

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**FORM S-1
REGISTRATION STATEMENT**
Under
The Securities Act of 1933

CODEX DNA, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

3826
(Primary Standard Industrial
Classification Code Number)

45-1216839
(I.R.S. Employer
Identification Number)

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(858) 228-4115

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee
Common Stock, \$0.0001 par value per share	\$100,000,000	\$10,910

(1) Includes offering price of any additional shares of common stock that the underwriters have the option to purchase.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information contained in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED _____, 2021

PRELIMINARY PROSPECTUS



Common Stock

We are offering _____ shares of our common stock. This is our initial public offering, and no public market currently exists for our common stock. We expect the initial public offering price to be between \$ _____ and \$ _____ per share.

We have applied to list our common stock on the Nasdaq Global Market under the symbol "DNAY."

We are an "emerging growth company" and "smaller reporting company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced reporting requirements.

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page 14 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Public Offering Price	\$ _____	\$ _____
Underwriting Discounts and Commissions ⁽¹⁾	\$ _____	\$ _____
Proceeds to Codex DNA, Inc., before expenses	\$ _____	\$ _____

(1) See the section titled "Underwriting" for a description of the compensation payable to the underwriters. Delivery of the shares of common stock is expected to be made on or about _____, 2021. We have granted the underwriters an option for a period of 30 days to purchase an additional _____ shares of our common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ _____, and the total proceeds to us, before expenses, will be \$ _____.

Jefferies

Cowen

KeyBanc Capital Markets

Prospectus dated _____, 2021

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Through and including _____, 2021 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Neither we nor the underwriters have authorized anyone to provide you any information or make any representations other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: we have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should carefully read this entire prospectus, including the information under the sections titled "Risk Factors," "Special Note Regarding Forward-Looking Statements," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus before making an investment decision. Unless the context requires otherwise, references in this prospectus to "we," "us," "our," "our company," "Codex DNA," or "the Company" refer to Codex DNA, Inc. and its subsidiaries.

Overview

We believe that we are a leading synthetic biology company focused on enabling researchers to rapidly, accurately and reproducibly build or "write" high-quality synthetic DNA and mRNA that is ready to use in many downstream synthetic biology enabled markets. Our synthetic biology solution addresses the bottlenecks across the multi-step process of building DNA and mRNA, as well as the significant limitations of existing solutions that prevent the rapid building of virtually error-free DNA and mRNA at a useable scale. A key part of our solution is our BioXp system, an end-to-end automated workstation that fits on the benchtop and is broadly accessible due to its ease-of-use and hands-free automation. We believe our BioXp system can democratize synthetic biology by simplifying the process of building DNA and mRNA, thereby accelerating the discovery, development and production of novel high-value products, including antibody-based biologics, mRNA-based vaccines and therapeutics and precision medicines.

We developed our synthetic biology solution to address the significant unmet need in the market for an approach that can automate, integrate, optimize and standardize the process for building synthetic DNA and mRNA. We commercially launched our current synthetic biology solution in September 2019, which now includes the BioXp 3250 system, BioXp kits with associated cloud-based application scripts, and benchtop reagent kits. Since the introduction of our solution through May 1, 2021, we have launched seven BioXp kits, three benchtop reagent kits, and several other synthetic biology products, including 12 SARS-CoV-2 full-length genomes and RNA controls as well as our Vmax X2 cells. We have placed approximately 160 BioXp systems globally. We target customers in the fields of personalized medicine, biologics drug discovery, vaccine development, genome editing and cell and gene therapy. As of May 1, 2021, our customer base was composed of over 300 customers and included 15 of the 25 largest biopharmaceutical companies in the world ranked by 2020 revenue, excluding affiliates of those companies. Our customer base also includes leading academic research institutions, government institutions, contract research organizations (CROs) and synthetic biology companies.

Background on Synthetic Biology

Synthetic biology is a well-established and rapidly expanding field of science that involves the engineering of biological components such as genes, mRNA, proteins, viruses and living cells starting from a digital DNA sequence, enabling the construction of those macromolecules and organisms with new and improved biological functions. The application of synthetic biology is constantly expanding, and new end markets are emerging, driven by continued innovation, a growing understanding of biology and access to novel research tools. For example, in healthcare, synthetic biology is being used to discover, develop and produce novel DNA-, mRNA-, and protein-based therapeutics and vaccines (e.g., antibody-based biologics, mRNA-based COVID-19 vaccines and personalized cancer therapeutics). In agriculture, synthetic biology is being utilized to improve crop yields and create novel food sources (e.g., plant-based meat products). Similarly, in technology, synthetic biology may lead to the ability to store and retrieve digital data using DNA. Finally, in consumer markets, synthetic biology is being employed in a variety of applications. For example, synthetic biology is used to construct clothes from renewable, bio-based sources, to develop biofuels and renewable energy from engineered microbes, and to produce plastics from biodegradable polymers.

Synthetic biology is enabled by numerous technologies that facilitate the *design-build-test* paradigm of new or modified biological components. Any inefficiency across these three phases can create a bottleneck hindering the rapid iteration within product development. In the build phase, the process of writing synthetic DNA or mRNA for an improved biological function is characterized by multiple, complex processes that involve numerous time-consuming and technical steps, including DNA synthesis, DNA assembly, DNA cloning, and DNA scale-up in *E. coli* with

multiple DNA purification steps in between. If the final product is mRNA, the process continues with additional technical steps including mRNA synthesis, mRNA modifications at each end and multiple mRNA purification steps.

In its January 2020 report, BCC Research estimated that the global synthetic biology market was \$5.3 billion in 2019 and projected that market to grow at a compound annual growth rate (CAGR) of 29%, reaching an estimated market size of \$18.9 billion by 2024. Of this \$5.3 billion market, BCC Research estimated that enabling technologies, such as our workflow solutions, represented an approximate \$2.6 billion market opportunity in 2019. Additionally, within this market, Transparency Market Research estimated that the *in-vitro* transcription template market (mRNA production) was \$118 million in 2020 and is growing at a CAGR of 19.8%.

Key Limitations in Writing Synthetic DNA and mRNA

Despite these substantial advancements, including the accumulation of a large number of functional discoveries resulting from the wide-spread adoption of DNA sequencing instruments, the profound potential of synthetic biology has been hampered by the complexity within, and among, the multi-step process of writing synthetic DNA and mRNA, as well as significant limitations of existing solutions that prevent the rapid building of virtually error-free DNA and mRNA at a useable scale. Both limitations ultimately affect speed and quality of product delivery.

Currently, the process of writing synthetic DNA or mRNA for an improved biological function is carried out in laboratories by highly skilled researchers using multiple kits, each designed to perform one or more of the technical steps. Depending on the length and complexity of the desired synthetic DNA or mRNA product, the process may involve hundreds of manual steps, require numerous different kits and take days, weeks or months to complete. As an alternative solution, many, but not all, of these steps can be outsourced to a molecular biology CRO for completion, shifting those challenges from the end user to the CRO. However, outsourcing poses additional limitations, including lack of workflow control, unpredictable timelines and security issues.

Whether experiments are performed in-house or through a CRO, existing solutions for building synthetic DNA and mRNA have deficiencies. For example:

- inconsistent levels of fidelity of DNA and mRNA fragments reducing overall yields of usable material;
- inability to construct stretches of DNA and mRNA sequence that have particular features;
- inability to construct DNA and mRNA sequences above a certain size; and
- inability to produce the end product in sufficient quantities for downstream applications.

These limitations produce bottlenecks across the build phase, which have significantly hindered the ability of the synthetic biology paradigm to deliver on its full potential. This inefficiency has created a significant unmet need in the market for an approach that can automate, integrate, optimize and standardize the process, and thereby enhance the speed, predictability and reproducibility of the *design-build-test* paradigm.

The Codex DNA Solution

Our synthetic biology solution, which leverages our industry-standard Gibson Assembly method, is aimed at addressing the bottlenecks across the build phase in order to accelerate the *design-build-test* paradigm. Key to our solution is our BioXp system, an end-to-end automated system for synthetic biology that fits on the benchtop and is broadly accessible due to its ease-of-use and hands-free automation. We have developed and commercialized the current version of the BioXp system, the BioXp 3250 system. We believe our BioXp system can democratize synthetic biology by making the build phase broadly accessible in terms of simplicity, accelerating applications and workflows, and greatly facilitating development of novel high-value products across a wide range of synthetic biology enabled markets. Our BioXp system empowers users to rapidly, accurately and reproducibly create high quality synthetic DNA and mRNA that is ready for use in many downstream synthetic biology workflows.

Our synthetic biology solution is comprised of:

- *The BioXp system*: which we believe is the first commercially available push-button, walkaway, end-to-end automated workstation, which requires only a few minutes of set up time, that empowers researchers to translate a digital DNA sequence to endpoint-ready synthetic DNA in as few as 8 hours and mRNA in less than 24 hours, exclusive of shipment time, using a benchtop instrument that is run by sophisticated onboard software;

- *The BioXp portal*: a user-friendly online portal that offers an intuitive guided workflow and design tools for building new DNA sequences and assembling them into vector(s) of choice using Gibson Assembly on the BioXp system;
- *The BioXp kits*: contain all the necessary building blocks and reagents, including our proprietary Gibson Assembly branded reagents, for specific synthetic biology workflow applications;
- *Cloud-based scripts*: product-specific and pre-validated scripts that optimize and simplify the use of the BioXp kits on the BioXp system (e.g., the BioXp system automatically scans barcodes from reagent plates to download scripts, enabling hands-free operation);
- *Benchtop reagents*: contain all the reagents necessary to proceed with a specific synthetic biology workflow on the benchtop using products generated on the BioXp system, providing additional flexibility to the customer and furthering our end-to-end solution; and
- *Biofoundry Services*: enable a customer to order and receive any of the BioXp system endpoint-ready products, such as genes, clones, cell-free amplified DNA and variant libraries.

Our solution is designed to offer the following benefits:

- *Consolidation of the build phase within a single end-to-end automated system*: We provide researchers all the hardware, software, materials and methodologies required to rapidly and accurately design and build large quantities of synthetic DNA and mRNA, with BioXp kits for synthetically produced protein under development. Our BioXp system reduces the turnaround time for such workflows to days or hours. Moreover, researchers no longer require multiple vendors to complete such workflows, eliminating related bottlenecks and security concerns.
- *Increased speed and scale*: Our BioXp system has the capacity to parallel process as many as 32 samples at once within an 8- to 24-hour period, depending on the BioXp kit being used. It also has the capacity to generate high quality and diverse libraries with short lead times, allowing innovation to be maintained in-house.
- *Capacity to construct a wide array of product formats*: Our BioXp system was designed such that future applications would not require hardware upgrades but only software upgrades that could be installed remotely. This feature has facilitated new product development efforts to enhance current product specifications and to develop new kits that extend beyond the production of synthetic DNA. For example, since the BioXp system was launched, new scripts have been developed to produce larger gene products, cell-free amplification of cloned DNA, and production of synthetic mRNA. Likewise, new scripts are currently being developed to enhance the mRNA product offering and develop protein synthesis BioXp kits. This capability provides substantial time-to-product and workflow control advantages for customers and gives them the flexibility to select the workflows that meet their unique needs.
- *Ability to construct larger and more complex DNA and mRNA sequences*: Our BioXp system uses proprietary protocols developed for robust DNA synthesis, assembly, and cloning enabling the construction of genes, mRNA, and clones across a wide range of sizes and complexity.
- *Industry-leading quality and performance*: Our BioXp system uses a proprietary two-step error correction process to generate virtually error-free synthetic genes every time. When compared to certain of our competitors, we have observed a 2.74 fold increase in sequence precision.
- *Enhanced productivity*: Our BioXp system creates finished DNA products in as few as eight hours. In addition, it includes protocols for the cell-free amplification of cloned DNA, obviating the need to use *E. coli*, reducing the time to product by days or even weeks. Altogether, we believe that this could represent at least a 20-fold productivity increase through accelerated iterations of the *design-build-test* paradigm. Ultimately, product development cycles are accelerated because the desired biological results are identified more quickly.
- *Protection of proprietary vectors*: Our BioXp system permits our customers to maintain their proprietary vectors on site, protecting their intellectual property throughout their entire development lifecycle.

The metrics described above were calculated using averages derived from publicly available information and quotes received for comparable product offerings by some of our competitors, some of which included shipping times, and averages from our workflows.

Our Growth Strategy

Our goal is to establish our solution, including our BioXp family of systems, as the industry standard for building synthetic DNA, mRNA and protein, and to democratize synthetic biology, thus accelerating its applications and workflows across a wide range of industries. To achieve this objective, we intend to:

- drive new customer adoption of our BioXp systems;
- maximize the utilization of BioXp system by developing additional BioXp kits for our customers' workflows;
- continue to expand into other attractive markets for synthetic biology that are currently under-served;
- develop and commercialize new, disruptive BioXp systems to further increase utilization, expand breadth of applications, and accelerate product development cycles;
- continue to innovate across our synthetic biology product portfolio;
- establish strategic partnerships leveraging our core competencies and validating our technology; and
- continue to attract leading scientists to work at our company.

Our Products

We have developed and commercialized products that include BioXp systems, BioXp kits for generating a wide array of synthetic DNA and mRNA formats, and benchtop reagents that complement the automated synthetic biology workflow applications and workflow solutions.

Our BioXp 3250 system was launched in September 2020, replacing a legacy BioXp 3200 system. We believe that it is the first commercially available fully automated benchtop instrument that enables numerous synthetic biology workflows by providing a turn-key, end-to-end solution for generating synthetic DNA and mRNA starting from DNA sequence. Through a combination of increased throughput and scale and reduced hands-on time, we estimate that the BioXp 3250 system offers the potential to significantly enhance productivity several fold, accelerating the development of critical new products in enabled markets. The BioXp 3250 system accelerates the *design-build-test* phases of the customer's product development cycle by enabling rapid, automated synthesis of genes, clones, variant libraries and mRNA. Unlike traditional approaches that can take days, weeks or months, the BioXp 3250 system achieves these workflows in a single run, which can be completed in 8 to 24 hours.



Our BioXp kits contain all the requisite Gibson Assembly branded reagents and allow our BioXp system to perform the steps required to produce various DNA and mRNA products designed for a range of synthetic biology

applications. BioXp kits are designed to be backwards compatible with legacy systems and forward compatible with systems under development. Since the introduction of our solution through May 1, 2021, we have launched seven BioXp kits.

We also offer benchtop reagents that are synergistic with our BioXp system and BioXp kits to accelerate the build phase of the *design-build-test* synthetic biology paradigm. Since the introduction of our solution through May 1, 2021, we have launched three benchtop reagent kits.

As part of our continuing effort to improve the processes of synthetic biology, we are currently developing next-generation BioXp systems and BioXp kits with an aim to radically transform rapid demand-response workflows in synthetic biology by consolidating supply chains and enabling global distributed manufacturing for both discovery and clinical applications. Our ultimate goal is to build what we describe as the Digital-to-Biological Converter (DBC). The DBC's approach would begin not with oligonucleotides, which can take days to procure, but with DNA sequence data. The system we envision would take data and produce synthetic genes, or even convert those automatically into mRNA or protein. This would enable the "sequence-in, vaccines-out" concept that could replace the months-long manufacturing processes required today with a process that can be carried out in a matter of days.

We label and sell our products for research use only (RUO) and expect to sell them to academic institutions, life sciences and research laboratories that conduct research, and pharmaceutical and biotechnology companies for non-diagnostic and non-clinical purposes. Our RUO products are not intended or promoted for use in clinical practice in the diagnosis of disease or other conditions, and they are labeled for research use only. Accordingly, we believe our products, as we currently intend to market them, are not subject to regulation by FDA. Although FDA regulations require that RUO products be labeled with "For Research Use Only. Not for use in diagnostic procedures," the regulations do not subject such products to the FDA's jurisdiction or the broader pre- and post-market controls for medical devices.

We are an early-stage synthetic biology technology company, and we have incurred significant losses since separating from Synthetic Genomics, Inc. (SGI) and beginning to operate as a stand-alone entity in March 2019, and expect to continue incurring losses in the future. We incurred net losses of \$8.3 million for the period from March 8, 2019 through December 31, 2019 and \$18.0 million for the year ended December 31, 2020. We incurred net losses of \$3.9 million and \$7.4 million in the three months ended March 31, 2020 and 2021, respectively. As of March 31, 2021, we had an accumulated deficit of \$33.8 million. These losses and accumulated deficit were primarily due to the substantial investments we have made to develop, commercialize and market our technology and products. Other risks with respect to our business are listed in the "Risks Associated with Our Business" on page 6 and in the "Risk Factors" section beginning on page 14.

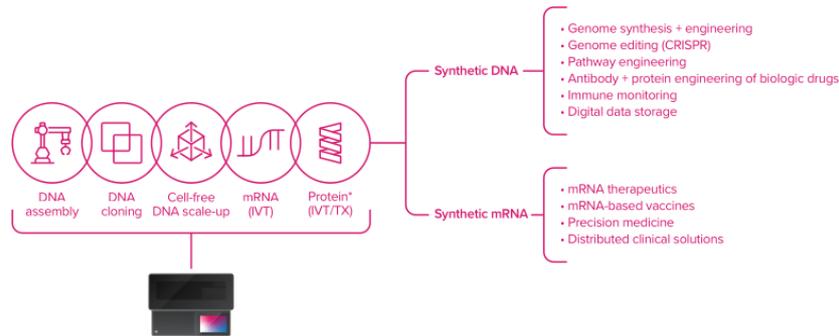
Our Biofoundry Services

We use our BioXp 3250 system, BioXp kits and benchtop reagents to perform biofoundry services for customers. Typically, these customers have not yet purchased our BioXp system or they have custom requirements. We apply sophisticated security protocols to these services designed to protect our customers' intellectual property rights, which is a key concern for customers. These services enable a customer to order and receive any of the BioXp system endpoint-ready products, such as genes, clones, cell-free amplified DNA and variant libraries. Importantly, our biofoundry services are strategically used in a consultative partner approach through our pilot program, allowing customers to see specific proof points prior to potentially purchasing a BioXp system.

Workflow Solutions for Synthetic Biology Enabled Markets

Our current and future BioXp systems are intended to address the needs of the synthetic biology customer across discovery and pre-clinical development by providing an unmatched capability to synthesize high-quality DNA in as few as 8 hours and mRNA in less than 24 hours, exclusive of shipment times. With future system releases and extensions, we plan to address the continuum of research needs across the central dogma of molecular biology by enabling cell-free production of high-quality synthetic DNA, mRNA and protein for the discovery, development and

manufacturing of enabled products across a wide range of markets. The graphic below demonstrates our solution for DNA and mRNA enabled workflows.



*Future product offering

Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company. These risks are described more fully in the section titled "Risk Factors" in this prospectus. These risks include, but are not limited to, the following:

- we are an early-stage synthetic biology technology company with a history of net losses, which we expect to continue, and we may not be able to generate meaningful revenues or achieve and sustain profitability in the future;
- we have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance;
- our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide;
- we may not be able to achieve or maintain satisfactory pricing and margins for our products;
- the size of the markets for our products may be smaller than estimated, and new market opportunities may not develop as quickly as we expect, or at all, thus limiting our ability to successfully meet our anticipated revenue projections;
- we have limited experience in sales and marketing of our products;
- we may need to raise additional capital to fund our operations, which may be unavailable to us or, even if consummated, may cause dilution or place significant restrictions on our ability to operate;
- we rely on a single contract manufacturer to manufacture and supply our instruments and single source suppliers for certain components of our instruments and raw materials. If this manufacturer or these suppliers should fail or not perform satisfactorily, our ability to commercialize and supply our products would be adversely affected; and
- if we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products and build a strong brand identity may be impaired.

Corporate Information

We were formed in Delaware as a corporation on March 24, 2011 under the name Synthetic Genomics Solutions, Inc., as a wholly owned subsidiary of SGI. On February 26, 2013, we changed our name to SGI-DNA, Inc., and on March 31, 2020 we changed our name to Codex DNA, Inc. Our principal executive offices are located at 9535

Waples Street, Suite 100, San Diego, CA 92121-2993. Our telephone number at that address is (858) 228-4115. Our website address is www.codexdna.com. Information contained on our website is not incorporated by reference into this prospectus and should not be considered part of this prospectus.

We use the Codex DNA logo, BioXp, Gibson Assembly, RapidAMP, Vmax and other marks as trademarks in the United States and other countries. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the TM or ® symbol, but such references are not intended to indicate in any way that we will not assert, to the fullest extent possible under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (the JOBS Act). We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have more than \$1.07 billion in total annual gross revenue; (ii) the date we qualify as a "large accelerated filer" under the rules of the Securities and Exchange Commission (the SEC) with at least \$700 million of equity securities held by non-affiliates; (iii) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period; and (iv) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- presenting only two years of audited financial statements and only two years of selected financial data;
- an exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the Sarbanes-Oxley Act);
- reduced disclosure about our executive compensation arrangements in our periodic reports, proxy statements, and registration statements; and
- exemptions from the requirements of holding non-binding advisory votes on executive compensation or golden parachute arrangements.

As a result of this status, we have taken advantage of reduced reporting requirements in this prospectus and may elect to take advantage of other reduced reporting requirements in our future filings with the SEC. In particular, in this prospectus, we have provided only two periods of audited financial statements (the period March 8, 2019 through December 31, 2019 and the year ended December 31, 2020), with correspondingly reduced "Selected Financial Data" and "Management's Discussion and Analysis of Financial Conditions and Results of Operations" disclosure, and have not included all of the executive compensation related information that would be required if we were not an emerging growth company.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards, and, therefore, we will not be subject to the same new or revised accounting standards at the same time as other public companies that are not emerging growth companies or those that have opted out of using such extended transition period, which may make comparison of our financial statements with such other public companies more difficult. We may take advantage of these reporting exemptions until we no longer qualify as an emerging growth company, or, with respect to adoption of certain new or revised accounting standards, until we irrevocably elect to opt out of using the extended transition period. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting standards as of public company effective dates.

We are also a "smaller reporting company" as defined in the Securities Exchange Act of 1934, as amended (the Exchange Act). We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock

held by non-affiliates is less than \$250 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100 million during the most recently completed fiscal year for which audited financial statements are available and our voting and non-voting common stock held by non-affiliates is less than \$700 million.

THE OFFERING

The following summary contains basic information about the offering and our common stock and is not intended to be complete. It does not contain all the information that may be important to you. For a more complete description of our common stock, see "Description of Capital Stock."

Issuer	Codex DNA, Inc.
Common stock offered by us	shares.
Option to purchase additional shares	We have granted the underwriters an option for a period of 30 days to purchase up to additional shares of our common stock.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	<p>We estimate that the net proceeds from this offering will be approximately \$ million, or \$ million if the underwriters exercise in full their option to purchase additional shares of common stock, assuming an initial public offering price of per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.</p> <p>We currently intend to use the net proceeds from this offering, together with our existing cash and available borrowings for general corporate purposes, including working capital, and funding our research and development and sales and marketing activities. We may use a portion of the net proceeds to expand our current business through strategic acquisitions or in-licenses of complimentary companies or technologies; however, we currently do not have any agreements or commitments to complete any such transactions and are not involved in negotiations regarding such transactions.</p> <p>We also may use a portion of the net proceeds to repay debt under our Loan and Security Agreement with Silicon Valley Bank. This debt bears interest at a per annum rate equal to the greater of (a) 4.0% above the prime rate and (b) 7.25%, and matures on January 1, 2024.</p> <p>See the section titled "Use of Proceeds" for more information.</p>
Risk factors	See the section titled "Risk Factors" on page 14 for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.
Proposed Nasdaq Global Market (Nasdaq) trading symbol	"DNAY"
The number of shares of our common stock to be outstanding after this offering is based on 64,686,862 shares of our common stock outstanding as of March 31, 2021 (after giving effect to the automatic conversion of all of our outstanding convertible preferred stock and the automatic exercise of all of our outstanding warrants issued to SGI	

into an aggregate of 48,945,302 shares of common stock immediately prior to the completion of this offering), and excludes:

- 1,453,980 shares of common stock issuable upon the exercise of options granted under our 2019 Stock Plan, as amended (the 2019 Plan), outstanding as of March 31, 2021 with a weighted-average exercise price of \$0.20 per share;
- 1,986,394 shares of common stock issuable upon the exercise of options granted under our 2021 Equity Incentive Plan (the 2021 Plan), outstanding as of March 31, 2021 with an exercise price of \$1.46 per share;
- 3,455,200 shares of common stock issuable upon the exercise of options granted under the 2021 Plan after March 31, 2021 with weighted average exercise price of \$2.19 per share;
- 187,220 shares of common stock issuable upon the exercise of warrants to purchase shares issued to SVB Financial Group with an initial exercise price of \$1.20 per share; and
- shares of common stock reserved for future issuance under our equity compensation plans, consisting of:
 - shares of common stock reserved for future issuance under our 2021 Plan, as of _____, 2021, which shares will be added to the shares to be reserved for future issuance under our 2021 Stock Incentive Plan (the 2021 SIP);
 - shares of common stock reserved for future issuance under our 2021 SIP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan; and
 - shares of common stock reserved for future issuance under our 2021 Employee Stock Purchase Plan (the ESPP), which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan.

Unless otherwise indicated, this prospectus assumes or gives effect to the following:

- no exercise of outstanding options;
- no exercise by the underwriters of their option to purchase additional shares of common stock from us in this offering;
- the automatic conversion of all outstanding shares of our convertible preferred stock as of March 31, 2021, into an aggregate of 45,238,000 shares of our common stock immediately prior to the completion of this offering;
- the automatic exercise of all outstanding warrants issued to SGI into an aggregate of 3,707,302 shares of our common stock immediately prior to the completion of this offering; and
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, each of which will occur immediately prior to the completion of this offering.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables set forth our summary consolidated financial data for the periods indicated. Pursuant to the authority of the SEC under Rules 3-06 and 3-13 of Regulation S-X under the Securities Act of 1933, as amended (the Securities Act), we have substituted audited consolidated financial statements for the period from March 8, 2019 through December 31, 2019 in place of audited consolidated financial statements for the fiscal year ended December 31, 2019. We have derived the consolidated statement of operations data for the period from March 8, 2019 through December 31, 2019 and the year ended December 31, 2020, and the consolidated balance sheet data as of December 31, 2020, from our audited consolidated financial statements included elsewhere in this prospectus. Because of the different length of time for which financial information is presented in the period ended December 31, 2019 compared to that presented for the year ended December 31, 2020, our financial results for those periods are not comparable. We have derived the statement of operations data for the three months ended March 31, 2020 and 2021, and the balance sheet data as of March 31, 2021 from our unaudited interim financial statements and related notes included elsewhere in this prospectus. Our unaudited interim financial statements were prepared in accordance with generally accepted accounting principles in the United States (GAAP), on the same basis as our audited financial statements and include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for the fair presentation of the financial information set forth in those financial statements. Our historical results are not necessarily indicative of the results that should be expected for any future period, and our interim results are not necessarily indicative of our results for the full fiscal year. You should read the following summary consolidated financial data together with the more detailed information contained in "Selected Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and our consolidated financial statements and the related notes included elsewhere in this prospectus.

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021
Statement of Operations and Comprehensive Loss Data (in thousands):				
Revenue:				
Product sales	\$ 3,555	\$ 5,131	\$ 1,048	\$ 1,799
Royalties	1,250	1,445	339	528
	4,805	6,576	1,387	2,327
Cost of revenue	2,677	2,951	574	1,025
Gross profit	2,128	3,625	813	1,302
Operating expenses:				
Research and development	3,318	8,925	1,963	2,878
Sales and marketing	1,878	6,931	1,299	2,275
General and administrative	3,908	4,130	1,146	2,413
Total operating expenses	9,104	19,986	4,408	7,566
Loss from operations	(6,976)	(16,361)	(3,595)	(6,264)
Other income (expense):				
Interest expense	(1,490)	(690)	(192)	(241)
Change in fair value of derivative liabilities	62	(880)	(93)	(296)
Loss on extinguishment of debt	—	—	—	(618)
Other income (expense), net	102	(74)	—	(19)
Loss before provision for income taxes	(8,302)	(18,005)	(3,880)	(7,438)
Provision for income taxes	—	(5)	—	(4)
Net loss and comprehensive loss	(8,302)	(18,010)	(3,880)	(7,442)
Net loss attributable to common stockholders	\$ (8,302)	\$ (18,010)	\$ (3,880)	\$ (7,442)
Net loss per share attributable to common stockholders—basic and diluted	\$ (0.55)	\$ (1.20)	\$ (0.26)	\$ (0.48)
Weighted average common stock outstanding—basic and diluted	15,000,000	15,004,616	15,000,000	15,579,423
Pro forma net loss per share attributable to common stockholders—basic and diluted (unaudited) ⁽¹⁾		\$ (0.29)		\$ (0.12)
Pro forma weighted average common stock outstanding—basic and diluted (unaudited) ⁽¹⁾		60,242,616		60,817,423

(1) The unaudited pro forma basic and diluted weighted-average shares of common stock outstanding used in the calculation of unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2020 and the quarter ended March 31, 2021 have been prepared to give effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 45,238,000 shares of our common stock immediately prior to the closing of this offering and (ii) the automatic exercise of all outstanding warrants issued to SGI into an aggregate of 3,707,302 shares of our common stock immediately prior to the closing of this offering, as if this offering had occurred on the

later of the beginning of each period or the issuance date of the convertible preferred stock or warrants issued to SGI.

	As of March 31, 2021		
	Actual	Pro Forma ⁽¹⁾	Pro Forma as Adjusted ⁽²⁾
Balance Sheet Data (in thousands):			
Cash	\$ 17,834	\$ 17,639	
Working capital ⁽⁴⁾	16,313	16,118	
Total assets	31,318	31,123	
Long-term debt, net of discount, including current portion	14,372	14,372	
Derivative liabilities	2,403	303	
Convertible preferred stock	38,914	—	
Total stockholders' equity (deficit)	(32,701)	8,118	

- (1) The pro forma column in the balance sheet data table above reflects (i) the automatic conversion of all shares of our convertible preferred stock into 45,238,000 shares of common stock and (ii) the automatic exercise of all outstanding warrants issued to SGI into an aggregate of 3,707,302 shares of our common stock immediately prior to the completion of this offering, as if such conversion and exercise had occurred on March 31, 2021.
- (2) The pro forma as adjusted column in the balance sheet data table above gives effect to (i) the pro forma adjustments set forth above and (ii) the receipt of \$ million in net proceeds from the sale and issuance by us of shares of our common stock in this offering, based upon the assumed initial public offering price of \$ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, working capital, total assets and total stockholders' equity (deficit) by \$, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting estimated underwriting discounts and commissions payable by us. An increase or decrease of 1.0 million shares in the number of shares of common stock offered by us would increase or decrease, as applicable, the amount of our pro forma as adjusted cash, working capital, total assets and total stockholders' equity (deficit) by \$ assuming the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions payable by us.
- (4) We define working capital as current assets less current liabilities. See our financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our consolidated financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus, before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and the market price of our common stock.

Risks Related to Our Business

We are an early-stage synthetic biology technology company with a history of net losses, which we expect to continue, and we may not be able to generate meaningful revenues or achieve and sustain profitability in the future.

We are an early-stage synthetic biology technology company, and we have incurred significant losses since separating from Synthetic Genomics, Inc. (SGI) and beginning to operate as a stand-alone entity in March 2019, and expect to continue incurring losses in the future. We incurred net losses of \$8.3 million for the period from March 8, 2019 through December 31, 2019 and \$18.0 million for the year ended December 31, 2020. We incurred net losses of \$3.9 million and \$7.4 million in the three months ended March 31, 2020 and 2021, respectively. As of March 31, 2021, we had an accumulated deficit of \$33.8 million. These losses and accumulated deficit were primarily due to the substantial investments we have made to develop, commercialize and market our technology and products. Over the next several years, we expect to continue to devote a significant portion of our resources towards the continued development and commercialization of our synthetic biology products. These efforts may prove more costly than we currently anticipate. In addition, as a public company, we will incur significant legal, accounting, administrative, insurance and other expenses that we did not incur as a private company. Accordingly, we cannot assure you that we will achieve profitability in the future or that, if we do become profitable, we will remain profitable.

We have a limited operating history, which may make it difficult to evaluate the prospects for our future viability and predict our future performance.

Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. For example, our management team has had a limited time working together and many of our key employees are new to our company. Predictions about our future success or viability are highly uncertain and may not be as accurate as they could be if we had a longer operating history or a longer history of successfully developing and commercializing products.

In addition, as a business with a limited operating history, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown obstacles. We have encountered in the past, and will encounter in the future, risks and uncertainties frequently experienced by growing companies with limited operating histories in emerging and rapidly changing industries. If our assumptions regarding these risks and uncertainties, which we use to plan and operate our business, are incorrect or change, or if we do not address these risks successfully, our results of operations could differ materially from our expectations, and our business, financial condition and results of operations could be adversely affected.

Our operating results may fluctuate significantly in the future, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the level of demand for our commercialized products, which may vary significantly from period to period;

- our ability to drive adoption of our products in our target markets and our ability to expand into any future target markets, including internationally;
- the prices at which we will be able to sell our products;
- the volume and mix of our sales between our BioXp systems, BioXp kits, benchtop reagents, other products and biofoundry services, or changes in the manufacturing or sales costs related to our products;
- the length of time of the sales cycle for purchases of, or royalties on, our products, including lead time needed to procure critical raw materials from suppliers and finished goods from our third-party contract suppliers and manufacturers;
- the extent to which we succeed in developing and commercializing new products;
- potential shortages, or increases in costs, of our product components or raw materials, or other disruptions to our supply chain;
- the timing and cost of, and level of investment in, research and development and commercialization activities relating to our products, which may change from time to time;
- our ability to successfully manage relationships with customers, third-party distributors and suppliers of our products;
- the timing and amount of expenditures that we may incur to develop, commercialize or acquire additional products and technologies;
- changes in governmental funding sources;
- cyclical changes to the research and development budgets within the pharmaceutical, biotechnology and industrial segments of synthetic biology;
- seasonal spending patterns of our customers;
- the expenses needed to attract and retain skilled personnel;
- future accounting pronouncements or changes in our accounting policies;
- the outcome of any litigation or governmental investigations involving us, our industry or both;
- higher than anticipated service, replacement and warranty costs;
- the costs associated with being a public company;
- changes in the regulatory environment;
- the impact of the COVID-19 pandemic on the economy, investment in synthetic biology and research industries, our business operations, and resources and operations of our customers, suppliers, and distributors; and
- general industry, economic and market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors.

The cumulative effects of the factors discussed above could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period of time. If our operating results fall below the expectations of analysts or investors or below any guidance we may provide, or if the guidance we provide is below the expectations of analysts or investors, it could cause the market price of our common stock to decline.

We may not be able to achieve or maintain satisfactory pricing and margins for our products.

The synthetic biology industry has a history of price competition, and we can give no assurance that we will be able to achieve satisfactory prices for our products or maintain prices at the levels we have historically achieved. If we are forced to lower the price we charge for our products, our gross margins will decrease, which will adversely affect our ability to invest in and grow our business. We believe that we will continue to be subject to significant pricing pressure, which may limit our ability to maintain or increase our prices.

Our cost of goods is dependent upon the pricing we are able to negotiate with our suppliers of raw materials, instruments and components. In particular, we have experienced price increases for certain raw materials, such as oligonucleotides, and expect these raw materials to continue to be in high demand. We do not have long term supply

contracts for any of our raw materials. If our costs increase and we are unable to offset such increases with a proportionate increase in our prices, our margins would erode, which would harm our business and results of operations.

We may need to raise additional capital to fund our operations, which may be unavailable to us or, even if consummated, may cause dilution or place significant restrictions on our ability to operate.

Based on our current plans, we believe that our current cash, available borrowings, the net proceeds from this offering and anticipated cash flow from operations will be sufficient to meet our anticipated cash requirements for at least twelve months from the date of this prospectus. As a result, we have disclosed that there is substantial doubt about our ability to continue as a going concern. If our available cash resources, net proceeds from this offering and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements, including because of lower demand for our products or the realization of other risks described in this prospectus, we may be required to raise additional capital prior to such time through issuances of equity or convertible debt securities, or seek debt financing or other form of third-party funding. Following the offering, we believe our cash and additional borrowings available under our Loan and Security Agreement with Silicon Valley Bank (SVB), dated as of March 4, 2021 (the 2021 Loan Agreement), will be sufficient to meet our capital requirements and fund our operations for at least the next 12 months following this offering. However, we have based these estimates on assumptions that may prove to be incorrect, and we could spend our available financial resources much faster than we currently expect.

We may seek to raise additional capital in the future to expand our business, to pursue strategic investments, to take advantage of financing opportunities or for other reasons, including:

- increasing our sales and marketing and other commercialization efforts to drive market adoption of our products;
- funding development and marketing efforts of our current or any future products;
- expanding our technologies into additional markets;
- acquiring, licensing or investing in technologies and other intellectual property rights;
- acquiring or investing in complementary businesses or assets; and
- financing capital expenditures and general and administrative expenses.

Our present and future funding requirements will depend on many factors, including:

- our rate of progress in increasing penetration of our target markets with current and new products, and the cost of the sales and marketing activities associated with establishing adoption of our products;
- our rate of progress in, and cost of research and development activities associated with, products in research and development; and
- the effect of competing technological and market developments.

If we are unable to obtain adequate financing or financing on terms satisfactory to us when needed, our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited, and could have a material adverse effect on our business, financial condition, results of operations and prospects.

The various ways we could raise additional capital carry potential risks. If we raise funds by issuing equity securities, dilution to our stockholders would result. If we raise funds by issuing debt securities, those debt securities would have rights, preferences and privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings pursuant to a credit agreement could impose significant restrictions on our operations. If we raise funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our technologies or products or grant licenses on terms that are not favorable to us.

Our Loan and Security Agreement with Silicon Valley Bank contains restrictive covenants that limit our operations.

Pursuant to the terms of the 2021 Loan Agreement, we have borrowed \$15.0 million and may become eligible to borrow up to an additional \$5.0 million, at SVB's sole option. If we are not in compliance with the financial covenants of the 2021 Loan Agreement, it is unlikely that SVB will offer to extend the additional \$5.0 million of debt financing.

The 2021 Loan Agreement contains various restrictive covenants and other restrictions, including, among other things:

- a minimum revenue covenant;
- on our ability to transfer all or part of our business or property, except for inventory in the ordinary course of business, surplus or obsolete equipment, permitted liens, transfers of cash permitted by the agreement or transfers involving less than \$250,000 in any fiscal year;
- on our ability to change our business or move our offices;
- on our ability to liquidate or dissolve or merge or consolidate with another entity, or acquire another entity;
- on our ability to incur debt or encumber our assets; and
- on our ability to pay dividends or make investments, other than permitted investments.

These restrictions may restrict our current and future operations, particularly our ability to respond to certain changes in our business or industry or take future actions. See the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources" for additional information.

Our ability to meet these restrictive covenants can be impacted by events beyond our control. The 2021 Loan Agreement provides that our breach or failure to satisfy certain covenants constitutes an event of default. Upon the occurrence of an event of default, our lenders could elect to declare all amounts outstanding under the 2021 Loan Agreement to be immediately due and payable. If the outstanding debt under the 2021 Loan Agreement was to be accelerated, we may not have sufficient cash on hand to repay it, which would have an immediate adverse effect on our business and operating results. This could potentially cause us to cease operations and result in a complete loss of your investment in our common stock.

We depend on our key personnel and other highly qualified personnel, and if we are unable to recruit, train and retain our personnel, we may not achieve our goals.

Our future success depends upon our ability to recruit, train, retain and motivate key personnel. Our senior management team, including Todd R. Nelson, Ph.D., our President and Chief Executive Officer; Daniel Gibson, Ph.D., our Chief Technology Officer; Jennifer I. McNealey, our Chief Financial Officer; Timothy E. Cloutier, our Senior Vice President, Commercial Operations; and Laurence Warden, our Vice President of Engineering and Instrumentation, is critical to our vision, strategic direction, product development and commercialization efforts. We have entered into at-will employment agreements with each of Dr. Nelson, Dr. Gibson, Ms. McNealey, Dr. Cloutier and Mr. Warden, and such agreements may be terminated by either party at any time without cause. The departure of one or more of our executives officers, senior management team members or other key employees could be disruptive to our business unless we are able to hire qualified successors. We do not maintain "key man" life insurance on our senior management team.

Our continued growth depends, in part, on attracting, retaining and motivating qualified personnel, including highly trained sales personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively identify and sell to potential new customers. New hires require significant training and, in most cases, take significant time before they achieve full productivity. Our failure to successfully integrate these key personnel into our business could adversely affect our business. In addition, competition for qualified personnel is intense, particularly in the San Diego area, where our operations are headquartered. We compete for qualified scientific and information technology personnel with other life science and information technology companies as well as academic institutions and research institutions.

We do not maintain fixed-term employment contracts with any of our employees. As a result, our employees could leave our company with little or no prior notice and would be free to work for a competitor. Due to the complex and technical nature of our products and technology and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our business, results of operations, financial condition and prospects.

If we do not sustain or successfully manage our anticipated growth, our business and prospects will be harmed.

Our anticipated growth will place significant strains on our management, operational and manufacturing systems and processes, sales and marketing team, financial systems and internal controls and other aspects of our business. As of May 1, 2021, we had 96 employees in the United States and five full-time employees internationally. We expect that we will need to hire additional accounting, finance and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company. Once public, our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements and effectively manage these growth activities. We may face challenges integrating, developing and motivating our rapidly growing employee base. To effectively manage our growth, we must continue to improve our operational and manufacturing systems and processes, our financial systems and internal controls and other aspects of our business and continue to effectively expand, train and manage our personnel. Our ability to successfully manage our expected growth is uncertain given the fact that we have only been in operation as a stand-alone company since March 2019. As our organization continues to grow, we will be required to implement more complex organizational management structures, and we may find it increasingly difficult to maintain the benefits of our corporate culture, including our ability to quickly develop and launch new and innovative products. If we do not successfully manage our anticipated growth, our business, results of operations, financial condition and prospects will be harmed.

A significant portion of our revenue in the near term will be generated from the sale of our current products.

While we anticipate that a substantial contributor to our growth will come from new product introductions, we expect that we will generate in the near term, a significant portion of our revenue from the sale of our BioXp systems and the increased sale of BioXp kits and benchtop reagents to our current customers. There can be no assurance that our current customers will increase their BioXp kit and benchtop reagent purchases. There can also be no assurance that we will be able to design other products that will meet the expectations of our customers or that any of our future products will become commercially viable. As technologies change in the future for synthetic biology research tools, we will be expected to upgrade or adapt our products in order to maintain the latest technology.

While concentrating our research and development and commercialization efforts on our synthetic biology solution, we may forego other opportunities that may provide greater revenue or be more profitable. If our research and product development efforts do not result in additional commercially viable products within the anticipated timelines, or at all, our business and results of operations will be adversely affected. Any delay or failure by us to develop and release our new products or product enhancements would have a substantial adverse effect on our business and results of operations.

If we fail to introduce compelling new products, our revenues and our prospects could be harmed.

Our ability to attract new customers and increase revenue from existing customers will depend in large part on our ability to introduce compelling new products and pursue new market opportunities that develop as a result of technological and scientific advances. The success of any enhancement to our existing commercialized products or introduction of new products depends on several factors, including timely completion and delivery, cost-effective development and manufacturing, competitive pricing, adequate quality testing, integration with existing technologies, appropriately timed and staged introduction and overall market acceptance. Any new product that we develop may not be introduced in a timely or cost-effective manner, may contain defects, errors, vulnerabilities or bugs, or may not achieve the market acceptance necessary to generate significant revenue.

The typical development cycle of new synthetic biology products can be lengthy and complicated, and may require new scientific discoveries or advancements, considerable resources and complex technology and engineering. Such developments may involve external suppliers and service providers, making the management of development projects complex and subject to risks and uncertainties regarding timing, timely delivery of required components or services and satisfactory technical performance of such components or assembled products. If we do not achieve the required technical specifications or successfully manage new product development processes, or if development work is not performed according to schedule, then the development of such new technologies or products may be adversely impacted.

In addition, there is extensive competition in the synthetic biology industry, which is characterized by rapid and significant technological changes, frequent new product introductions and enhancements and evolving industry

demands and standards. Our future success will depend on our ability to maintain a competitive position, including technologically superior and less expensive products compared to those of our competitors. Technological development by others may result in our technologies, as well as products developed using our technologies, becoming obsolete. If we are unable to successfully develop new products, compete with alternative products, or otherwise gain and maintain market acceptance, our business, results of operations and financial condition could be harmed.

Rapidly changing technology in synthetic biology could make the products we are developing obsolete unless we continue to develop and manufacture new and improved products and pursue new market opportunities.

Our industry is characterized by rapid and significant technological changes, frequent new product introductions and enhancements and evolving industry standards. The preferences and needs of our customers may change over time. Our future success will depend on our ability to continually improve the products we are developing, to develop and introduce new products that address the evolving needs of our customers on a timely and cost-effective basis, and to pursue new market opportunities that develop as a result of technological and scientific advances. These new market opportunities may be outside the scope of our proven expertise or in areas which have unproven market demand, and the utility and value of new products developed by us may not be accepted in the markets served by the new products. Our inability to gain market acceptance of new products could harm our future operating results. Our future success also depends on our ability to manufacture these new and improved products to meet customer demand in a timely and cost-effective manner, including our ability to resolve manufacturing issues that may arise as we commence production of these complex products. Unanticipated difficulties or delays in replacing existing products with new products we introduce or in manufacturing improved or new products in sufficient quantities to meet customer demand could diminish future demand for our products and harm our future operating results.

We may acquire other companies or technologies, which could divert our management's attention, result in additional dilution to our stockholders, disrupt our operations and harm our operating results.

We may in the future seek to acquire or invest in businesses, applications or technologies that we believe could complement or expand our current or future products, enhance our technical capabilities or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various costs and expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are consummated. We may not be able to identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain the expected benefits of any acquisition or investment.

To date, the growth of our operations has been organic, and we have limited experience in acquiring other businesses or technologies. We may not be able to successfully integrate acquired personnel, operations and technologies, or effectively manage the combined business following an acquisition. Acquisitions could also result in dilutive issuances of equity securities, the use of our available cash, or the incurrence of debt, which could harm our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business and financial condition may suffer.

If we experience a significant disruption in our information technology systems or breaches of data security, our business could be adversely affected.

We rely, and will continue to rely, on multiple information technology systems to operate the systems that allow our company to function, including cloud-based and on-premises information technology systems. We rely extensively on information technology systems to facilitate our principal company activities, including to operate the cloud-based platform on which the services offered to our customers rely. In addition, we also use information technology systems for a variety of key business functions, including to keep financial records, facilitate our research and development initiatives, manage our manufacturing operations, maintain quality control, fulfill customer orders, maintain corporate records, communicate with staff and external parties, and operate other critical functions.

Like all companies that rely on information technology systems, our information technology systems and those of our vendors and partners are potentially vulnerable to failures of confidentiality, integrity, and availability. Such failures could include, for example, malicious intrusion, corruption of data, and disruptive events, including but not limited to natural disasters and catastrophes. Such failures, if they occur, could compromise company, vendor or partner systems and employee, company, vendor, or partner data. A wide range of cyber attacks, including cyber intrusions, denial of service, and other malicious internet-based activity, such as social engineering and phishing scams,

continue to increase. Cloud-based platform providers of services have been and are expected to continue to be targeted by a variety of threat actors, including sophisticated nation-state and nation-state-supported actors. Such threat actors use attack methods that change frequently, are increasingly complex and sophisticated, including social engineering and phishing scams, and can originate from a wide variety of sources, including insider threats or external actors. In addition to traditional computer "hackers," malicious code, such as viruses and worms, employee theft or misuse, denial-of-service attacks and sophisticated nation-state and nation-state supported actors now engage in attacks, including advanced persistent threat intrusions. In addition, we have not finalized our information technology and data security policies and procedures and therefore, our information technology systems may be more susceptible to such failures and attacks than if such security policies and procedures were finalized. Despite our efforts to create security barriers to such threats, it is virtually impossible for us to entirely mitigate these risks and there is no guarantee that our efforts are or will be adequate to safeguard against all such threats. Moreover, despite our current and future efforts, it is possible that we may not be able to anticipate, detect, appropriately react and respond to, or implement effective preventative measures against, all cybersecurity incidents. Such cybersecurity incidents can be difficult to detect and any delay in identifying such incidents may lead to increased harm and legal exposure of the type described below.

If our security measures, or those of our vendors and partners, are compromised for any reason, including negligence, error, or malfeasance, our principal company activities could cease to function, or be significantly degraded, until such cybersecurity incidents are remediated. Further, our business could be harmed, our reputation could be damaged, and we could become subject to regulatory inquiries or litigation, all of which could result in significant liability. In addition, if we were to experience a prolonged system disruption in our information technology systems or those of certain of our vendors and partners, it could negatively impact our ability to serve our customers, which could adversely impact our business, financial condition, results of operations and prospects. If operations at our facilities were disrupted and could not be promptly restored, such disruption could cause a material disruption in our business, financial condition, results of operations, and prospects. Moreover, there could be public announcements regarding any cybersecurity incidents and, if securities analysts or investors perceive these announcements to be negative, it could, among other things, have a material adverse effect on our business, reputation, financial condition, results of operations and prospects.

Our information technology systems, and those of our vendors and partners, are potentially vulnerable to cybersecurity incidents such as data security breaches, which could lead to the loss and exposure of information, including personal, sensitive, and confidential data, to unauthorized persons, resulting in a data security breach. Any such data security breaches could, among other things, lead to the loss of trade secrets or other intellectual property, or could lead to the exposure of personal information, including sensitive personal information, of our employees, customers and others, any of which could have a material adverse effect on our business, reputation, financial condition, results of operations and prospects. In addition, any such data security breaches could result in legal claims or proceedings, regulatory inquiries, investigations, or actions, and other types of liability under laws that protect the privacy and security of personal information, including federal, state and foreign data protection, privacy, data security, and consumer protection regulations, violations of which could result in significant penalties and fines. Additionally, the introduction and passage of new privacy laws, including but not limited to the California Privacy Rights Act (CPRA), which was approved by California voters in the election on November 3, 2020 and will modify the California Consumer Privacy Act (CCPA), creates further uncertainty and may require us to incur additional costs and expenses in an effort to comply. In addition, U.S. and international laws and regulations that have been applied to protect user privacy (including laws regarding unfair and deceptive practices in the U.S. and GDPR in the EU) may be subject to evolving interpretations or applications. This area of law is continuing to evolve and is subject to significant uncertainty, which may require us to incur additional costs and expenses in order to comply. Furthermore, responding to a legal claim or proceeding or a regulatory inquiry, investigation, or action, regardless of its merit, could be costly, divert management's attention and harm our reputation.

The cost of protecting against, investigating, mitigating and responding to cybersecurity incidents and data security breaches, and complying with applicable breach notification obligations to individuals, regulators, vendors, partners, and others can be significant. As threats related to cybersecurity incidents and data security breaches continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to detect, appropriately react to, and respond to such cybersecurity incidents and data security breaches. The inability to implement, maintain and upgrade adequate safeguards could have a material adverse effect on our business, financial condition, results of operations and prospects. Should such disruptions occur, our current insurance policies may not be adequate to compensate us for the potential costs and other losses

arising from such disruptions, failures, or security breaches and it is possible that an insurer could deny coverage on any future claim. In addition, such insurance may not be available to us in the future on economically reasonable terms or at all. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, financial condition, results of operations and prospects.

A customer may unintentionally misuse our products or a bad actor may intentionally use our products with intent to create harm and, in either case, third parties may seek to hold us liable for the resulting harm.

All orders for our products that we receive are processed through a security filter. We verify that the shipping addresses of our customers are valid, screen the customer versus known agent lists and comply in all material respects with the know your customer rules. Despite these precautions it is possible that one of our customers may unintentionally misuse our products or a bad actor may attempt to misuse our products to create harm. If misuse of our products were to occur, the terms and conditions of our invoices may be insufficient to protect us from liability. Any indemnification that our customers are required to provide to us may be insufficient to cover the costs and damages resulting from the misuse of our products. Further, any product liability insurance we may obtain could specifically exclude bad acts of our customers from coverage or coverage limits may be insufficient to protect us from the amount of the liability we could incur. Any unintentional or intentional misuse of our products could result in liability or require us to expend costs to defend ourselves, may not be covered by insurance and may have a material and adverse effect on our business or results of operations.

Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern.

As shown in the financial statements included in this prospectus, we have had recurring losses from operations and, as a result, our independent registered public accounting firm has expressed substantial doubt concerning our ability to continue as a going concern and has included an explanatory paragraph in its report on our financial statement as of and for the year ended December 31, 2020 with respect to this uncertainty. Future reports on our financial statements may also include an explanatory paragraph with respect to our ability to continue as a going concern. We have incurred significant losses since our inception and have never generated profit, and it is possible we will never generate profit. There is no assurance that other financing will be available when needed to allow us to continue as a going concern. The perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about our ability to meet our contractual obligations. If we are unable to continue as a going concern, you could lose all or part of your investment.

Risks Related to Supply, Manufacturing and Distribution of Our Products

We rely on a single contract manufacturer to manufacture and supply our instruments and single source suppliers for certain components of our instruments and raw materials. If this manufacturer or these suppliers should fail or not perform satisfactorily, our ability to commercialize and supply our products would be adversely affected.

We do not own or operate, and currently do not plan to own or operate, facilities for manufacturing our BioXp systems. We rely and expect to continue to rely on third parties for the production and packaging of our instruments. We rely on a single contract manufacturer, D&K Engineering, Inc. (D&K), located in San Diego, to manufacture and supply our BioXp systems. Since our contract with D&K does not commit it to carry inventory or make available any particular quantities of instruments outside of accepted purchase orders, D&K may give other customers' needs higher priority than ours, and we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms. We do not have a long-term supply agreement with D&K. Instead, we typically issue purchase orders for our BioXp systems on a six-month rolling basis and we currently maintain less than 30 days of inventory of BioXp systems. Our purchase orders with D&K are terminable without cause upon sixty days' notice in writing to the other party.

Our reliance on a third party for the manufacture of our instruments increases the risk that we will not have sufficient quantities of our instruments or will not be able to obtain such quantities at an acceptable cost or quality, which could delay, prevent or impair commercialization of our instruments. In the event it becomes necessary to utilize a different contract manufacturer for our BioXp systems, we would experience additional costs, delays and difficulties as a result of having to identify and enter into an agreement with a new manufacturer. We would also have to

prepare such new manufacturer to meet the technical and logistical requirements associated with manufacturing our instruments, and our business could suffer as a result.

In addition, certain of the components used in our instruments are sourced from limited or single-source suppliers. If we were to lose such suppliers, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis on acceptable terms, if at all. An interruption in our ability to sell and deliver instruments to customers could occur if we encounter delays or difficulties in securing these components, or if the quality of the components supplied do not meet our specifications, or if we cannot then obtain an acceptable substitute. If any of these events occur, our business, results of operations, financial condition and prospects could be harmed.

We also rely on third parties for certain components of our BioXp kits and benchtop reagents, including the nucleotides we use in our BioXp kits, which are primarily sourced from Integrated DNA Technologies, Inc. (IDT), a division of Danaher Corporation. Recently, supply issues with IDT have caused us to rely on an alternative supplier for these components and raw materials. We cannot guarantee that we will be able to source these materials at similar quantities and on similar terms if our preferred suppliers were to become unable or unwilling to fulfill our requirements.

Our reliance on third party manufacturers subjects us to risks associated with their businesses and operations. This dependence on others may harm our ability to develop and commercialize our products on a timely and competitive basis. Any such failure may result in decreased product sales and lower product revenue, which would harm our business. For example, even if we have agreements with third parties, they may not perform their obligations to us and they may be unable or unwilling to establish or increase production capacity commensurate with our needs. Disputes may also arise between us and our suppliers that result in the delay or termination of commercialization or that result in costly litigation or arbitration that diverts management's attention and resources. Also, third party manufacturers are subject to their own operational and financial risks that are outside of our control, and potentially their control also, that may cause them to suffer liquidity or operational problems and that could interfere with their business operations. For example, our suppliers have also been impacted by the COVID-19 pandemic and some of our raw materials and components originate in China. We have also experienced supply delays for critical hardware, instrumentation and supplies that we use for product development, as these other components and supplies are otherwise diverted to COVID-19-related testing and other uses.

We have limited experience producing and supplying our products. We may be unable to consistently manufacture or source our products to the necessary specifications or in quantities necessary to meet demand on a timely basis and at acceptable performance and cost levels.

Our BioXp systems, BioXp kits and benchtop reagents comprise an integrated solution with many different components that work together. As such, a quality defect in a single component can compromise the performance of the entire system. In order to successfully generate revenue from this product line, we need to supply our customers with products that meet their expectations for quality and functionality in accordance with established specifications on a timely basis. Our instruments are manufactured by D&K using complex processes, sophisticated equipment and strict adherence to specifications and quality systems procedures. Given the complexity of this instrumentation, individual units may occasionally require additional installation and service prior to becoming available for customer use.

As we continue to scale commercially and develop new products, and as our products incorporate increasingly sophisticated technology, it will become more difficult to ensure our products are produced in the necessary quantities while maintaining quality. There is no assurance that we or our third-party manufacturers will be able to continue to manufacture our products so that our technology consistently achieves the product specifications and produces results with acceptable quality. In addition, our BioXp kits and benchtop reagents have a limited shelf life, after which their performance is not ensured and many of our products must be shipped and stored at controlled temperatures. Shipment of BioXp kits and benchtop reagents that exceed their shelf life or shipment of defective products to customers may result in recalls and warranty replacements, which would increase our costs and may damage our reputation, and depending upon current inventory levels and the availability and lead time for additional inventory, could lead to availability issues. Any future design issues, unforeseen manufacturing problems, such as contamination of our or our manufacturers' facilities, equipment malfunctions, aging components, quality issues with components and materials sourced from third-party suppliers, or failures to strictly follow procedures or meet

specifications, may have a material adverse effect on our brand, business, reputation, results of operations and financial condition and could result in us or our third-party manufacturers losing International Organization for Standardization (ISO) or quality management certifications. If our third-party manufacturers fail to maintain ISO quality management certifications, our customers might choose not to purchase products from us.

In addition, as we scale our commercial operations, we will also need to make corresponding improvements to other operational functions, such as our customer support, service and billing systems, compliance programs and internal quality assurance programs. We cannot assure you that any increases in scale, related improvements and quality assurance will be successfully implemented or that appropriate personnel will be available. As we develop additional products, we may need to bring new equipment on-line, implement new systems, technology, controls and procedures and hire personnel with different qualifications.

An inability to manufacture products and components that consistently meet specifications, in necessary quantities, at commercially acceptable costs and without significant delays, may have a material adverse effect on our business, results of operations, financial condition and prospects.

We must continue to secure and maintain sufficient and stable supplies of components and raw materials.

Certain disruptions in supply of, and changes in the competitive environment for, components and raw materials integral to the manufacturing of our products may adversely affect our profitability. We use a broad range of materials and supplies in our products. A significant disruption in the supply of these materials could decrease production and shipping levels, materially increase our operating costs and materially and adversely affect our revenues and profit margins. Shortages of materials or interruptions in transportation systems, labor strikes, work stoppages, war, acts of terrorism or other interruptions to or difficulties in the employment of labor or transportation in the markets in which we purchase materials, components and supplies for the production of our products, in each case, may adversely affect our ability to maintain production of our products and achieve profitability. Unforeseen discontinuation or unavailability of certain components, such as enzymes or nucleotides, each of which we currently primarily source from single supplier, could cause backorders as we modify our product specifications to accommodate replacement components. If we were to experience a significant or prolonged shortage of critical components from any of our suppliers and could not procure the components from other sources, we would be unable to manufacture our products and ship them to our customers in a timely fashion, or at all, which would adversely affect our sales, margins and customer relations.

Our products could have defects or errors, giving rise to claims against us, adversely affecting market adoption and negatively impacting our business, financial condition, and results of operations.

Our products utilize novel and complex technology related to writing synthetic DNA and mRNA and may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects, or errors will not arise, and as we commercialize our products, these risks may increase. We provide warranties at the point of sale that our products will meet performance expectations and will be free from defects. We also provide extended warranties at an additional cost to the customer. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, we depend upon third parties for the supply of our instruments and various components, many of which require a significant degree of technical expertise to produce. If our suppliers fail to make our products or their components to specification or provide defective products to us, and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If our products contain defects, we may experience:

- a failure to achieve market acceptance for our products;
- loss of customer orders and delay in order fulfillment;
- damage to our reputation;
- increased warranty and customer service and support costs due to product repair or replacement;
- product recalls or replacements;
- inability to attract new customers;

- diversion of resources from our manufacturing and research and development departments into our service department; and
- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

If we become subject to product liability claims, we may be required to pay damages out of our cash reserves.

Our business exposes us to potential product liability claims that are inherent in the production, marketing and sale of biotechnological and genetic products. We do not currently have product liability insurance and any product liability claim, or recall of one of our products, would have to be paid out of our cash reserves.

Shipping is a critical part of our business. Any changes in our shipping arrangements or damages or losses sustained during shipping could adversely affect our business, financial condition, results of operations and prospects.

We currently rely on commercial carriers for our shipping. If we are not able to negotiate acceptable pricing and other terms with these carriers, or if they experience performance problems or other difficulties, it could negatively impact our operating results and our customers' experience. If a product is damaged in transit, it may result in a substantial delay in the fulfillment of the customer's order, and depending on the type and extent of the damage and whether the incident is covered by insurance, it may result in a substantial financial loss to us. If our products are not delivered in a timely fashion or are damaged or lost during the delivery process, our customers could become dissatisfied and cease using our products or services, which would adversely affect our business, financial condition, results of operations and prospects.

Our business depends on our ability to quickly and reliably deliver our products and in particular, our BioXp kits and benchtop reagents, to our customers. Certain of these products are perishable and must be kept below certain temperatures and, therefore, we ship these products on dry ice and only ship such products on certain days of the week to reach customers without spoilage. Disruptions in the delivery of these products, whether due to labor disruptions, bad weather, natural disasters, terrorist acts or threats or for other reasons could result in our customers receiving products that are not fit for use, and if used, could result in inaccurate results or ruined experiments. While we work with customers to replace any products that are impacted by delivery disruptions, our reputation and our business may be adversely impacted even if we replace products free of charge. In addition, if we are unable to continue to obtain expedited delivery services on commercially reasonable terms, our operating results may be adversely affected.

In addition, should our commercial carriers encounter difficulties in delivering our products to customers, particularly at the end of any financial quarter, it could adversely impact our ability to recognize revenue for those products in that period and accordingly adversely affect our financial results for that period.

Risks Related to Our Sales, Marketing and Customer Support

We have limited experience in sales and marketing of our products.

We have limited experience in sales and marketing our products. Our ability to achieve profitability depends on our being able to attract customers for our products. To meet our sales objectives, we must expand our sales, marketing, distribution and customer service and support capabilities with personnel with the appropriate technical expertise. In undertaking expansion efforts, we will face a number of risks relating to:

- our ability to attract, retain and manage the sales, marketing and customer service and support personnel necessary to commercialize and gain market acceptance for our technology;
- the time and cost of maintaining specialized sales, marketing and customer service and support personnel; and
- the relative success of our sales, marketing and customer service and support personnel.

We currently enlist, and may in the future seek to enlist one or more third parties to assist with sales, distribution and customer service and support. There is no guarantee that we will be successful in attracting effective sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales and distribution partners, are not successful, our products may not gain market acceptance, which could materially impact our business operations.

A substantial proportion of our sales are through distributors, and we do not control their efforts to sell our products. If our relationships with these third-party distributors deteriorate, or if these third-party distributors fail to sell our products or engage in activities that harm our reputation, our financial results may be negatively affected.

Our current sales model includes direct sales in North America and parts of Europe, and relationships with third party distributors in other parts of Europe and various countries in the Middle East, Africa and Asia Pacific regions. We believe that our reliance on distributors improves the economics of our business, as we do not carry the high fixed costs of a direct sales force in many of the countries in which our products are sold. If we are unable to maintain or enter into such distribution arrangements on acceptable terms, or at all, we may not be able to successfully commercialize our products in certain countries.

Furthermore, distributors can choose the level of effort that they apply to selling our products relative to others in their portfolio. The selection, training, and compensation of distributors' sales personnel are within their control rather than our own and may vary significantly in quality from distributor to distributor. They may experience their own financial difficulties, or distribution relationships may be terminated or allowed to expire, which could increase the cost of or impede commercialization of our products in applicable countries. Disputes may also arise between us and our distributors that result in the delay or termination of commercialization or that result in costly litigation or arbitration that diverts management's attention and resources. Distributors may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our proprietary information or expose us to potential litigation. Distributors could move forward with competing products developed either independently or in collaboration with others, including our competitors.

In addition, although our contract terms require our distributors to comply with all applicable laws regarding the sale of our products, including regulatory labelling, protection of personal data, U.S. export regulations and the U.S. Foreign Corrupt Practices Act (FCPA), we may not be able to ensure proper compliance. If our distributors fail to effectively market and sell our products in full compliance with applicable laws and regulations, our results of operations and business may suffer.

The size of the markets for our products may be smaller than estimated, and new market opportunities may not develop as quickly as we expect, or at all, thus limiting our ability to successfully meet our anticipated revenue projections.

The market for synthetic biology technologies and products is evolving, making it difficult to predict with any accuracy the size of the markets for our current and future products, including our BioXp systems, BioXp kits and benchtop reagents. Our estimates of the total addressable market for our current and future products are based on a number of internal and third-party estimates and assumptions. In particular, our estimates are based on our expectations that researchers in the market for certain synthetic biology research tools and technologies will view our products as competitive alternatives to, or better options than, existing tools and technologies. We also expect researchers will recognize the ability of our products to complement, enhance and enable new applications of their current tools and technologies. Underlying each of these expectations are a number of estimates and assumptions that may be incorrect, including the assumptions that government or other sources of funding will continue to be available to synthetic biology researchers at times and in amounts necessary to allow them to purchase our products and that researchers have an unmet need for performing synthetic biology applications. As a result, the sizes of the annual total addressable market for new markets and new products are even more difficult to predict. The synthetic biology market may develop more slowly or differently than we expect. While we believe our assumptions and the data underlying our estimates of the total addressable market for our products are reasonable, these assumptions and estimates may not be correct and the conditions supporting our assumptions or estimates, or those underlying the third-party data we have used, may change over time, thereby reducing the accuracy of our estimates. As a result, our estimates of the total addressable market for our products may be incorrect.

The future growth of the market for our current and future products depends on many factors beyond our control. For example, in 2020, 11% of our revenue was from products specifically targeting research and development efforts related to COVID-19 vaccines and therapeutic products. As effective COVID-19 vaccines or treatments are developed, approved and rolled out to protect against and treat the COVID-19 virus, demand for these products and biofoundry services may be impacted and the size of our market opportunity for such products may be impacted.

We expect that our products will be subject to the market forces and adoption curves common to other new technologies. The market for synthetic biology technologies and products is in its early stages of development. Sales

of new products into new market opportunities may take years to develop and mature and we cannot be certain that these market opportunities will develop as we expect. If the markets for our current and future products are smaller than estimated or do not develop as we expect, our growth may be limited and our business, financial condition and operational results of operations could be adversely affected.

Our success depends on broad scientific and market acceptance of our products, which we may fail to achieve.

Our ability to achieve and maintain scientific and commercial market acceptance of our products will depend on a number of factors. If widespread adoption of our products takes longer than anticipated, we will continue to experience operating losses.

The success of life sciences products is due, in large part, to recognition and acceptance by the scientific community, their adoption of these products in the applicable field of research and the growth, prevalence and costs of competing products. Such recognition and acceptance of our products may not occur in the near term, or at all. New synthetic biology technology, including our own, may not be adopted until the consistency and accuracy of such technology has been proven.

Other factors in achieving commercial market acceptance of our products include:

- our ability to market and increase awareness of the capabilities of our products;
- our customers' willingness to adopt new products and workflows;
- whether early adopters and key opinion leaders (KOLs) publish research involving the use of our products;
- our products' ease-of-use and whether it reliably provides advantages over alternative technologies;
- the rate of adoption of our products and services by academic institutions, laboratories, biopharmaceutical companies and others;
- the prices we charge for our products;
- our ability to develop new products and workflows;
- whether competitors commercialize products that perform similar functions as our products; and
- the impact of our investments in product innovation and commercial growth.

We cannot assure you that we will be successful in addressing each of these criteria or other criteria that might affect the market acceptance of any products we commercialize. If we are unsuccessful in achieving and maintaining scientific and market acceptance of our products, our business, financial condition and results of operations would be adversely affected.

The synthetic biology technology market is highly competitive. If we fail to compete effectively, our business and results of operation will suffer.

We face significant competition in the synthetic biology technology market. We currently compete with synthetic biology technology companies and the companies that are supplying components, products and services that serve customers engaged in synthetic biology research. These companies include Thermo Fisher Scientific Inc.; Danaher Corporation; CureVac N.V.; GENEWIZ Group, which was acquired by Brooks Automation, Inc.; GenScript Biotech Corporation; DNA Script SAS; Integrated DNA Technologies, Inc.; Molecular Assemblies, Inc.; Nuclera Nucleics Ltd; Nutcracker Therapeutics, Inc.; Twist Bioscience Corporation; Aldevron, LLC; TriLink BioTechnologies, Inc. and others.

Some of our current competitors are large, publicly-traded companies, or are divisions of large publicly-traded companies, and may enjoy a number of competitive advantages over us, including:

- greater name and brand recognition;
- greater financial and human resources;
- broader product lines;
- larger sales forces and more established distributor networks;
- substantial intellectual property portfolios;
- larger and more established customer bases and relationships; and

- better established, larger scale and lower cost manufacturing capabilities.

We cannot assure investors that our products will compete favorably or that we will be successful in the face of increasing competition from products and technologies introduced by our existing or future competitors or companies entering our markets. In addition, we cannot assure investors that our competitors do not have or will not develop products or technologies that currently or in the future will enable them to produce competitive products with greater capabilities or at lower costs than ours. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

Our revenue, results of operations and cash flows would be adversely affected by the loss of a significant customer.

We have derived, and we may continue to derive, a significant portion of our revenues from a limited number of large customers. We estimate that our twenty largest customers accounted for 85% and 60% of our revenue for the period March 8, 2019 through December 31, 2019 and the year ended December 31, 2020, respectively. The loss of key customers, or the reduction in the amount of product ordered by them may adversely affect our revenue, results of operations, cash flows and reputation in the marketplace.

One customer, New England Biolabs, Inc., accounted for 21% of our revenue for the year ended December 31, 2020, based on royalties paid under a Confidential Settlement Agreement. This royalty will expire upon the earlier of the expiration of all licensed patents or the entry of a final judgment declaring the licensed patents invalid or unenforceable. Also under the terms of the Confidential Settlement Agreement, NEB has only agreed to continue to offer the royalty-bearing products for sale through September 30, 2025, after which time it may stop selling the royalty bearing products upon sixty days' notice.

We generally do not have long-term contracts with our customers requiring them to purchase any specified quantities of products from us.

We generally do not have long-term contracts with our customers requiring them to purchase any specified quantities of products from us. Without such contracts, our customers are not obligated to order our products. We cannot accurately predict our customers' decisions to reduce or cease purchasing our products. Additionally, even where we enter into contracts with our customers, there is no guarantee that such agreements will be negotiated on terms that are commercially favorable to us in the long term. If many of our customers were to substantially reduce their purchase volume or cease ordering products from us, this could materially and adversely affect our financial performance.

Our business will depend significantly on research and development spending by the pharmaceutical, biotechnology and industrial agricultural customers, as well as academic institutions and other research institutions. Any reduction in spending could limit demand for our products and adversely affect our business, results of operations, financial condition and prospects.

We expect that substantially all of our sales revenue in the near term will be generated from sales to pharmaceutical, biotechnology and industrial agricultural customers, as well as academic institutions and other research institutions. Much of these customers' funding is dependent on annual research and development budgets and in the case of academic and other research institutions will be, in turn, provided by various state, federal and international government agencies. As a result, the demand for our products will depend upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as:

- research and development budgets within the pharmaceutical, biotechnology, agricultural and other industries;
- government funding of research and development;
- changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research or changes that have the effect of increasing the length of the funding process;
- macroeconomic conditions and the political climate;
- potential changes in the regulatory environment;
- differences in budgetary cycles, especially government- or grant-funded customers, whose cycles often coincide with government fiscal year ends;

- market-driven pressures to consolidate operations and reduce costs; and
- scientific and market acceptance of relatively new synthetic biology products.

In addition, various state, federal and international agencies that provide grants and other funding may be subject to stringent budgetary constraints that could result in spending reductions, reduced grant making, reduced allocations or budget cutbacks, which could jeopardize the ability of funding organizations or the organizations to whom they provide funding, to purchase our products. For example, congressional appropriations to the National Institutes of Health (NIH), have generally increased year-over-year for the last 19 years, and reached a new high in 2020, but the NIH also experiences occasional year-over-year decreases in appropriations, including as recently as 2013. In addition, funding for life science research has increased more slowly during the past several years compared to previous years and has actually declined in some countries. There is no guarantee that NIH appropriations will not decrease in the future, and a decrease may be more likely under the current administration, whose annual budget proposals have repeatedly decreased NIH appropriations. A decrease in the amount of, or delay in the approval of, appropriations to NIH or other similar United States or international organizations, such as the Medical Research Council in the United Kingdom, could result in fewer grants benefiting synthetic biology research. These reductions or delays could also result in a decrease in the aggregate amount of grants awarded for synthetic biology research or the redirection of existing funding to other projects or priorities, any of which in turn could cause our customers and potential customers to reduce or delay purchases of our products. Our operating results may fluctuate substantially due to any such reductions and delays. Any decrease in our customers' budgets or expenditures, or in the size, scope or frequency of their capital or operating expenditures, could materially and adversely affect our business, results of operations, financial condition and prospects.

Our success depends on our ability to service and support our products directly or in collaboration with our strategic partners.

To the extent that we or our strategic partners fail to maintain a high quality level of service and support for our products, there is a risk that the perceived quality of our products will be diminished in the marketplace. Likewise, we may fail to provide the level, quantity or quality of service expected by the marketplace. This could result in slower adoption rates and lower than anticipated utilization of our products, which could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to the COVID-19 Pandemic and Other Natural Disasters

The COVID-19 pandemic and efforts to reduce its spread have adversely impacted, and are expected to continue to adversely impact, our business and operations.

The COVID-19 pandemic has had, and is expected to continue to have, an adverse impact on our operations, particularly as a result of preventive and precautionary measures that we, other businesses and governments are taking. Governmental mandates related to COVID-19 have impacted, and we expect similar infectious diseases or public health crises may continue to impact, our personnel and personnel at third-party manufacturers in the United States and other countries. Such mandates have impacted and likely will continue to impact the availability and cost of materials, which disrupts or delays our receipt of components and supplies from the third parties we rely on to, among other things, manufacture our BioXp systems, BioXp kits and benchtop reagents or source and timely receive parts and components from third parties. For instance, there are standing "stay-at-home" orders in California, and specifically San Diego County where our headquarters is located, that require businesses to implement certain social distancing protocols and other health and safety measures, which may affect productivity and morale. An extended implementation of these governmental mandates could further impact our ability to operate effectively and conduct ongoing research and development or other activities. The COVID-19 pandemic has also had an adverse effect on our ability to attract, recruit, interview and hire at the pace we would typically expect to support our rapidly expanding operations. To the extent that any governmental authority imposes additional regulatory requirements or changes existing laws, regulations and policies that apply to our business and operations, such as additional workplace safety measures, our product development plans may be delayed, and we may incur further costs in bringing our business and operations into compliance with changing or new laws, regulations and policies.

Our ability to drive the adoption of our products will depend upon our ability to attend trade shows and conferences, visit customer sites, the ability of our customers to access laboratories, install our products and train their personnel on our products and conduct research in the face of the COVID-19 pandemic. Additionally, the research and development budgets of these customers, the ability of such customers to receive funding for research, and the

ability of such customers to receive instrument installations and visitors to their facilities and to travel to our facilities, other laboratories and industry events, will become increasingly important to the adoption of our products. All of these considerations are impacted by factors beyond our control, such as:

- reductions in capacity or shutdowns of laboratories and other institutions as well as other impacts stemming from the COVID-19 pandemic, such as reduced or delayed spending on instruments or reagents as a result of such shutdowns and delays before re-opened laboratories and institutions resume previous levels of research activities that require new purchases of our products;
- decreases in government funding of research and development; and
- changes to programs that provide funding to research laboratories and institutions, including changes in the amount of funds allocated to different areas of research, changes that have the effect of increasing the length of the funding process or the impact of the COVID-19 pandemic on our customers and potential customers and their funding sources.

The ultimate impact of the COVID-19 pandemic is highly uncertain and subject to sudden change. This impact could have a material, adverse impact on our liquidity, capital resources, operations and business and those of the third parties on which we rely, and could worsen over time. The extent to which the COVID-19 pandemic impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. While we do not yet know the full extent of potential impacts on our business, any of these occurrences could significantly harm our business, results of operations and financial condition.

Unfavorable U.S. or global economic conditions as a result of the COVID-19 pandemic, or otherwise, could adversely affect our ability to raise capital and our business, results of operations and financial condition.

While the potential economic impact brought by, and the duration of, the COVID-19 pandemic is difficult to assess or predict, the COVID-19 pandemic has resulted in, and may continue to result in, extreme volatility and disruptions in the capital and credit markets, reducing our ability to raise additional capital through equity, equity-linked or debt financings, which could negatively impact our short-term and long-term liquidity and our ability to operate in accordance with our operating plan, or at all. Additionally, our results of operations could be adversely affected by general conditions in the global economy and financial markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our products and our ability to raise additional capital when needed on favorable terms, if at all. A weak or declining economy could strain our customers' budgets or cause delays in their payments to us. Any of the foregoing could harm our business. We cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our ability to raise capital, business, results of operations and financial condition.

If our facilities or our third-party manufacturers' facilities become unavailable or inoperable, our research and development program and commercialization of our products could be adversely impacted and manufacturing of our products could be interrupted.

Our San Diego, California, facilities house our corporate, research and development and quality assurance teams. Our instruments are manufactured at our third-party manufacturer's facilities in San Diego, and our BioXp kits and benchtop reagents are manufactured at various locations in the United States and internationally, including our San Diego facilities. We do not have a second or back-up facility to use if our San Diego facility becomes inoperable.

Our facilities in San Diego and those of our third-party manufacturers are vulnerable to natural disasters, public health crises, including the impact of the COVID-19 pandemic, and catastrophic events. For example, our San Diego facilities are located near earthquake fault zones and are vulnerable to damage from earthquakes as well as other types of disasters, including fires, floods, power loss, communications failures and similar events. If any disaster, public health crisis or catastrophic event were to occur, our ability to operate our business would be seriously, or potentially completely, impaired. If our facilities or our third-party manufacturer's facilities become unavailable for any reason, we cannot provide assurances that we will be able to secure alternative manufacturing facilities with the necessary capabilities and equipment on acceptable terms, if at all. We may encounter particular difficulties in replacing our San Diego facilities given the specialized equipment housed within it. The inability to manufacture our products, combined with our limited inventory of finished products, may result in the loss of future customers or harm our reputation, and we may be unable to re-establish relationships with those customers in the future.

If our research and development program or commercialization program were disrupted by a disaster or catastrophe, the launch of new products, including our workflow automation and reagent solutions, and the timing of improvements to our products could be significantly delayed and could adversely impact our ability to compete with other available products and solutions. If our or our third-party manufacturer's capabilities are impaired, we may not be able to manufacture and ship our products in a timely manner, which would adversely impact our business. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

Risks Related to Doing Business Internationally

Doing business internationally creates operational and financial risks for our business.

We estimate that during the period ended December 31, 2019 and the fiscal year ended December 31, 2020, approximately 14% and 25%, respectively, of our revenue was generated from customers located outside of the United States. In connection with our growth strategy, we intend to further expand in international markets. Conducting and launching operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones and consumes significant management resources. If we fail to coordinate and manage these activities effectively, our business, financial condition or results of operations could be adversely affected. International sales entail a variety of risks, including longer payment cycles and difficulties in collecting accounts receivable outside of the United States, currency exchange fluctuations, challenges in staffing and managing foreign operations, tariffs and other trade barriers, unexpected changes in legislative or regulatory requirements of foreign countries into which we sell our products, difficulties in obtaining export licenses or in overcoming other trade barriers, laws and business practices favoring local companies, political and economic instability, difficulties protecting or procuring intellectual property rights, and restrictions resulting in delivery delays and significant taxes or other burdens of complying with a variety of foreign laws.

Changes in the value of the relevant currencies may affect the cost of certain items required in our operations. Changes in currency exchange rates may also affect the relative prices at which we are able to sell products in the same market. Our revenue from international customers may be negatively impacted as increases in the U.S. dollar relative to our international customers' local currency could make our products more expensive, impacting our ability to compete. Our costs of materials from international suppliers may increase if in order to continue doing business with us they raise their prices as the value of the U.S. dollar decreases relative to their local currency. Foreign policies and actions regarding currency valuation could result in actions by the United States and other countries to offset the effects of such fluctuations. The recent global financial downturn has led to a high level of volatility in foreign currency exchange rates and that level of volatility may continue, which could adversely affect our business, financial condition or results of operations.

Our international business could expose us to business, regulatory, political, operational, financial, and economic risks associated with doing business outside of the United States.

Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws that are or may be applicable to our business in the future, such as the European Union's General Data Protection Regulation (GDPR), and other data privacy requirements, labor and employment regulations, anti-competition regulations, the U.K. Bribery Act of 2010 and other anti-corruption laws;
- required compliance with U.S. laws such as the FCPA, and other U.S. federal laws and regulations, including those established by the Office of Foreign Asset Control;
- export requirements and import or trade restrictions;
- laws and business practices favoring local companies;
- foreign currency exchange fluctuations, longer payment cycles and difficulties in enforcing agreements and collecting accounts receivables through certain foreign legal systems;
- hyperinflation or economic or political instability in foreign countries;
- changes in social, economic, and political conditions or in laws, regulations and policies governing foreign trade, manufacturing, research and development, and investment, including as a result of the separation of the United Kingdom from the European Union, commonly referred to as Brexit;

- the imposition of inconsistent laws or regulations;
- changes in or interpretations of foreign law that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;
- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting, maintaining, enforcing or procuring intellectual property rights.

If one or more of these risks occurs, it could require us to dedicate significant resources to remedy such occurrence, and if we are unsuccessful in finding a solution, our financial results will suffer.

We could inadvertently engage in exporting or related activity that contravenes international trade restraints, or regulatory authorities could promulgate more far-reaching international trade restraints, which could give rise to one or more of substantial legal liability, impediments to our business and reputational damage.

Our international business activities must comport with U.S. export controls and other international trade restraints, including the U.S. Department of Commerce's Export Administration Regulations and economic sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control.

To date our exports have not been licensable under export controls; however, we could still fail to observe export controls or sanctions requirements in a manner that leaves us in noncompliance with export controls or other international trade restraints. In addition, authorities could promulgate international trade restraints that impinge on our ability to engage in our business operations as planned. One or more of resulting legal penalties, restraints on our business or reputational damage could have material adverse effects on our business and financial condition.

We are subject to various U.S. and international anti-corruption laws and other anti-bribery and anti-money laundering laws and regulations.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, and other anti-corruption, anti-bribery, and anti-money laundering laws in the jurisdictions where we do business, both domestic and abroad. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years and are interpreted broadly. These laws generally prohibit companies, their employees, business partners, third-party intermediaries, representatives, and agents from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to government officials or commercial parties to obtain or retain business, direct business to any person, or gain any improper advantage. We sometimes leverage third parties to conduct our business abroad. We and our employees, business partners, third-party intermediaries, representatives, and agents may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we may be held liable for their corrupt or other illegal activities even if we do not explicitly authorize those activities. We cannot assure you that our employees and agents will not take actions that violate applicable law, for which we may be ultimately held responsible. These laws also require that we keep accurate books and records and maintain internal accounting controls and compliance procedures designed to prevent any such actions. While we have policies and procedures to address compliance with these laws, we cannot assure you that our employees, business partners, third-party intermediaries, representatives, and agents will not take actions that violate our policies or applicable law, for which we may be ultimately held responsible. Our exposure for violating these laws increases as our international presence expands and as we increase sales and operations in foreign jurisdictions.

Any violation of the FCPA or other applicable anti-bribery, anti-corruption, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions, settlements, prosecution, enforcement actions, fines, damages, or suspension or debarment from government contracts, all of which may have an adverse effect on our reputation, business, stock price, financial condition, prospects, and results of operations. In addition, responding to any investigation or action will likely result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees.

Risks Related to Our Regulatory Environment

If we elect to label and promote any of our products as clinical diagnostics tests or medical devices, we would be required to obtain prior approval or clearance by the U.S. Food and Drug Administration (FDA), which would take significant time and expense and could fail to result in FDA clearance or approval for the intended uses we believe are commercially attractive.

Our products are currently labeled and promoted, and are, and in the near-future will be, sold primarily to academic and research institutions and research companies as research use only (RUO) products. They are not currently designed, or intended to be used, for clinical diagnostic tests or as medical devices. If we elect to label and market our products for use as, or in the performance of, clinical diagnostics in the United States, thereby subjecting them to FDA regulations as medical devices, we would be required to obtain premarket 510(k) clearance or premarket approval from the FDA, unless an exception applies.

We may in the future register with the FDA as a medical device manufacturer and list some of our products with the FDA pursuant to an FDA Class I listing for general purpose laboratory equipment. While this regulatory classification is exempt from certain FDA requirements, such as the need to submit a premarket notification commonly known as a 510(k), and some of the requirements of the FDA's Quality System Regulations (QSRs), we would be subject to ongoing FDA "general controls," which include compliance with FDA regulations for labeling, inspections by the FDA, complaint evaluation, corrections and removals reporting, promotional restrictions, reporting adverse events or malfunctions for our products, and general prohibitions against misbranding and adulteration.

In addition, we may in the future submit 510(k) premarket notifications to the FDA to obtain FDA clearance of certain of our products. It is possible, in the event we elect to submit 510(k) applications for any of our products, that the FDA would take the position that a more burdensome premarket application, such as a premarket approval application or a de novo application, is required for those same products. If such applications were required, greater time and investment would be required to obtain FDA approval. Even if the FDA agreed that a 510(k) was appropriate, FDA clearance can be expensive and time consuming. Notwithstanding the effort and expense, FDA clearance or approval could be denied for some or all of our products for which we choose to market as a medical device or a clinical diagnostic device. There can be no assurance that future products for which we may seek premarket clearance or approval will be approved or cleared by FDA or a comparable foreign regulatory authority on a timely basis, if at all, nor can there be assurance that labeling claims will be consistent with our anticipated claims or adequate to support continued adoption of such products. Compliance with FDA or comparable foreign regulatory authority regulations would require substantial costs, and subject us to heightened scrutiny by regulators and substantial penalties for failure to comply with such requirements or the inability to market our products. The lengthy and unpredictable premarket clearance or approval process, as well as the unpredictability of the results of any required clinical studies, may result in our failing to obtain regulatory clearance or approval to market such products, which would significantly harm our business, results of operations, reputation, and prospects.

If we sought and received regulatory clearance or approval for any of our products, we would be subject to ongoing FDA obligations and continued regulatory oversight and review, including the general controls listed above and the FDA's QSRs for our development and manufacturing operations. We could also be subject to additional FDA post-marketing obligations for such products, any or all of which would increase our costs and divert resources away from other projects. If we sought and received regulatory clearance or approval and are not able to maintain regulatory compliance with applicable laws, we could be prohibited from marketing our products for use as, or in the performance of, clinical diagnostics and be subject to enforcement actions, including warning letters and adverse publicity, fines, injunctions, and civil penalties, recalls or seizure of products, operating restrictions and criminal prosecution.

In addition, we could decide to seek regulatory clearance or approval for certain of our products in countries outside of the United States. Sales of such products outside the United States will likely be subject to foreign regulatory requirements, which can vary greatly from country to country. As a result, the time required to obtain clearances or approvals outside the United States may differ from that required to obtain FDA clearance or approval and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. In Europe, we would need to comply with the new Medical Device Regulation 2017/745 and In Vitro Diagnostic Regulation 2017/746, which became effective May 26, 2017, with application dates of May 26, 2021 (postponed from 2020) and May 26, 2022 respectively. This will increase the difficulty of regulatory approvals in Europe in the future. In addition, the FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain and maintain required approvals,

clearances and certifications could impair our ability to commercialize our products for diagnostic use outside of the United States.

Our products could become subject to government regulation as medical devices by the FDA and other regulatory agencies even if we do not elect to seek regulatory clearance or approval to market our products for diagnostic purposes, which would adversely impact our ability to market and sell our products and harm our business. If our products become subject to FDA regulation, the regulatory clearance or approval and the maintenance of continued and post-market regulatory compliance for such products will be expensive, time-consuming and uncertain both in timing and in outcome.

We do not currently expect our workflow automation and reagent solutions to be subject to the clearance or approval of the FDA, as it is not intended to be used for the diagnosis, treatment or prevention of disease. However, as we expand our product line and the applications and uses of our current or products into new fields, certain of our future products could become subject to regulation by the FDA, or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. Also, even if our products are labeled, promoted and intended as RUO, the FDA or comparable agencies of other countries could disagree with our conclusion that our products are intended for research use only or deem our sales, marketing and promotional efforts as being inconsistent with RUO products. For example, our customers may independently elect to use our RUO labeled products in their own laboratory developed tests (LDTs) for clinical diagnostic use, which could subject our products to government regulation, and the regulatory clearance or approval and maintenance process for such products may be uncertain, expensive, and time-consuming. Regulatory requirements related to marketing, selling and distribution of RUO products could change or be uncertain, even if clinical uses of our RUO products by our customers were done without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against laboratories offering LDTs. However, on October 3, 2014, the FDA issued two draft guidance documents that set forth the FDA's proposed risk-based framework for regulating LDTs, which are designed, manufactured and used within a single laboratory. The draft guidance documents provide the anticipated details through which the FDA would propose to establish an LDT oversight framework, including premarket review for higher-risk LDTs, such as those that have the same intended use as FDA-approved or cleared companion diagnostic tests currently on the market. In January 2017, the FDA announced that it would not issue final guidance on the oversight of LDTs and manufacturers of products used for LDTs, but would seek further public discussion on an appropriate oversight approach, and give Congress an opportunity to develop a legislative solution.

As manufacturers develop more complex diagnostic tests and diagnostic software, the FDA may increase its regulation of LDTs. Any future legislative or administrative rule making or oversight of LDTs, if and when finalized, may impact the sales of our products and how customers use our products, and may require us to change our business model in order to maintain compliance with these laws. We cannot predict how these various efforts will be resolved, how Congress or the FDA will regulate LDTs in the future, or how that regulatory system will impact our business. Changes to the current regulatory framework, including the imposition of additional or new regulations, including regulation of our products, could arise at any time during the development or marketing of our products, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our products, if required. Further, sales of devices for diagnostic purposes may subject us to additional healthcare regulation and enforcement by the applicable government agencies. Such laws include, without limitation, state and federal anti-kickback or anti-referral laws, healthcare fraud and abuse laws, false claims laws, privacy and security laws, Physician Payments Sunshine Act and related transparency and manufacturer reporting laws, and other laws and regulations applicable to medical device manufacturers.

Additionally, on November 25, 2013, the FDA issued Final Guidance "Distribution of In Vitro Diagnostic Products Labeled for Research Use Only." The guidance emphasizes that the FDA will review the totality of the circumstances when it comes to evaluating whether equipment and testing components are properly labeled as RUO. The final guidance states that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA's clearance, approval, and other regulatory requirements if the circumstances surrounding the distribution, marketing and promotional practices indicate that the manufacturer knows its products are, or intends for its products to be, used for clinical diagnostic purposes. These circumstances

may include written or verbal sales and marketing claims or links to articles regarding a product's performance in clinical applications and a manufacturer's provision of technical support for clinical applications.

As part of the United States' efforts to combat COVID-19 and consistent with Executive Orders 13771 and 13924, the Department of Health and Human Services (HHS) announced rescission of guidance and other informal issuances of the FDA regarding premarket review of LDT absent notice-and-comment rulemaking, stating that, absent notice-and-comment rulemaking, those seeking approval or clearance of, or an emergency use authorization, for an LDT may nonetheless voluntarily submit a premarket approval application, premarket notification or an Emergency Use Authorization request, respectively, but are not required to do so. However, laboratories opting to use LDTs without FDA premarket review or authorization would not be eligible for liability protection under the Public Readiness and Emergency Preparedness Act. While this action by HHS is expected to reduce the regulatory burden on clinical laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 that develop LDTs, it is unclear how this action as well as future legislation by federal and state governments and the FDA will impact the industry, including our business and that of our customers. Such HHS measure may compel the FDA to formalize earlier enforcement discretionary policies and informal guidance through notice-and-comment rulemaking and impose further restrictions on LDTs. HHS' rescission policy may change over time. Congress could also enact legislation restricting LDTs. Any restrictions on LDTs by the FDA, HHS, Congress or state regulatory authorities may decrease the demand for our products. The adoption of new restrictions on RUO products, whether by the FDA or Congress, could adversely affect demand for our products. Further, we could be required to obtain premarket clearance or approval before we can sell our products to certain customers.

Ethical, legal and social concerns surrounding the use of genetic information could reduce demand for our technology.

Our products may be used to create DNA sequences of humans, agricultural crops and other living organisms. Our products could be used in a variety of applications, which may have underlying ethical, legal and social concerns. Governmental authorities could, for safety, social or other purposes, impose limits on or implement regulation of the use of gene synthesis. Such concerns or governmental restrictions could limit the use of our DNA synthesis products, which could have a material adverse effect on our business, financial condition and results of operations. In addition, public perception about the safety and environmental hazards of, and ethical concerns over, genetically engineered products and processes could influence public acceptance of our technologies, products and processes. These concerns could result in increased expenses, regulatory scrutiny, delays or other impediments to our programs.

We use biological and hazardous materials that require considerable expertise and expense for handling, storage and disposal and may result in claims against us.

We work with materials, including chemicals, biological agents, and compounds and DNA samples that could be hazardous to human health and safety or the environment. Our operations and research and development processes also produce hazardous and biological waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental laws and regulations may restrict or have a material effect on our operations and research and development programs. If we do not comply with applicable regulations, we may be subject to fines and penalties.

In addition, accidental injury or contamination from these materials or wastes could interrupt our commercialization efforts, research and development programs and business operations, as well as cause environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance.

While our property insurance policy provides limited coverage in the event of contamination from hazardous and biological products and the resulting cleanup costs, we do not currently have any additional insurance coverage for legal liability for claims arising from the handling, storage or disposal of hazardous materials. Accordingly, in the event of contamination or injury, we could be liable for damages or penalized with fines in an amount exceeding our resources, and our operations could be suspended or otherwise adversely affected. We may not be able to maintain insurance on acceptable terms, if at all.

We could inadvertently develop DNA sequences or engage in other activity that contravenes biosecurity requirements, or regulatory authorities could promulgate more far reaching biosecurity requirements that our standard business practices cannot accommodate, which could give rise to substantial legal liability, impediments to our business and reputational damage.

The Federal Select Agent Program (FSAP) involves rules administered by the Centers for Disease Control and Prevention and the Animal and Plant Health Inspection Service that regulate possession, use and transfer of biological select agents and toxins that have the potential to pose a severe threat to public, animal or plant health or to animal or plant products.

We have established a biosecurity program under which we follow biosafety and biosecurity best practices and avoid DNA synthesis activities that implicate FSAP rules; however, we could inadvertently fail to comply with FSAP or other biosecurity rules. In addition, authorities could promulgate new biosecurity requirements that restrict our operations. One or more resulting legal penalties, restraints on our business or reputational damage could have material adverse effects on our business and financial condition.

We are currently subject to, and may in the future become subject to additional, U.S. federal and state laws and regulations imposing obligations on how we collect, store and process personal information. Our actual or perceived failure to comply with such obligations could harm our business. Ensuring compliance with such laws could also impair our efforts to maintain and expand our future customer base, and thereby decrease our revenue.

In the ordinary course of our business, we currently, and in the future will, collect, store, transfer, use or process sensitive data, including personally identifiable information of employees, and intellectual property and proprietary business information owned or controlled by ourselves and other parties. The secure processing, storage, maintenance, and transmission of this critical information are vital to our operations and business strategy. We are, and may increasingly become, subject to various laws and regulations, as well as contractual obligations, relating to data privacy and security in the jurisdictions in which we operate. The regulatory environment related to data privacy and security is increasingly rigorous, with new and constantly changing requirements applicable to our business, and enforcement practices are likely to remain uncertain for the foreseeable future. These laws and regulations may be interpreted and applied differently over time and from jurisdiction to jurisdiction, and it is possible that they will be interpreted and applied in ways that may have a material adverse effect on our business, financial condition, results of operations and prospects.

We are in the process of evaluating compliance needs, but we do not currently have in place formal policies and procedures related to the storage, collection and processing of information, and have not conducted any internal or external data privacy audits, to ensure our compliance with all applicable data protection laws and regulations. Additionally, we do not currently have policies and procedures in place for assessing our third-party vendors' compliance with applicable data protection laws and regulations. All of these evolving compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to modify our data processing practices and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us or our third-party vendors, collaborators, contractors and consultants to comply with any applicable federal, state or similar foreign laws and regulations relating to data privacy and security, or could result in damage to our reputation, as well as proceedings or litigation by governmental agencies or other third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, penalties or judgments, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Related to Our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for our products and technology, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our products and build a strong brand identity may be impaired.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary products and technologies. Each of these types of

measures provides limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to obtain, maintain and protect our intellectual property, third parties may be able to compete more effectively against us. In addition, we may incur substantial litigation costs in our attempts to enforce our right in, defend against challenges to, or recover or restrict use of our intellectual property.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not adequately cover competitors' products, our competitive position could be adversely affected, as could our business, financial condition, results of operations and prospects. Both the patent application process and the process of managing patent and other intellectual property disputes can be time-consuming and expensive.

Our success depends in large part on our ability to obtain and maintain protection of the intellectual property, particularly patents we may own solely or jointly with, or license from, third parties, in the United States and in other countries of interest, with respect to our products and technologies. However, obtaining and enforcing patents is costly, time-consuming and complex. We may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, we may not develop additional proprietary products, methods and technologies that are patentable. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed from or to third parties; such patents and applications may not be prosecuted and enforced by such third parties in our best interests.

The patent position of synthetic biology technology companies is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. Changes in either the patent laws or in interpretations of patent laws in the United States or other jurisdictions may diminish the value of our intellectual property. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. It is possible that none of our pending patent applications will result in issued patents in a timely fashion or at all, and even if patents are granted, they may not provide a basis for intellectual property protection of commercially viable products or services, may not provide us with any competitive advantages. We cannot predict the breadth of claims that may be granted or enforced in our patents or in third-party patents. It is possible that third parties will design around our current or future patents such that we cannot prevent such third parties from using similar technologies and commercializing similar products to compete with us. Some of our owned or licensed patents or patent applications may be challenged, and we may not be successful in defending any such challenge. Any successful third-party challenge to our patents could result in the narrowing, unenforceability or invalidity of such patents and increased competition with our business. The outcome of patent litigation or other proceeding can be uncertain, and any attempt by us to enforce our patent rights against others or to challenge the patent rights of others may not be successful, or, regardless of success, may take substantial time and result in substantial cost, and may divert our efforts and attention from other aspects of our business. Any of the foregoing events could have a material adverse effect on our business, financial condition and results of operations.

The U.S. law relating to the patentability of certain inventions in the synthetic biology technology industry is uncertain and rapidly changing, which may adversely impact our existing patents or our ability to obtain patents in the future.

Changes in either the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. The U.S. Congress has recently passed legislation implementing significant changes to U.S. patent law.

Various courts including the U.S. Supreme Court have rendered decisions that impact the patentability and patent eligibility of inventions or discoveries relating to synthetic biology technology, including by narrowing the scope and strength of patent protection in some instances. In light of these developments and depending on actions by the U.S. Congress, the federal courts and the United States Patent and Trademark office (the USPTO), the laws and regulations governing patents could be interpreted and applied, or could change, in unpredictable ways that may have a material adverse effect on our ability to obtain new patents and to defend and enforce our existing patents and patents that we might obtain in the future.

We cannot assure you that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO or other patent offices around the world. From time to time, the U.S. Supreme Court, other federal courts, the U.S. Congress or the USPTO may change the standards of patentability, scope and validity of patents in areas including synthetic biology technology and any such changes, or any similar adverse changes in the patent laws and procedures of other jurisdictions, could have a negative impact on our business, financial condition, prospects and results of operations.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our products in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. We may encounter difficulties in protecting and defending such rights in foreign jurisdictions. Consequently, we may not be able to prevent third parties from practicing our inventions in competition with us in some or all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors and other third parties may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and technologies and may also export infringing products to territories where we do have patent protection but where enforcement may not be as strong as in the United States. Our patents or other intellectual property rights may not be effective or sufficient to prevent such third-party products from competing with our products. In addition, certain countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to other parties. Furthermore, many countries limit the enforceability of patents against certain kinds of third parties, including government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of any patents.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of many other countries do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to gain any meaningful competitive advantage from our patents or other intellectual property rights. The legal systems in certain countries may also favor state-sponsored or domestic companies over foreign companies, even though we may have patents and other intellectual property protection in these countries. The absence of harmonized intellectual property protection laws makes it difficult to ensure consistent treatment and enforcement of patent, trade secret, and other intellectual property rights on a worldwide basis. As a result, it is possible that we will not be able to enforce our rights against third parties that misappropriate our proprietary technology or otherwise violate our intellectual property rights in any given country around the world.

Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, or that are initiated against us, and any damages or other remedies awarded to us may not be commercially meaningful. In addition, changes in the law and legal decisions by courts in foreign countries may affect our ability to obtain adequate protection for our products, services and other technologies and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

Issued patents covering our products could be found invalid or unenforceable if challenged.

Our owned and licensed patents and patent applications may be subject to validity, enforceability and priority disputes. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability. Some of our patents or patent applications (including licensed patents and patent applications) may be challenged in opposition, interference or derivation, ex parte re-examination, inter partes review, post-grant review or other similar proceedings. Any successful third-party challenge to our patents in this or any other proceeding could result in the unenforceability or invalidity of such patents, which may lead to increased competition to our business, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition,

if we initiate legal proceedings against a third party to enforce a patent covering our products, the defendant could counterclaim that the patent we are asserting in the proceeding is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. There are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Third parties may also raise similar claims before administrative bodies in the United States or abroad, outside the context of litigation per se. Such proceedings could result in revocation of or amendment to our patents in such a way that they no longer protect our products. The outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. If a defendant or other third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on certain aspects of our products and technologies, which could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license intellectual property or to develop or commercialize current or future products.

We may not be aware of all third-party intellectual property rights potentially relevant to our products, technology and services. Publications of discoveries in the scientific literature lag behind the discoveries, and patent applications in the United States and other jurisdictions are typically not published until approximately 18 months after the earliest effective filing date or, in some cases, not until such patent applications issue as patents. We might not have been the first to make the inventions claimed in each of our pending patent applications and we might not have been the first to file patent applications for these inventions. To determine the priority of these inventions, we may have to participate in interference or derivation proceedings in the U.S. or analogous proceedings in non-U.S. jurisdictions, which could result in substantial cost to us and the loss of valuable patent protection. No assurance can be given that other patent applications will not have priority over our patent applications. In addition, changes to the patent laws of the United States allow for various post-grant proceedings that have not been extensively tested, and their outcome is therefore uncertain. Furthermore, if third parties bring these proceedings against our patents, regardless of the merit of such proceedings and regardless of whether we are successful, we could experience significant costs and our management may be distracted. Any of the foregoing events could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business could be harmed.

We rely heavily on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information and to maintain our competitive position. However, trade secrets and know-how can be difficult to protect. In particular, we expect that with respect to our technologies, certain know how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel from academic to industry scientific positions.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into agreements, including confidentiality agreements, non-disclosure agreements and intellectual property assignment agreements, with our employees, consultants, academic institutions, corporate partners and, when needed, our advisers. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors or other third parties will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of the foregoing parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure, which could adversely impact our ability to establish or maintain a competitive advantage in the market, business, financial condition, results of operations and prospects.

Monitoring unauthorized disclosure is difficult, and we cannot guarantee that the steps we have taken to prevent such disclosure are adequate. If we were to enforce a claim that a third party had wrongfully obtained and was using our trade secrets, it could be expensive and time-consuming, it could distract our personnel, and the outcome would be unpredictable. In addition, courts outside the United States may be less effective in protecting trade secrets.

We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor or other third party, absent patent protection, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Competitors or third parties could purchase our products and attempt to replicate the competitive advantages we derive from our development efforts with their own competitive technologies that fall outside the scope of our intellectual property rights. They might also independently develop our technologies without reference to our trade secrets. If any of our trade secrets were to be disclosed to or independently discovered by a competitor or other third party, it could materially and adversely affect our business, financial condition, results of operations and prospects.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets or other intellectual property as an inventor or co-inventor. For example, we may have inventorship or ownership disputes arising from conflicting obligations of employees, consultants or others who are involved in developing our products. In addition, counterparties to our consulting, sponsored research, software development and other agreements may assert that they have an ownership interest in intellectual property developed under such arrangements. In particular, certain software development agreements pursuant to which third parties have developed parts of our proprietary software may not include provisions that expressly assign to us ownership of all intellectual property developed for us by such third parties. Furthermore, certain of our sponsored research agreements pursuant to which we provide research services for third parties do not assign to us all intellectual property developed under such agreements. As such, we may not have the right to use all such developed intellectual property under such agreements, we may be required to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms or at all, or they may be non-exclusive. If we are unable to obtain such licenses and such licenses are necessary for the development, manufacture and commercialization of our products and technologies, we may need to cease the development, manufacture and commercialization of our products and technologies. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. In such an event, we may be required to obtain licenses from third parties and such licenses may not be available on commercially reasonable terms or at all, or they may be non-exclusive. If we are unable to obtain and maintain such licenses, we may need to cease the development, manufacture and commercialization of the relevant products and technologies. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees, and certain customers or partners may defer engaging with us until the particular dispute is resolved. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not be able to protect and enforce our trademarks and trade names, or build name recognition in our markets of interest, thereby harming our competitive position.

The registered or unregistered trademarks or trade names that we use may be challenged, infringed, circumvented, declared generic, opposed, invalidated, cancelled or determined to be infringing on or dilutive of other marks. As a consequence, we may not be able to protect, register or maintain our rights in these trademarks and trade names.

Third parties may have prior rights in, or have filed, and may in the future file, for registration of, trademarks similar or identical to our trademarks in certain markets of interest that may block our ability to use or to register, or that may limit the scope of protection afforded to, our trademarks and trade names in such markets, thereby impeding our ability to protect, register, maintain or enforce our trademarks and trade names in all markets of interest and to build brand identity and possibly leading to litigation risks and market confusion.

If a third party succeeds in registering or developing common law rights in trademarks similar or identical to our trademarks that predate our rights, and if we are not successful in overcoming any objection from the USPTO or such third party based on or in challenging such rights and defending against challenges to our trademarks, we may not be able to use such trademarks to develop brand recognition of our technologies, products or services.

A third party with prior rights in a similar or identical trademark could challenge our use and registration of our trademarks and trade names by filing a trademark infringement court action or by seeking to block or cancel any registration for our trademarks through an opposition, cancellation, invalidity or other administrative proceeding. For example, we are currently engaged in litigation with Codexis, Inc., which is in the early stages, over the CODEX trademark and trade name. Codexis, Inc. initiated the litigation in the U.S. Federal Court for the Northern District of California asserting claims of federal and common law trademark infringement and unfair competition/false designation of origin regarding our use of the CODEX trademark and trade name based on Codexis, Inc.'s rights in the "CODEX" and "CODEXIS" trademarks, which are federally registered.

The outcome of any such trademark litigation or other proceeding can be uncertain. If we are unable to successfully defend against any such challenge, in addition to not being able to secure or maintain a registration for our trademark, we may be required, including by court order, to cease all further use of such trademark. Moreover, in the case of a trademark infringement action, a court may require us to issue corrective advertising or to take other steps as the court may deem necessary to remove or reduce the risk of consumer confusion, including changing our company name and rebranding our products. This would be expensive and could lead to a loss of brand recognition or customer confusion as a result. The court may also order us to pay damages (actual damages demonstrated at trial and a disgorgement of our profits), including treble damages and attorneys' fees if the court finds that we willfully infringed such third party trademark. Regardless of success, any such litigation or other proceeding may take substantial time and effort and result in substantial cost, and may divert our efforts and attention from other aspects of our business and could have a material adverse effect on our business, financial condition and results of operations.

Further, we have and may in the future enter into agreements with owners of such third party trade names or trademarks to avoid potential trademark litigation, which may limit our ability to use, register or enforce our trade names or trademarks in certain fields of business or in certain markets or which may place certain other restrictions on the use of our trademarks and trade names that could limit our ability to build a strong brand identity. If we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively, and our business, financial condition, results of operations and prospects may be adversely affected.

Patent terms may be inadequate to protect our competitive position on our workflow automation and reagent solutions for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the basic term of a utility patent is 20 years from its earliest effective non-provisional filing date. In the United States, the basic term of a patent may be lengthened by patent term adjustment, which compensates the patentee for certain administrative delays by the USPTO in examining and granting a patent, and it may be shortened by filing a terminal disclaimer over an earlier expiring patent. Even if a patent covering our products is obtained, once the patent life has expired, we would no longer be able to use the patent to exclude others from making or selling competitive products. If one of our products requires extended development, testing or regulatory review, patent protection for the product might expire soon after or even before the product is commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours, which could have a material adverse effect on our business, financial condition and results of operations.

We may become involved in lawsuits to defend against third-party claims of infringement, misappropriation or other violations of intellectual property or to protect or enforce our intellectual property, any of which could be expensive, time consuming and unsuccessful, and may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our ability and the ability of future collaborators to develop, manufacture, market and sell our product and use our products and technologies without infringing, misappropriating or otherwise violating the intellectual property rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the synthetic biology technology sector, as well as other proceedings for challenging patents, including interference, derivation, inter partes review, post grant review, reexamination proceedings, and pre- and post-grant oppositions. We may be exposed to, or threatened with, future litigation by third parties having patent or other intellectual property rights alleging that our products, manufacturing methods, software or technologies infringe, misappropriate or otherwise violate their intellectual property rights. Numerous issued patents and pending patent applications that are owned by third parties exist in

the fields in which we are developing our products and technologies. It is not always clear to industry participants, including us, the claim scope that may issue from pending patent applications owned by third parties or which patents cover various types of products, technologies or their methods of use or manufacture. Because of the large number of patents issued and patent applications filed in our fields, there may be a risk that third parties, including our competitors, may allege that they have patent rights encompassing our products, technologies or methods and that we are employing their proprietary technology without authorization.

If third parties, including our competitors, believe that our products or technologies infringe, misappropriate or otherwise violate their intellectual property, such third parties may seek to enforce their intellectual property, including patents against us by filing an intellectual property-related lawsuit, including a patent infringement lawsuit, against us. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of misappropriation, infringement, validity, enforceability, or priority. If any third parties were to assert patents against us and we are unable to successfully defend against any such assertion, we may be required, including by court order, to cease the development and commercialization of the infringing products or technology and we may be required to redesign such products and technologies so they do not infringe such patents, which may not be possible or may require substantial monetary expenditures and time. We could also be required to pay damages, which could be significant, including treble damages and attorneys' fees if we are found to have willfully infringed such patents. We could also be required to obtain a license to such patents in order to continue the development and commercialization of the infringing product or technology; however such a license may not be available on commercially reasonable terms or at all, including because certain of these patents are held by or may be licensed to our competitors. Even if such license were available, it may require substantial payments or cross-licenses under our intellectual property rights, and it may only be available on a nonexclusive basis, in which case third parties, including our competitors, could use the same licensed intellectual property to compete with us. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operation or prospects.

We may choose to challenge, including in connection with any allegation of patent infringement by a third party, the validity or enforceability of any third-party patent that we believe may have applicability in our field, and any other third-party patent that may be asserted against us. Such challenges may be brought either in court or by requesting that the USPTO, European Patent Office (EPO), or other patent offices review the patent claims, such as in an ex-parte reexamination, inter partes review, post-grant review proceeding or opposition proceeding. However, there can be no assurance that any such challenge by us will be successful. Even if such proceedings are successful, these proceedings are expensive and may consume our time or other resources, distract our management and technical personnel, and the costs of the proceedings could be substantial.

Third parties, including our competitors, could be infringing, misappropriating or otherwise violating our owned and in-licensed intellectual property rights. Monitoring unauthorized use of our intellectual property is difficult and costly. We may not be able to detect unauthorized use of, or take effective steps to enforce, our intellectual property rights. From time to time, we seek to analyze our competitors' products and services, and may in the future seek to enforce our rights against potential infringement, misappropriation or violation of our intellectual property. However, the steps we have taken to protect our intellectual property rights may not be effective to enforce our rights as against such infringement, misappropriation or violation of our intellectual property. Any inability to meaningfully enforce our intellectual property rights could harm our ability to compete and reduce demand for our products and technologies.

Litigation proceedings may be necessary for us to enforce our patent and other intellectual property rights. In any such proceedings, a court may refuse to stop the other party from using the technology at issue on the grounds that our owned and in-licensed patents do not cover the technology in question. Further, in such proceedings, the defendant could counterclaim that our intellectual property is invalid or unenforceable and the court may agree, in which case we could lose valuable intellectual property rights, which could allow third parties to commercialize technology or products similar to ours and compete directly with us, without payment to us, or could require us to obtain license rights from the prevailing party in order to be able to manufacture or commercialize our products without infringing such party's intellectual property rights, and if we unable to obtain such a license, we may be required to cease commercialization of our products and technologies, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects. The outcome in any such proceedings is unpredictable.

Regardless of whether we are the defending party or the party seeking to enforce rights in any intellectual property-related proceeding, and regardless of outcome, such proceedings that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition, results of operations and prospects. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Some of our competitors and other third parties may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. We may not have sufficient financial or other resources to adequately conduct these types of litigation or proceedings. Any of the foregoing, or any uncertainties resulting from the initiation and continuation of any litigation, could have a material adverse effect on our ability to raise the funds necessary to continue our operations or could otherwise have a material adverse effect on our business, financial condition, results of operations and prospects. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar adverse effect on our business, financial condition, results of operations and prospects.

Obtaining and maintaining our patent protection depends on compliance with various required procedures, document submissions, fee payments and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Various official fees, including renewal fees, must be paid to the respective patent authorities to apply for, prosecute, and maintain patents and patent applications. The USPTO and other patent authorities also variously require compliance with a number of procedural and substantive provisions under local law and practice during and sometimes after the patent application process. In many cases, an inadvertent lapse in paying a fee or fulfilling another requirement can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors may be able to enter the market without infringing our patents and this circumstance would have a material adverse effect on our business, financial condition, results of operations and prospects.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

We have employed and expect to employ individuals who were previously employed at universities or at other companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, advisors and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that our employees, advisors, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of their former employers or other third parties, or to claims that we have improperly used or obtained such trade secrets. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights and face increased competition to our business. Any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with advisors, contractors and consultants. A loss of key research personnel work product could hamper or prevent our ability to commercialize potential products, which could harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. This type of litigation or proceeding could substantially increase our operating losses and reduce our resources available for development activities. Some of our competitors may be able to sustain the costs of this type of litigation or proceedings more effectively than we can because of their substantially greater financial resources.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend

claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Furthermore, individuals executing agreements with us may have pre-existing or competing obligations to a third party, such as an academic institution, and thus an agreement with us may be disputed or ineffective in perfecting ownership of inventions developed by that individual, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Furthermore, we may in the future be subject to claims by former employees, consultants or other third parties asserting an ownership right in our owned or licensed patents or patent applications. An adverse determination in any such proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar technology, without payment to us, or could limit the duration of the overall patent protection covering our technology and products. Such challenges may also result in our inability to develop, manufacture or commercialize our products without infringing third-party patent rights. Any of the foregoing could harm our business, financial condition, results of operations and prospects.

If we cannot license rights to use technologies on reasonable terms, we may not be able to commercialize new products in the future.

We may identify third-party technology that we may need to license or acquire in order to develop or commercialize our products or technologies, including our workflow automation and reagent solutions. However, we may be unable to secure such licenses or acquisitions. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and greater commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us.

We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. In return for the use of a third party's technology, we may agree to pay the licensor royalties based on sales of our products or services. Royalties are a component of cost of products or technologies and affect the margins on our products. We may also need to negotiate licenses to patents or patent applications before or after introducing a commercial product. We may not be able to obtain necessary licenses to patents or patent applications, and our business may suffer if we are unable to enter into the necessary licenses on acceptable terms or at all, if any necessary licenses are subsequently terminated, if the licensor fails to abide by the terms of the license or fails to prevent infringement by third parties, or if the licensed intellectual property rights are found to be invalid or unenforceable.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to products and technologies we may develop or utilize similar technology that are not covered by the claims of the patents that we own or license now or in the future;
- we might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or may own in the future;
- we might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing, misappropriating or otherwise violating our owned or licensed intellectual property rights;
- it is possible that our pending licensed patent applications or those that we may own in the future will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable as a result of legal challenges by our competitors;

- our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business; and
- we may choose not to file a patent for certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could materially adversely affect our business, financial condition, results of operations and prospects.

Risks Related to this Offering and Ownership of Our Common Stock

Prior to this offering, there has been no public market for shares of our common stock and an active trading market for our common stock may never develop or be sustained.

Prior to this offering, there has been no public market for shares of our common stock. We have applied to list our common stock on the Nasdaq Global Market under the symbol "DNAY." We cannot assure you that an active trading market for our common stock will develop on that exchange or elsewhere. If an active trading market does not develop, or develops but is not maintained, you may have difficulty selling any of our common stock that you purchase due to the limited public float. Accordingly, we cannot assure you of your ability to sell your shares of common stock when desired or the prices that you may obtain for your shares.

The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

The initial public offering price for our common stock will be determined through negotiations with the underwriters. This initial public offering price may differ from the market price of our common stock after the offering. As a result, you may not be able to sell your common stock at or above the initial public offering price. Some of the factors that may cause the market price of our common stock to fluctuate include, but are not limited to:

- actual or anticipated fluctuations in our operating results, including fluctuations in our quarterly and annual results;
- operating expenses being more than anticipated;
- supply chain and production disruption due to our moving primary manufacturing facilities to a new location;
- the failure or discontinuation of any of our product development and research programs;
- changes in the structure or funding of research at academic and research laboratories and institutions, including changes that would affect their ability to purchase our products;
- the success of existing or new competitive businesses or technologies;
- announcements about new research programs or products of our competitors;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- litigation and governmental investigations involving us, our industry or both;
- regulatory or legal developments in the United States and other countries;
- variations in market conditions in the synthetic biology technology sector;
- investor perceptions of us or our industry;
- changes in estimates or recommendations by securities analysts, if any, that cover our common stock or companies that are perceived to be similar to us;
- whether our financial results meet the expectations of securities analysts or investors;
- the level of expenses related to any of our research and development programs or products;
- actual or anticipated changes in our estimates as to our financial results or development timelines;
- variations in our financial results or those of companies that are perceived to be similar to us;
- the announcement or expectation of additional financing efforts;

- sales of our common stock by us or sales of our common stock by our insiders or other stockholders;
- the expiration of market standoff or lock-up agreements;
- general economic, industry and market conditions; and
- the COVID-19 pandemic, natural disasters or major catastrophic events.

Recently, stock markets in general, and the market for life sciences technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations, particularly in light of the current COVID-19 pandemic. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our stock shortly following this offering. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our common stock, the price of our common stock could decline.

The trading market for our common stock will rely in part on the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or securities analysts. If no or few analysts commence coverage of us, the trading price of our common stock could decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our common stock, the price of our common stock could decline. If one or more of these analysts cease to cover our common stock, we could lose visibility in the market for our common stock, which in turn could cause the price of our common stock to decline.

Our directors, officers and principal stockholders have significant voting power and may take actions that may not be in the best interests of our other stockholders.

As of March 31, 2021, our directors, officers and stockholders holding 5% or more of our outstanding common stock and their affiliates beneficially owned over 99% of our outstanding common stock in the aggregate, assuming the exercise of all options and warrants held by such persons and without giving effect to the purchase of shares by any such persons in this offering. As a result, these stockholders, if they act together, will be able to exert significant influence over the management and affairs of our company and most matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change in control, might adversely affect the market price of our common stock and may not be in the best interests of our other stockholders.

Sales of a substantial number of shares of our common stock by our existing stockholders following this offering could cause the price of our common stock to decline.

Sales of a substantial number of shares of our common stock in the public market could occur at any time following the expiration of the market standoff and lock-up agreements or the early release of these agreements or the perception in the market that the holders of a large number of shares of common stock intend to sell shares and could reduce the market price of our common stock. After giving effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation, (ii) the automatic conversion of all shares of our convertible preferred stock outstanding as of March 31, 2021 into 45,238,000 shares of our common stock, (iii) the automatic exercise of all outstanding warrants issued to SGI as of March 31, 2021 into 3,707,302 shares of our common stock and (iv) the issuance and sale of shares of common stock by us in this offering, we will have shares of common stock outstanding. Of these shares, the shares of common stock we are selling in this offering may be resold in the public market immediately, unless purchased by our affiliates. The remaining shares of common stock, or % of our outstanding shares of common stock after this offering are currently prohibited or otherwise restricted from being sold in the public market under securities laws, market standoff agreements entered into by our stockholders with us, or lock-up agreements entered into by our stockholders with the underwriters; however, subject to applicable securities law restrictions and excluding shares of common stock issued pursuant to the early exercise of unvested stock options that will remain unvested, the shares

of our common stock outstanding after this offering will be able to be sold in the public market beginning on _____, 2021. The representatives may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements at any time and for any reason. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act.

Moreover, after this offering, holders of an aggregate of _____ shares of our common stock will have rights, subject to conditions, to require us to file registration statements with the SEC covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders as described under "Description of Capital Stock—Registration Rights." We also plan to register all shares of common stock that we may issue under our equity compensation and employee stock purchase plans. Once we register these shares, they can be freely sold in the public market upon issuance and, if applicable, vesting, subject to volume limitations applicable to affiliates and the lock-up agreements described in the section titled "Underwriting" in this prospectus. Sales of common stock in the public market as restrictions end or pursuant to registration rights may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the trading price of our common stock to fall and make it more difficult for you to sell shares of our common stock. See the section titled "Shares Eligible for Future Sale" for more information regarding shares of common stock that may be sold in the public market after this offering.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in the section titled "Use of Proceeds" in this prospectus. Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

We do not expect to pay any dividends for the foreseeable future. Investors in this offering may never obtain a return on their investment.

You should not rely on an investment in our common stock to provide dividend income. We do not anticipate that we will pay any dividends to holders of our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations, fund our research and development programs and continue to invest in our commercial infrastructure. In addition, our current credit facility with SVB contains, and any future credit facility or financing we obtain may contain, terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not purchase our common stock.

Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, and also provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, each of which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, stockholders, or employees.

Our amended and restated certificate of incorporation that will become effective upon the closing of this offering specifies that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, stockholders, officers, or other employees to us or our stockholders, (c) any action or proceeding asserting a claim arising pursuant to, or seeking to enforce any right, obligation or remedy under, any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws, (d) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware, or (e) any action or proceeding asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another state court in Delaware or, if

no state court in Delaware has jurisdiction, the federal district court for the District of Delaware) and any appellate court therefrom, in all cases subject to the court having jurisdiction over the claims at issue and the indispensable parties; provided that the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act.

Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated bylaws also provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Any person or entity purchasing or otherwise acquiring or holding or owning (or continuing to hold or own) any interest in any of our securities shall be deemed to have notice of and consented to the foregoing bylaw provisions. Although we believe these exclusive forum provisions benefit us by providing increased consistency in the application of Delaware law and federal securities laws in the types of lawsuits to which each applies, the exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum of its choosing for disputes with us or any of our directors, officers, stockholders, or other employees, which may discourage lawsuits with respect to such claims against us and our current and former directors, officers, stockholders, or other employees. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder as a result of our exclusive forum provisions. Further, in the event a court finds either exclusive forum provision contained in our amended and restated bylaws to be unenforceable or inapplicable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our results of operations.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect prior to the closing of this offering might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Our status as a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our restated certificate of incorporation and restated bylaws contain provisions that may make the acquisition of our company more difficult, including the following:

- our board of directors will be classified into three classes of directors with staggered three-year terms and directors will only be able to be removed from office for cause by the affirmative vote of holders of at least a majority of the voting power of our then outstanding capital stock;
- certain amendments to our amended and restated certificate of incorporation will require the approval of a majority of our board of directors and stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- stockholder-proposed amendments to our amended and restated bylaws will require the approval of a majority of the stockholders entitled to vote, except certain provisions would require the affirmative vote of stockholders holding two-thirds of the voting power of our then outstanding capital stock;
- our stockholders will only be able to take action at a meeting of stockholders and will not be able to take action by written consent for any matter;
- vacancies on our board of directors will be able to be filled only by our board of directors and not by stockholders;
- only the chair of the board of directors, chief executive officer, president or a majority of the board of directors are authorized to call a special meeting of stockholders;
- certain litigation against us can only be brought in Delaware;
- our restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued, without the approval of the holders of our capital stock; and

- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

These anti-takeover defenses could discourage, delay, or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and to cause us to take other corporate actions they desire, any of which, under certain circumstances, could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2020, we had U.S. federal and state net operating loss carryforwards (NOLs) of \$28.4 million and \$15.9 million, respectively. The federal NOLs of \$1.3 million, generated before January 1, 2018, will begin to expire in 2034, but can be used to offset up to 100% of taxable income. Amounts generated after December 31, 2017 will carryforward indefinitely, but will be subject to a 80% taxable income limitation beginning in tax years after December 31, 2020, as provided by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). State NOLs, if not utilized, will begin to expire in 2036. We may use these NOLs to offset against taxable income for U.S. federal and state income tax purposes. Additionally, Section 382 of the Internal Revenue Code of 1986, as amended (the Code), may limit the NOLs we may use in any year for U.S. federal income tax purposes in the event of certain changes in ownership of our company. A Section 382 "ownership change" generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. We have not conducted a 382 study to determine whether the use of our NOLs is impaired. We may have previously undergone an "ownership change." In addition, this offering or future issuances or sales of our stock, including certain transactions involving our stock that are outside of our control, could result in future "ownership changes." "Ownership changes" that have occurred in the past or that may occur in the future, including in connection with this offering could result in the imposition of an annual limit on the amount of pre-ownership change NOLs and other tax attributes we can use to reduce our taxable income, potentially increasing and accelerating our liability for income taxes, and also potentially causing those tax attributes to expire unused. States may impose other limitations on the use of our NOLs. Any limitation on using NOLs could, depending on the extent of such limitation and the NOLs previously used, result in our retaining less cash after payment of U.S. federal and state income taxes during any year in which we have taxable income, rather than losses, than we would be entitled to retain if such NOLs were available as an offset against such income for U.S. federal and state income tax reporting purposes, which could adversely impact our operating results.

We are an "emerging growth company" and a "smaller reporting company" and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act. For so long as we remain an emerging growth company, we are permitted by SEC rules and plan to rely on exemptions from certain disclosure requirements that are applicable to other SEC registered public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes Oxley Act, not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, the information we provide stockholders will be different than the information that is available with respect to other public companies. In this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. To the extent that we continue to qualify as a "smaller reporting company," as such term is defined in Rule 12b-2 under the Exchange Act, after we cease to qualify as an emerging growth company, we will continue to be permitted to make certain reduced disclosures in our periodic reports and other documents that we file with the SEC. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We will incur significant increased costs and management resources as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting, compliance and other expenses that we did not incur as a private company and these expenses may increase even more after we are no longer an "emerging growth company." Our management and other personnel will need to devote a substantial amount of time and incur significant expense in connection with compliance initiatives. For example, in anticipation of becoming a public company, we will need to adopt additional internal controls and disclosure controls and procedures, retain a transfer agent and adopt an insider trading policy. As a public company, we will bear all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under the securities laws.

In addition, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes Oxley Act, and the related rules and regulations implemented by the SEC and Nasdaq, have increased legal and financial compliance costs and will make some compliance activities more time-consuming. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment will result in increased general and administrative expenses and may divert management's time and attention from our other business activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us, and our business may be harmed. In connection with this offering, we intend to increase our directors' and officers' insurance coverage, which will increase our insurance cost. In the future, it may be more expensive or more difficult for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution as a result of this offering.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution of \$ per share, representing the difference between the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and our pro forma net tangible book value per share after giving effect to (i) the filing and effectiveness of our amended and restated certificate of incorporation, (ii) the automatic conversion of all shares of our convertible preferred stock outstanding as of March 31, 2021 into 45,238,000 shares of our common stock, (iii) the automatic exercise of all outstanding warrants issued to SGI as of March 31, 2021 into 3,707,302 shares of our common stock and (iv) the issuance and sale of shares of common stock by us in this offering. As of March 31, 2021, there were 3,440,374 shares of our common stock subject to outstanding stock options with a weighted-average exercise price of \$0.93 per share. To the extent that these outstanding stock options and warrants are ultimately exercised or the underwriters exercise their option to purchase additional shares of our common stock, you will incur further dilution. See the section titled "Dilution" for more information.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock may be volatile. The stock market in general, and the Nasdaq Stock Market and life sciences technology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result

in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Our actual operating results may differ significantly from any guidance that we provide.

From time to time, we may provide guidance in our quarterly earnings conference calls, quarterly earnings releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. This guidance, which would include forward-looking statements, would be based on projections prepared by our management. Neither our registered public accountants nor any other independent expert or outside party would compile or examine the projections. Accordingly, no such person would express any opinion or any other form of assurance with respect to the projections. Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we would release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties. Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying any guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance would be only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner or prevent fraud, which would adversely affect investor confidence in our company and harm our business.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could cause us to fail to meet our reporting obligations in a timely manner, or at all. In addition, any testing by us conducted in connection with Section 404(a) of the Sarbanes Oxley Act or any subsequent testing by our independent registered public accounting firm in connection with Section 404(b) of the Sarbanes Oxley Act, may reveal deficiencies in our internal controls over financial reporting that are deemed to be significant deficiencies or material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

In addition, as of December 31, 2020, we identified a significant deficiency in our internal controls over financial reporting that exists as a result of the technical categorization of transactions with a supplier. A significant deficiency is a deficiency, or a combination of deficiencies, in internal controls over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the company's financial reporting. We undertook steps to remedy this significant deficiency by our engagement of technical accounting consultants to assist management in determining the accounting treatment of unusual transactions and in evaluating new accounting positions and remediated this significant deficiency prior to the issuance date of our 2020 consolidated financial statements.

We will be required to disclose material changes made in our internal controls over financing reporting and procedures on a quarterly basis and our management will be required to assess the effectiveness of these controls annually. Beginning with our second Annual Report on Form 10-K after we become a public company, we will be required to make a formal assessment of the effectiveness of our internal control over financial reporting, and once we cease to be an emerging growth company, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, for as long as we are an "emerging growth company" under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404(b).

To achieve compliance with Section 404(a) within the prescribed period, we will be engaging in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a plan to assess and document the adequacy of our internal control over financial reporting, continue steps to improve

control processes as appropriate, validate through testing that controls are designed and operating effectively and implement a continuous reporting and improvement process for internal control over financial reporting.

We could be an "emerging growth company" for up to five years. An independent assessment of the effectiveness of our internal controls could detect problems that our management's assessment might not identify. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operation could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. We base our estimates on historical experience and estimates and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. For example, in connection with the implementation of the new revenue accounting standard related to product sales, management makes judgments and assumptions based on our interpretation of the new standard. The new revenue standard is principle-based and interpretation of those principles may vary from company to company based on their unique circumstances. It is possible that interpretation, industry practice and guidance may evolve as we apply the new standard. If our assumptions underlying our estimates and judgments relating to our critical accounting policies change or if actual circumstances differ from our assumptions, estimates or judgments, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are based on our management's beliefs and assumptions and on information currently available to our management. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, development plans, expected research and development costs, regulatory strategy, timing, and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "project," "seek," "should," "target," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

- estimates of the synthetic biology market, market growth, and new market expansion;
- our future revenue, expenses, capital requirements and our needs for additional financing;
- our expectations regarding the rate and degree of market acceptance of our BioXp system, BioXp kits and benchtop reagents;
- the ability of our products to facilitate the *design-build-test* paradigm of synthetic biology;
- the size and growth of the synthetic biology market and competitive companies and technologies and our industry;
- our ability to manage and grow our business;
- our ability to develop and commercialize new products;
- our ability to establish and maintain intellectual property protection for our products or avoid or defend claims of infringement;
- the performance of third-party manufacturers and suppliers and our ability to qualify second-source suppliers;
- the potential effects of government regulation;
- our ability to hire and retain key personnel and to manage our future growth effectively;
- our ability to obtain additional financing in this or future offerings;
- the volatility of the trading price of our common stock;
- the impact of local, regional, and national and international economic conditions and events;
- the impact of COVID-19 on our business;
- our expectations about market trends;
- our anticipated use of our existing resources and the net proceeds from this offering; and
- other risks and uncertainties, including those listed in the section titled "Risk Factors."

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or

incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to unduly rely upon these statements.

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates, projections and other information concerning our industry, our business and the markets for our current and future products, including data regarding the estimated size of such markets and the incidence of certain medical conditions. We obtained the industry, market and similar data set forth in this prospectus from our internal estimates and research, including surveys and studies we have sponsored or conducted, and from academic and industry research, publications, surveys and studies conducted by third parties, including governmental agencies. In some cases, we do not expressly refer to the sources from which this data is derived. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. While we believe that the data we use from third parties are reliable, we have not separately verified this data. Any industry forecasts are based on data (including third-party data), models, and experience of various professionals and are based on various assumptions, all of which are subject to change without notice. Further, while we believe our internal research is reliable, such research has not been verified by any third party. While we are not aware of any misstatements regarding the market data presented herein, industry forecasts and projections involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled "Risk Factors."

USE OF PROCEEDS

We estimate that the net proceeds to us from the sale of the shares of our common stock in this offering will be approximately \$ million, or approximately \$ million if the underwriters exercise their option to purchase additional shares in full, based upon the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share would increase or decrease, as applicable, the net proceeds to us from this offering by approximately \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, the net proceeds to us from this offering by approximately \$ million, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We currently expect to use our net proceeds from this offering, together with our existing cash and available borrowings, for general corporate purposes, including working capital, and funding our research and development and sales and marketing activities. We may use a portion of the net proceeds to expand our current business through strategic acquisitions or in-licenses of complimentary companies or technologies; however, we currently do not have any agreements or commitments to complete any such transactions and are not involved in negotiations regarding such transactions. We also may use a portion of the net proceeds to repay debt under our Loan and Security Agreement with Silicon Valley Bank. This debt bears interest at a per annum rate equal to the greater of (a) 4.0% above the prime rate and (b) 7.25%, and matures on January 1, 2024.

Based on our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, available borrowings and short-term investments as of the date of this prospectus, will be sufficient to fund our operating expenses and capital expenditures for at least the next twelve months.

Our expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. We cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above and we may require additional funds in order to fully accomplish the specified uses listed above. As a result, our management will have broad discretion over the use of the net proceeds from this offering.

The amounts and timing of our actual expenditures will depend upon numerous factors including cash flows from operations, the extent and success of our commercial expansion, the extent and results of our research and development efforts, the anticipated growth of our business and any unforeseen cash needs.

Pending their uses, we plan to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade instruments, including certificates of deposit or direct or guaranteed obligations of the U.S. government. We cannot predict whether the proceeds invested will yield a favorable return.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. In addition, the terms of our Loan and Security Agreement with Silicon Valley Bank restrict our ability to pay dividends. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant, including restrictions in our current and future debt instruments, our future earnings, capital requirements, financial condition, prospects and applicable Delaware law, which provides that dividends are only payable out of surplus or current net profits.

CAPITALIZATION

The following table sets forth our cash and capitalization as of March 31, 2021:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 45,238,000 shares of our common stock immediately prior to the completion of this offering, (ii) the automatic exercise of all outstanding warrants issued to SGI into an aggregate of 3,707,302 shares of our common stock immediately prior to the completion of this offering, and (iii) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering; and
- on a pro forma as adjusted basis to reflect (i) the pro forma adjustments set forth above and (ii) our issuance and sale of shares of common stock in this offering at the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information set forth below is illustrative only and will depend on the actual initial public offering price and other terms of this offering determined at pricing. You should read this information in conjunction with our consolidated financial statements and the related notes appearing elsewhere in this prospectus, as well as the sections titled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	As of March 31, 2021		
	Actual	Pro Forma	Pro Forma As Adjusted
	(in thousands, except per share data)		
Cash	\$ 17,834	\$ 17,639	\$
Derivative liabilities	\$ 2,403	\$ 303	\$
Long-term debt, net of discount, including current portion	14,372	14,372	
Stockholders' equity (deficit):			
Convertible preferred stock, \$0.0001 par value; 45,949,699 shares authorized, actual; 45,238,000 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	38,914	—	—
Preferred stock, \$0.0001 par value; no shares authorized, issued and outstanding, actual; 5,000,000 shares authorized and no shares issued or outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock, \$0.0001 par value; 72,000,000 shares authorized, actual; 15,741,560 shares issued and outstanding, actual; 100,000,000 shares authorized, pro forma; 64,686,862 shares issued and outstanding, pro forma; 100,000,000 shares authorized, pro forma as adjusted; shares issued and shares outstanding, pro forma as adjusted	2	7	
Additional paid-in capital	1,051	41,922	
Accumulated deficit	(33,754)	(33,811)	
Total stockholders' equity (deficit)	(32,701)	8,118	
Total capitalization	22,988	22,793	\$

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, each of our pro forma as adjusted cash, additional paid-in capital, total stockholders' equity (deficit) and total capitalization by \$ million, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of 1.0 million shares in the number of shares of common stock offered by us would increase or decrease, as applicable each of our pro forma as adjusted cash, additional paid-in capital, total stockholders' equity (deficit) and total capitalization by \$ million, assuming the assumed initial public offering price of \$ per share, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters' option to purchase additional shares is exercised in full, our pro forma as adjusted cash, additional paid-in capital, total stockholders' equity (deficit), and total capitalization as of December 31, 2020, would be \$ million, \$ million, \$ million, and \$ million, respectively.

The number of shares of our common stock to be issued and outstanding, pro forma and pro forma as adjusted in the table above is based on 64,686,862 shares of our common stock outstanding as of March 31, 2021 (after giving pro forma effect to the automatic conversion of all of our outstanding convertible preferred stock and the automatic exercise of all of our outstanding warrants issued to SGI into an aggregate of 48,945,302 shares of our common stock immediately prior to the completion of this offering), and excludes:

- 1,453,980 shares of common stock issuable upon the exercise of options granted under the 2019 Plan, outstanding as of March 31, 2021 with a weighted-average exercise price of \$0.20 per share;
- 1,986,39 shares of common stock issuable upon the exercise of options granted under the 2021 Plan, outstanding as of March 31, 2021 with an exercise price of \$1.46 per share;
- 3,455,200 shares of common stock issuable upon the exercise of options granted under the 2021 Plan, after March 31, 2021 with an exercise price of \$2.19 per share;
- 187,220 shares of common stock issuable upon the exercise of warrants to purchase shares issued to SVB Financial Group with an initial exercise price of \$1.20 per share; and
- shares of common stock reserved for future issuance under our equity compensation plans, consisting of:
 - shares of common stock reserved for future issuance under our 2021 Plan, as of , 2021, which shares will be added to the shares to be reserved for future issuance under the 2021 SIP;
 - shares of common stock reserved for future issuance under our 2021 SIP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan; and
 - shares of common stock reserved for future issuance under our ESPP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan.

DILUTION

Investors purchasing our common stock in this offering will experience immediate and substantial dilution in the pro forma as adjusted net tangible book value of their shares of common stock. Dilution in pro forma as adjusted net tangible book value represents the difference between the initial public offering price of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after the offering.

Our historical net tangible book value as of March 31, 2021 was \$(42.2) million, or \$(2.68) per share of our common stock. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities and convertible preferred stock, which is not included within our stockholders' equity (deficit). Historical net tangible book value per share represents historical net tangible book value divided by the number of shares of our common stock outstanding as of March 31, 2021.

Our pro forma net tangible book value as of March 31, 2021 was \$(1.4) million, or \$(0.02) per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of March 31, 2021, after giving pro forma effect to the automatic conversion of all of our outstanding convertible preferred stock and the automatic exercise of all of our outstanding warrants issued to SGI into an aggregate of 48,945,302 shares of our common stock immediately prior to the completion of this offering, as if such conversion and exercise had occurred on March 31, 2021.

After giving further effect to our sale of _____ shares of common stock in this offering at the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2020, would have been \$ _____ million, or \$ _____ per share. This represents an immediate increase in pro forma net tangible book value per share of \$ _____ to our existing stockholders and an immediate dilution in pro forma net tangible book value per share of \$ _____ to investors purchasing shares of common stock in this offering.

The following table illustrates this dilution on a per share basis to new investors (without giving effect to any exercise by the underwriters of their option to purchase additional shares):

Assumed initial public offering price per share	\$
Historical net tangible book value per share of common stock as of March 31, 2021	\$ (2.68)
Increase per share in net tangible book value per share of common stock attributable to pro forma adjustments	2.66
Pro forma net tangible book value per share of common stock as of March 31, 2021	(0.02)
Increase in net tangible book value per share of common stock attributable to this offering	_____
Pro forma as adjusted net tangible book value per share of common stock after this offering	_____
Dilution per share of common stock to new investors participating in this offering	\$ _____

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the pro forma as adjusted net tangible book value per share after this offering by \$ _____ per share and the dilution to investors purchasing shares of common stock in this offering by \$ _____ per share, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase of 1.0 million shares in the number of shares offered by us would increase the pro forma as adjusted net

tangible book value per share after this offering by \$ [redacted] and decrease the dilution per share to investors purchasing shares of common stock in this offering by \$ [redacted], assuming no change in the assumed initial public offering price and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each decrease of 1.0 million shares in the number of shares offered by us would decrease the pro forma as adjusted net tangible book value per share after this offering by \$ [redacted] and increase the dilution per share to investors purchasing shares of common stock in this offering by \$ [redacted], assuming no change in the assumed initial public offering price and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their option to purchase [redacted] additional shares of common stock in this offering in full at the assumed initial public offering price of \$ [redacted] per share, which is the midpoint of the price range set forth on the cover page of this prospectus and assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, the pro forma as adjusted net tangible book value per share after this offering would be \$ [redacted] per share, and the dilution per share to investors purchasing shares of common stock in this offering would be \$ [redacted] per share.

The following table summarizes, on the pro forma as adjusted basis described above, as of March 31, 2021, the number of shares of common stock purchased from us, the total consideration paid, or to be paid, and the weighted-average price per share paid, or to be paid, by existing stockholders and by investors purchasing shares in this offering at the assumed initial public offering price of \$ [redacted] per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(dollar amounts in thousands, except per share amounts)	Shares Purchased		Total Consideration		Weighted-Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders before this offering		%	\$	%	\$
Investors purchasing shares in this offering					
Total		100 %	\$	100 %	

The table above assumes no exercise of the underwriters' option to purchase [redacted] additional shares in this offering. If the underwriters' option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to [redacted] % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by investors purchasing shares of common stock in the offering would be increased to [redacted] % of the total number of shares outstanding after this offering.

Each \$1.00 increase or decrease in the assumed initial public offering price of \$ [redacted] per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as applicable, the total consideration paid by investors purchasing shares in this offering by \$ [redacted] million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. Similarly, each increase or decrease of 1.0 million shares in the number of shares offered by us would increase or decrease, as applicable, the total consideration paid by investors purchasing shares in this offering by \$ [redacted] million, assuming no change in the assumed initial public offering price.

The foregoing tables and calculations (other than the historical net tangible book value calculation) are based on 64,686,862 shares of our common stock outstanding as of March 31, 2021 (after giving pro forma effect to the automatic conversion of all of our outstanding convertible preferred stock and the automatic exercise of all of our outstanding warrants issued to SGI into an aggregate of 48,945,302 shares of our common stock immediately prior to the completion of this offering), and excludes:

- 1,453,980 shares of common stock issuable upon the exercise of options granted under the 2019 Plan, outstanding as of March 31, 2021 with a weighted-average exercise price of \$0.20 per share;

- 1,986,394 shares of common stock issuable upon the exercise of options granted under the 2021 Plan, after March 31, 2021 with an exercise price of \$1.46 per share;
- 3,455,200 shares of common stock issuable upon the exercise of options granted under the 2021 Plan, after March 31, 2021 with a weighted-average exercise price of \$2.19 per share;
- 187,220 shares of common stock issuable upon the exercise of warrants to purchase shares issued to SVB Financial Group with an initial exercise price of \$1.20 per share; and
- shares of common stock reserved for future issuance under our equity compensation plans, consisting of:
 - shares of common stock reserved for future issuance under our 2021 Plan, as of _____, 2021, which shares will be added to the shares to be reserved for future issuance under the 2021 SIP;
 - shares of common stock reserved for future issuance under our 2021 SIP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan; and
 - shares of common stock reserved for future issuance under our ESPP, which will become effective in connection with this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan.

To the extent that any outstanding options are exercised or new options are issued under our equity benefit plans, or we issue additional shares of common stock or other securities convertible into or exercisable or exchangeable for shares of our capital stock in the future, there will be further dilution to investors purchasing shares of common stock in this offering.

SELECTED CONSOLIDATED FINANCIAL DATA

The following tables summarize our selected consolidated financial data for the periods and as of the dates indicated. Pursuant to the authority of the SEC under Rules 3-06 and 3-13 of Regulation S-X under the Securities Act, we have substituted audited consolidated financial statements for the period from March 8, 2019 through December 31, 2019 in place of audited consolidated financial statements for the fiscal year ended December 31, 2019. Because of the different length of time for which financial information is presented in the period from March 8, 2019 through December 31, 2019 compared to that presented for the year ended December 31, 2020, our financial results for those periods are not comparable. We have derived the selected consolidated statement of operations data for the period from March 8, 2019 through December 31, 2019 and the year ended December 31, 2020, and the consolidated balance sheet data as of December 31, 2019 and 2020, from our audited consolidated financial statements appearing elsewhere in this prospectus. We have derived the statement of operations data for the three months ended March 31, 2020 and 2021, and the balance sheet data as of March 31, 2021 from our unaudited interim financial statements and related notes included elsewhere in this prospectus. Our unaudited interim financial statements were prepared in accordance with GAAP, on the same basis as our audited financial statements and include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for the fair presentation of the financial information set forth in those financial statements. Our historical results are not necessarily indicative of the results that may be expected in the future, and our interim results are not necessarily indicative of our results for the full fiscal year. You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes appearing elsewhere in this prospectus and the information in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020	Three Months Ended March 31, 2020	Three Months Ended March 31, 2021
Statement of Operations and Comprehensive Loss Data (in thousands):				
Revenue:				
Product sales	\$ 3,555	\$ 5,131	\$ 1,048	\$ 1,799
Royalties	1,250	1,445	339	528
Total revenue	4,805	6,576	1,387	2,327
Cost of revenue	2,677	2,951	574	1,025
Gross profit	2,128	3,625	813	1,302
Operating expenses:				
Research and development	3,318	8,925	1,963	2,878
Sales and marketing	1,878	6,931	1,299	2,275
General and administrative	3,908	4,130	1,146	2,413
Total operating expenses	9,104	19,986	4,408	7,566
Loss from operations	(6,976)	(16,361)	(3,595)	(6,264)
Other income (expense):				
Interest expense	(1,490)	(690)	(192)	(241)
Change in fair value of derivative liabilities	62	(880)	(93)	(296)
Loss on extinguishment of debt	—	—	—	(618)
Other income (expense), net	102	(74)	—	(19)
Loss before provision for income taxes	(8,302)	(18,005)	(3,880)	(7,438)
Provision for income taxes	—	(5)	—	(4)
Net loss and comprehensive loss	(8,302)	(18,010)	(3,880)	(7,442)
Net loss attributable to common stockholders	\$ (8,302)	\$ (18,010)	\$ (3,880)	\$ (7,442)
Net loss per share attributable to common stockholders—basic and diluted	\$ (0.55)	\$ (1.20)	\$ (0.26)	\$ (0.48)
Weighted average common stock outstanding—basic and diluted	15,000,000	15,004,616	15,000,000	15,579,423
Pro forma net loss per share attributable to common stockholders—basic and diluted (unaudited) ⁽¹⁾		\$ (0.29)		\$ (0.12)
Pro forma weighted average common stock outstanding—basic and diluted (unaudited) ⁽²⁾		60,242,616		60,817,423

	December 31,		March 31,
	2019	2020	2021
Balance Sheet Data (in thousands):			
Cash	\$ 29,144	\$ 13,463	\$ 17,834
Working capital ⁽²⁾	29,712	11,556	16,313
Total assets	38,761	26,863	31,318
Long-term debt, net of discount, including current portion	4,472	4,686	14,372
Derivative liabilities	654	1,533	2,403
Convertible preferred stock	38,914	38,914	38,914
Total stockholders' equity (deficit)	(7,503)	(25,459)	(32,701)

(1) The unaudited pro forma basic and diluted weighted-average shares of common stock outstanding used in the calculation of unaudited pro forma basic and diluted net loss per share attributable to common stockholders for the year ended December 31, 2020 and quarter ended March 31, 2021 have been prepared to give effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 45,238,000 shares of our common stock immediately prior to the closing of this offering and (ii) the automatic exercise of all outstanding warrants issued to SGI into an aggregate of 3,707,302 shares of our common stock immediately prior to the closing of this offering, as if this offering had occurred on the later of the beginning of each period or the issuance date of the convertible preferred stock or warrants issued to SGI.

(2) We define working capital as current assets less current liabilities. See our financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Unless the context otherwise requires, all references in this section to the "Company," "we," "us," or "our" refer to the business of Codex DNA, Inc. and its subsidiaries.

You should read the following discussion and analysis of our financial condition and results of operations together with the "Selected Consolidated Financial Data" section of this prospectus and our consolidated financial statements and the related notes appearing elsewhere in this prospectus. This discussion contains forward-looking statements that reflect our plans, estimates, and beliefs that involve risks and uncertainties. As a result of many factors, such as those set forth under the "Risk Factors" and "Special Note Regarding Forward-Looking Statements" sections and elsewhere in this proxy statement/prospectus, our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We believe that we are a leading synthetic biology company focused on enabling researchers to rapidly, accurately and reproducibly build or "write" high-quality synthetic DNA and mRNA that is ready to use in many downstream synthetic biology enabled markets. Our synthetic biology solution addresses the bottlenecks across the multi-step process of building DNA and mRNA, as well as the significant limitations of existing solutions that prevent the rapid building of virtually error-free DNA and mRNA at a useable scale. A key part of our solution is our BioXp system, an end-to-end automated workstation that fits on the benchtop and is broadly accessible due to its ease-of-use and hands-free automation. We believe our BioXp system can democratize synthetic biology by simplifying the process of building DNA and mRNA, thereby accelerating the discovery, development and production of novel high-value products, including antibody-based biologics, mRNA-based vaccines and therapeutics and precision medicines.

Our synthetic biology solution is comprised of our:

- *BioXp system*: which we believe is the first commercially available push-button, walkaway, end-to-end automated workstation that empowers researchers to go from a digital DNA sequence to endpoint-ready synthetic DNA in as few as 8 hours and mRNA in less than 24 hours, exclusive of shipment time;
- *BioXp portal*: a user-friendly online portal that offers an intuitive guided workflow and design tools for building new DNA sequences and assembling them into vector(s) of choice;
- *BioXp kits*: contain all the necessary building blocks and reagents, including our proprietary Gibson Assembly branded reagents, for specific synthetic biology workflow applications;
- *Cloud-based scripts*: product-specific and pre-validated scripts that optimize and simplify the use of the BioXp kits on the BioXp system;
- *Benchtop reagents*: contain all the reagents necessary to proceed with a specific synthetic biology workflow on the benchtop using products generated on the BioXp system; and
- *Biofoundry Services*: enable a customer to order and receive any of the BioXp system endpoint-ready products, such as genes, clones, cell-free amplified DNA and variant libraries.

We have developed and commercialized products that include BioXp systems, including our current BioXp 3250 system, BioXp kits for generating a wide array of synthetic DNA and mRNA, and benchtop reagents that complement the automated synthetic biology workflow applications and workflow solutions. We believe that our integrated BioXp systems and BioXp kits represent the industry's leading synthetic biology workflow automation solution and provide us with a first mover advantage in the rapidly growing synthetic biology market. As part of our continuing effort to improve the processes of synthetic biology, we are currently developing next-generation BioXp systems and BioXp kits with the goal of transforming rapid demand-response workflows in synthetic biology and consolidating supply chains and enabling global distributed manufacturing for discovery, pre-clinical and clinical applications. We also use our BioXp 3250 system, BioXp kits and benchtop reagents to perform services for customers.

We were incorporated in the state of Delaware in March 2011, as Synthetic Genomics Solution, Inc., a wholly owned subsidiary of Synthetic Genomics, Inc. (SGI). We changed our name to SGI-DNA, Inc. (SGI-DNA) in February 2013. On March 8, 2019, SGI sold SGI-DNA to GATTACA Mining, LLC (GATTACA) by entering into a stock purchase agreement to sell all of our outstanding common and preferred stock in exchange for a \$10 million non-recourse

promissory note (the Purchase Note) and a warrant to purchase common stock equal to 6% of the shares of common stock issued and outstanding as of the time of exercise, which will automatically be exercised immediately prior to the consummation of an initial public offering. This warrant and participation right were later amended in August 2019 to provide a warrant on 3,245,235 shares of common stock, a participation right to receive property with a value equal to the net proceeds a person would receive as a holder of 3,245,235 shares of common stock in a change of control transaction, and additional warrants equal to 3% of the shares sold in future equity financings prior to an initial public offering or certain change of control transactions. In connection with our Series A-1 convertible preferred stock financing in December 2019, we issued SGI warrants in connection with the participation right described above to purchase Series A-1 convertible preferred stock. These warrants have an exercise price of \$1.20177 per share. The common stock warrant has an aggregate exercise price of \$1. We were a co-borrower with GATTACA on the Purchase Note. See the section titled "Certain Relationships and Related Party Transactions" for more information regarding this transaction. Subsequently, we focused our efforts on launching new synthetic biology products and expanding our distribution and marketing efforts on our existing, research using only products. We also changed our name to Codex DNA, Inc. in March 2020.

We commercially launched our current synthetic biology solution in September 2019, which now includes the BioXp 3250 system, BioXp kits with associated cloud-based application scripts, and benchtop reagent kits. Since the introduction of our solution through May 1, 2021, we have launched seven BioXp kits, three benchtop reagent kits, and several other synthetic biology products, including 12 SARS-CoV-2 full-length genomes and RNA controls as well as our Vmax X2 cells. We have placed approximately 160 BioXp systems globally. We target customers in the fields of personalized medicine, biologics drug discovery, vaccine development, genome editing and cell and gene therapy. As of May 1, 2021, our customer base was composed of over 300 customers and included 15 of the 25 largest biopharmaceutical companies in the world ranked by 2020 revenue, excluding affiliates of those companies. Our customer base also includes leading academic research institutions, government institutions, CROs and synthetic biology companies.

Our BioXp system placements in 2020 represent the following markets and customer segments:

- *Areas of focus:* 45% biologics, 27% vaccine development, 14% cell and gene therapy, 12% genome editing and 2% agriculture.
- *Research area:* 37% immuno-oncology, 35% infectious disease, 18% genetic/rare disease and 10% other.
- *Application:* 23% vaccines, 21% protein engineering, 20% cell engineering, 20% antibody engineering and 16% nucleic acid engineering.
- *Customer type:* 43% biotechnology development, 23% academic institutions, 14% pharmaceutical development, 12% other and 8% contract research.

We estimate that our 2020 product sales mix statistics were as follows:

- *Sales mix:* 57% BioXp systems, 19% BioXp kits, 16% biofoundry services and 8% benchtop reagents.
- *Geographic mix:* 67% North America, 22% Europe/Middle East/Africa and 11% Asia Pacific.
- *Distribution mix:* 84% direct sales and 16% distributors.

Since our inception as a stand-alone company on March 8, 2019, we have devoted substantially all of our efforts to raising capital, organizing, and staffing our company, commercializing existing products and developing new products. To date, we have funded our operations with proceeds from the issuance of convertible notes and convertible preferred stock, payments received from royalties and product sales, and proceeds from borrowings under our credit facilities. Through March 31, 2021, we had received gross proceeds of \$32.8 million from sales of our convertible preferred stock, \$6.8 million from the issuance of our convertible notes and and gross proceeds of \$20.0 million through borrowings under our loan and security agreements with Oxford Finance LLC (the 2019 Loan Agreement) and Silicon Valley Bank (the 2021 Loan Agreement).

We have incurred significant operating losses since our inception. During the period from March 8, 2019 to December 31, 2019 and the year ended December 31, 2020, our revenue was \$4.8 million and \$6.6 million, respectively. During the three months ended March 31, 2020 and 2021, our revenue was \$1.4 million and \$2.3 million, respectively. As of March 31, 2021, we had cash of \$17.8 million. Our ability to generate product revenue sufficient to achieve profitability will depend on the successful development and commercialization of our products.

We reported net losses of \$8.3 million, \$18.0 million, \$3.9 million, and \$7.4 million for the period from March 8, 2019 to December 31, 2019, for the year ended December 31, 2020, and for the three months ended March 31, 2020 and 2021, respectively. As of March 31, 2021, we had an accumulated deficit of \$33.8 million.

Impact of COVID-19

In December 2019, a novel strain of coronavirus, which causes the disease known as COVID-19, was reported to have surfaced in Wuhan, China. Since then, COVID-19 coronavirus has spread globally. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The ongoing COVID-19 global and national health emergency has caused significant disruption in the international and United States economies and financial markets. The spread of COVID-19 has caused illness, quarantines, cancellation of events and travel, business and school shutdowns, reduction in business activity and financial transactions, labor shortages, supply chain interruptions and overall economic and financial market instability.

In response to public health directives and orders and to help minimize the risk of the virus to employees, we have taken precautionary measures, including implementing work-from home policies for certain employees. The COVID-19 pandemic has the potential to significantly impact our manufacturing supply chain, distribution or logistics and other services. Additionally, our service providers and their operations may be disrupted, temporarily closed or experience worker or supply shortages, which could result in additional disruptions or delays in shipments of purchased equipment, materials or the development of new products. To date, we have not suffered material supply chain disruptions.

The COVID-19 pandemic has had a mixed impact on our revenues. We sell our products to pharmaceutical and academic laboratories. Many such laboratories temporarily closed or reduced work hours due to the pandemic which reduced sales to existing customers. Furthermore, many business and academic conferences were cancelled and travel restrictions were imposed world-wide, which impacted customer acquisition and reduced sales. However, we were able to quickly develop new COVID-19 specific products and sell these and our existing products to entities working on COVID-19 products and vaccine development, which contributed to revenue growth.

We are not able to estimate the duration of the pandemic and potential impact on the business if disruptions or delays in shipments of product occur. In addition, a severe prolonged economic downturn could result in a variety of risks to the business, including weakened demand for product and a decreased ability to raise additional capital when needed on acceptable terms, if at all. As the situation continues to evolve, we will continue to closely monitor market conditions and respond accordingly.

Components of Results of Operations

Revenue

Revenue consists of product sales and royalties. Net product sales primarily consist of sales of our BioXp systems, BioXp kits, benchtop reagents and biofoundry services. In providing biofoundry services, we use our own instruments and reagents to create DNA products for our customers. Royalties consist of fees charged for the grant of non-exclusive rights of our patents to third parties.

Historically, revenue growth has come from BioXp systems, BioXp kits and biofoundry services. Growth in BioXp systems sales has come from investments in direct and indirect distribution channels and new product introductions. Growth in BioXp kit sales has come from the growth of the installed base of BioXp systems and new application kits. Biofoundry services were launched late in 2019. Growth in biofoundry services has been driven by new product introductions and prospective customers using biofoundry services to validate our BioXp systems. We have also seen an increase in demand for our biofoundry services driven by COVID-19-related access problems to researchers' labs.

Cost of Revenue

Cost of revenue primarily consists of material and labor costs, freight and indirect overhead costs associated with sales of our BioXp instruments, BioXp reagents, benchtop reagents and biofoundry services. Cost of revenue also includes period costs related to certain inventory adjustment charges, and unabsorbed manufacturing and overhead costs, as well as any write-offs of inventory that fail to meet specification or are otherwise no longer suitable for commercial manufacture. Cost of revenue is expected to increase as revenue increases.

Research and Development Expenses

Research and development expenses include pre-production costs related to the design, development and improvement of our products and technologies, including employee compensation, benefits and related costs of sustaining our engineering teams, project material costs, third party fees paid to consultants, prototype development expenses, legal costs related to intellectual property, patent fees, and other costs incurred in the product design and development process. We expense research and development costs as incurred. Non-refundable advance payments that we make for goods or services to be received in the future are recorded as prepaid expenses. The prepaid amounts are expensed as the related goods are delivered or the services are performed, or when it is no longer expected that the goods will be delivered or the services rendered.

We expect that our research and development expenses will increase significantly, both in the near term and subsequently, in connection with our planned product development activities. At this time, we cannot accurately estimate or know the nature, timing and costs of the efforts that will be necessary to complete the development of any of our future products. The successful development and commercialization of our future products is highly uncertain. This is due to the numerous risks and uncertainties associated with product development and commercialization, including but not limited to the following:

- we can never be certain that we can solve any technical challenge;
- if such solution can be found, we can never be certain of the timing of such a solution;
- once we find a technical solution, we cannot be certain that the solution will be commercially feasible; and
- any solution may not be desired by our customers.

These uncertainties with respect to the development of any of our future products could significantly impact the costs and timing associated with the development of these products.

Sales and Marketing Expenses

Sales and marketing expenses include employee compensation, including compensation and benefits for sales, marketing, customer service, corporate development personnel and related administrative expenses. In addition, sales and marketing expenses also include costs for international employees and facility overhead based on headcount. We anticipate that our sales and marketing expenses will increase in the future as we increase our headcount to support increasing sales and expanding our international operations. Sales and marketing costs are expensed as incurred.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for personnel in executive, finance, and administrative functions. General and administrative expenses also include legal fees relating to corporate matters; professional fees for accounting, auditing, tax and administrative consulting services; insurance costs, administrative travel expenses, other operating costs; and facility costs not otherwise included in research and development or sales and marketing expenses.

We anticipate that our general and administrative expenses will increase in the future as we increase our administrative headcount to support our continued research, development and commercialization activities. We also anticipate that we will incur significantly increased accounting, audit, legal, regulatory, compliance and director and officer insurance costs as well as investor and public relations expenses associated with operating as a public company. General and administrative expenses are expensed as incurred.

Other Income (Expense)**Interest Expense**

Interest expense primarily consists of cash and non-cash interest on our term loan facilities, convertible notes, the Purchase Note, and our finance leases.

Change in Fair Value of Derivative Liabilities

In connection with the divestiture of our capital stock by SGI in March of 2019, SGI retained a participation right whereby SGI could receive property with a value equal to the net proceeds a person would receive as a holder of 6% of our common stock in a change of control transaction. SGI was also issued a warrant to purchase common stock,

equal to 6% of the shares of common stock issued and outstanding as of the time of exercise, which will automatically be exercised immediately prior to the consummation of an initial public offering. This warrant and participation right were later amended in August 2019 to provide a warrant on 3,245,235 shares of common stock, a participation right to receive property with a value equal to the net proceeds a person would receive as a holder of 3,245,235 shares of common stock in a change of control transaction, and additional warrants equal to 3% of the shares sold in future equity financings prior to an initial public offering or certain change of control transactions. The common stock warrant has an aggregate exercise price of \$1. We classify this participation right as a liability on our consolidated balance sheets that we remeasure to fair value at each reporting date. We recognize changes in the fair value of this participation right as a component of other income (expense) in our consolidated statements of operations and comprehensive loss.

In connection with our Series A-1 convertible preferred stock financing in December 2019, we issued SGI warrants in connection with the participation right described above to purchase Series A-1 convertible preferred stock. The Series A-1 warrant has an exercise price of \$1.20177 per share. We classify these warrants as a liability on our consolidated balance sheets that we remeasure to fair value at each reporting date. We recognize changes in the fair value of the warrant liability as a component of other income (expense) in our consolidated statements of operations and comprehensive loss. We will continue to recognize changes in the fair value of the warrant liability until the warrants are exercised, expire or qualify for equity classification. Immediately prior to the closing of this offering, the Series A-1 convertible preferred stock warrants will be net exercised into shares of common stock, and the fair value of the warrant liability at that time will be reclassified to stockholders equity.

In connection with the 2019 Loan Agreement, we identified a contingent liability to pay a success fee to the lender as well as a contingent put option liability related to a contingent interest feature and acceleration clause. Under the 2019 Loan Agreement we issued a total of \$5.0 million in secured promissory notes. The success fee contingent liability and the contingent put option liability are valued and separately accounted for in the accompanying consolidated financial statements. The fair value of the success fee was recorded as a discount to the notes and included within derivative liabilities on our consolidated balance sheets. We also include the contingent put option liability within derivative liabilities on our consolidated balance sheets as a long-term liability. We remeasure both derivatives to fair value at each reporting date, and recognize changes in the fair value as a component of other income (expense) in our consolidated statements of operations and comprehensive loss. We will continue to recognize changes in the fair value of the success fee contingent liability until the success fee is paid. The contingent put option liability was extinguished when the 2019 Loan Agreement was repaid in March 2021.

In connection with the 2021 Loan Agreement, we identified a contingent put option liability related to a contingent interest feature and acceleration clause. The contingent put option liability is valued and separately accounted for in the accompanying consolidated financial statements. The fair value of the contingent put option liability is within derivative liabilities on our consolidated balance sheets as a long-term liability. We remeasure the derivative to fair value at each reporting date, and recognize changes in the fair value as a component of other income (expense) in our consolidated statements of operations and comprehensive loss. Under the 2021 Loan Agreement we issued a warrant to purchase a number of shares of preferred stock. The warrant is exercisable into the number of shares of preferred stock equal to approximately \$0.2 million divided by the applicable warrant price. The warrant is initially exercisable for Series A-1 convertible preferred stock at an exercise price of \$1.20177 per share, and will become exercisable for any series of convertible preferred stock issued by us in the future prior to August 1, 2021, at an exercise price equal to the lowest original purchase price paid by investors for such convertible preferred stock. We classify these warrants as a liability on our consolidated balance sheets that we remeasure to fair value at each reporting date. We recognize changes in the fair value of the warrant liability as a component of other income (expense) in our consolidated statements of operations and comprehensive loss. We will continue to recognize changes in the fair value of the warrant liability until the warrants are exercised, expire or qualify for equity classification.

Other Income (Expense), Net

Other income (expense), net consists primarily of gains on the disposal of fixed assets and losses on the write off of intangible assets.

Income Taxes

Since our inception, we have not recorded any income tax benefits for the NOLs we have incurred in each year or for our earned research and development tax credits generated in each period, as we believe, based upon the weight of

available evidence, that it is more likely than not that all of our NOLs and tax credit carryforwards will not be realized. As of December 31, 2019 and 2020, we had federal NOL carryforwards of \$12.2 million and \$28.4 million, respectively and state NOL carryforwards of \$6.7 million and \$15.9 million, respectively. The federal NOL carryforwards of \$1.3 million generated before January 1, 2018 will begin to expire in 2034, but can be used to offset up to 100% of taxable income. Amounts generated after December 31, 2017 will carryforward indefinitely, but will be subject to 80% taxable income limitation beginning in tax years after December 31, 2020, as provided by the CARES Act. We have recorded a full valuation allowance against our net deferred tax assets at each balance sheet date.

On March 27, 2020, the CARES Act was passed by the U.S. Congress and signed into United States law. The CARES Act, among other things, includes certain provisions for individuals and corporations; however, these benefits did not impact our income tax provisions in the period or year presented given the existence of the full valuation allowance.

Results of Operations

Comparison of the Three Months ended March 31, 2020 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,		
	2020	2021	Change
	(in thousands)		
Revenue			
Product sales	\$ 1,048	\$ 1,799	\$ 751
Royalties	339	528	189
Total revenue	1,387	2,327	940
Cost of revenue	574	1,025	451
Gross profit	813	1,302	489
Operating expenses:			
Research and development	1,963	2,878	915
Sales and marketing	1,299	2,275	976
General and administrative	1,146	2,413	1,267
Total operating expenses	4,408	7,566	3,158
Loss from operations	(3,595)	(6,264)	(2,669)
Other income (expense):			
Interest expense, net	(192)	(241)	(49)
Change in fair value of derivative liabilities	(93)	(296)	(203)
Loss on extinguishment of debt	—	(618)	(618)
Other expense, net	—	(19)	(19)
Total other expense, net	(285)	(1,174)	(889)
Loss before provision for income taxes	(3,880)	(7,438)	(3,558)
Provision for income taxes	—	(4)	(4)
Net loss	\$ (3,880)	\$ (7,442)	\$ (3,562)

Revenue

The following table summarizes our revenue for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,		
	2020	2021	Change
	(in thousands)		
Product sales	\$ 1,048	\$ 1,799	\$ 751
Royalties	339	528	189
Total revenue	\$ 1,387	\$ 2,327	\$ 940

Revenue for the three months ended March 31, 2021 was \$2.3 million, compared to \$1.4 million for the three months ended March 31, 2020. The increase of \$0.9 million was primarily driven by new product introductions. The 3250 BioXp system, which launched in late 2020, led to a \$0.5 million increase in product sales, along with a \$0.1 million increase in biofoundry services due to the launch of a new product line in late 2019, a \$0.1 million increase in reagent product sales and a \$0.2 million increase in royalties.

Royalty revenue was largely attributable to one customer, New England Biolabs, Inc. (NEB), which accounted for 24% of revenue for the three months ended March 31, 2020 and 20% for the three months ended March 31, 2021. Under the terms of the Confidential Settlement Agreement with NEB (the Confidential Settlement Agreement), NEB has agreed to pay the Company a royalty in the low double digits for certain products commercialized as of the date of the agreement and for products introduced after such date if such products are formulated using substantially the same enzymes or methods as the royalty-bearing products. This royalty will expire upon the earlier of the expiration of all licensed patents or the entry of a final judgment declaring the licensed patents invalid or unenforceable. Also under the terms of the Confidential Settlement Agreement, NEB has agreed to continue to offer for sale the royalty-bearing products through at least September 30, 2025, after which time it may stop selling the royalty bearing products upon sixty days' notice.

Cost of Revenue

The following table summarizes our cost of revenue for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,		
	2020	2021	Change
	(in thousands)		
Standard costs	\$ 376	\$ 885	\$ 509
Shipping charges	66	79	13
Other costs	132	61	(71)
Total cost of revenue	\$ 574	\$ 1,025	\$ 451

Cost of revenue for the three months ended March 31, 2021 was \$1.0 million, compared to \$0.6 million for the three months ended March 31, 2020. The increase of \$0.5 million was primarily driven by a \$0.5 million increase related to standard costs driven by increasing units sold. These increases were offset by \$0.1 million decrease in other costs. Other costs are composed of overhead, indirect costs and manufacturing variances. The decrease in other costs was primarily driven by reduced manufacturing variances.

Research and Development Expenses

The following table summarizes our research and development expenses for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,		
	2020	2021	Change
	(in thousands)		
Personnel expenses (including stock-based compensation)	\$ 1,182	\$ 1,745	\$ 563
Professional services	345	534	189
Facility related and other	436	599	163
Total research and development expenses	\$ 1,963	\$ 2,878	\$ 915

Research and development expenses for the three months ended March 31, 2021 was \$2.9 million, compared to \$2.0 million for the three months ended March 31, 2020. The increase of \$0.6 million in personnel expenses was due to our increase in headcount related to our product development efforts. The increase of \$0.2 million in professional services is primarily due to increases in third-party consulting and temporary labor costs related to our product development efforts. The increase of \$0.2 million in facility related and other expenses is directly attributable to the increases in lab supplies. Additionally, during 2020, we expanded our San Diego office, which increased our overall facility costs.

Sales and Marketing Expenses

The following table summarizes our sales and marketing expenses for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,		
	2020	2021	Change
	(in thousands)		
Personnel expenses (including stock-based compensation)	\$ 894	\$ 1,834	\$ 940
Professional services	164	277	113
Facility related and other	241	164	(77)
Total sales and marketing expense	\$ 1,299	\$ 2,275	\$ 976

Sales and marketing expenses for the three months ended March 31, 2021 was \$2.3 million, compared to \$1.3 million for the three months ended March 31, 2020. The increase of \$0.9 million in personnel expenses was due to an increase in headcount related to our sales and marketing efforts. The increase of \$0.1 million in professional services is primarily due to increases in our digital marketing activities, partially offset by decreases in our marketing trade show and event activities in 2020.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,		
	2020	2021	Change
	(in thousands)		
Personnel expenses (including stock-based compensation)	\$ 873	\$ 1,189	\$ 316
Professional services	144	853	709
Facility related and other	129	371	242
Total general and administrative expenses	\$ 1,146	\$ 2,413	\$ 1,267

General and administrative expenses for the three months ended March 31, 2021 was \$2.4 million, compared to \$1.1 million for the three months ended March 31, 2020. The increase of \$0.3 million in personnel expenses was due to the timing of personnel additions and employee recruiting fees related to preparation for an initial public offering in 2021. The increase of \$0.7 million in professional services is primarily due to increased costs of consulting, legal services and audit and accounting costs. The increase of \$0.2 million in facility related and other costs is related to increases in office supplies.

Other Expense, Net

Other expense, net for the three months ended March 31, 2021 was a net expense of \$1.2 million, compared to a net expense \$0.3 million for the three months ended March 31, 2020. The change was primarily due to the loss on extinguishment of debt, the change in fair value of derivative liabilities, and an increase in interest expense as a result of the 2021 Loan Agreement. The fair value change of derivative liabilities was due to the increase in the value of the underlying preferred stock and the likelihood of an initial public offering.

Comparison of the period March 8, 2019 (inception) through December 31, 2019 and Year Ended December 31, 2020

The following table summarizes our results of operations for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020	Change
	(in thousands)		
Revenue			
Product sales	\$ 3,555	\$ 5,131	\$ 1,576
Royalties	1,250	1,445	195
Total revenue	4,805	6,576	1,771
Cost of revenue	2,677	2,951	274
Gross profit	2,128	3,625	1,497
Operating expenses:			
Research and development	3,318	8,925	5,607
Sales and marketing	1,878	6,931	5,053
General and administrative	3,908	4,130	222
Total operating expenses	9,104	19,986	10,882
Loss from operations	(6,976)	(16,361)	(9,385)
Other income (expense):			
Interest (expense) income, net	(1,490)	(690)	800
Change in fair value of derivative liabilities	62	(880)	(942)
Other income (expense), net	102	(74)	(176)
Total other income (expense), net	(1,326)	(1,644)	(318)
Loss before provision for income taxes	(8,302)	(18,005)	(9,703)
Provision for income taxes	—	(5)	(5)
Net loss	\$ (8,302)	\$ (18,010)	\$ (9,708)

Revenue

The following table summarizes our revenue for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020	Change
	(in thousands)		
Product sales	\$ 3,555	\$ 5,131	\$ 1,576
Royalties	1,250	1,445	195
Total revenue	\$ 4,805	\$ 6,576	\$ 1,771

Revenue for the period ended December 31, 2019 was \$4.8 million, compared to \$6.6 million for the year ended December 31, 2020. The increase of \$1.8 million was primarily driven by a \$1.6 million increase in product sales of BioXp instruments, a \$0.8 million increase in biofoundry services due to the launch of a new product line in late 2019, a \$0.3 million increase in reagent product sales, and a \$0.2 million increase in royalties partially offset by a \$1.1 million reduction due to the termination of a significant supply and service agreement with one of our customers, Gritstone Oncology, Inc. The revenues from this agreement, which are not expected to recur, accounted for 23% of revenue for the period ended December 31, 2019 and 0% for the period ended December 31, 2020.

Royalty revenue was largely attributable to royalties paid by NEB under the Confidential Settlement Agreement, and accounted for 26% of revenue for the period ended December 31, 2019 and 21% for the period ended December 31, 2020.

In 2020, the company developed several COVID-19 specific products in the biofoundry services and benchtop reagent product lines. Combined, these products accounted for 11% of revenue in the year ended December 31, 2020. In the future, we expect sales of COVID-19 specific products to decline.

Cost of Revenue

The following table summarizes our cost of revenue for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020	Change
	(in thousands)		
Standard costs	\$ 1,192	\$ 1,970	\$ 778
Shipping charges	134	265	131
Other costs	1,351	716	(635)
Total cost of revenue	\$ 2,677	\$ 2,951	\$ 274

Cost of revenue for the period ended December 31, 2019 was \$2.7 million, compared to \$3.0 million for the year ended December 31, 2020. The increase of \$0.3 million was primarily driven by a \$0.8 million increase related to standard costs and a \$0.1 million increase related to shipping charges driven by increasing units sold. These increases were offset by \$0.6 million decrease in other costs. Other costs are composed of overhead, indirect costs, and manufacturing variances. The decrease in other costs was primarily driven by reduced manufacturing variances.

Research and Development Expenses

The following table summarizes our research and development expenses for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020		Change
		(in thousands)		
Personnel expenses (including stock-based compensation)	\$ 2,150	\$ 5,300	\$	3,150
Professional services	107	1,911		1,804
Facility related and other	1,061	1,714		653
Total research and development expenses	\$ 3,318	\$ 8,925	\$	5,607

Research and development expenses for the period ended December 31, 2019 were \$3.3 million, compared to \$8.9 million for the year ended December 31, 2020. The increase of \$3.2 million in personnel expenses was due to our increase in headcount related to our product development efforts. The increase of \$1.8 million in professional services is primarily due to increases in third-party consulting and temporary labor related to our product development efforts. The increase of \$0.7 million in facility related and other expenses is directly attributable to the increases in personnel. Additionally, during 2020, we expanded our San Diego office, which increased our overall facility costs.

Sales and Marketing Expenses

The following table summarizes our sales and marketing expenses for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020		Change
		(in thousands)		
Personnel expenses (including stock-based compensation)	\$ 1,205	\$ 5,055	\$	3,850
Professional services	363	1,207		844
Facility related and other	310	669		359
Total sales and marketing expense	\$ 1,878	\$ 6,931	\$	5,053

Sales and marketing expenses for the period ended December 31, 2019 were \$1.9 million compared to \$6.9 million for the year ended December 31, 2020. The increase of \$3.9 million in personnel expenses was due to our increase in headcount related to our sales and marketing efforts. The increase of \$0.8 million in outside professional services is primarily due to increases in our marketing activities in 2020. The increase of \$0.4 million in facility related and other expenses is directly attributable to the increases in headcount of sales and marketing personnel.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020	Change
	(in thousands)		
Personnel expenses (including stock-based compensation)	\$ 2,000	\$ 2,411	\$ 411
Professional services	1,156	794	(362)
Facility related and other	752	925	173
Total general and administrative expenses	<u>\$ 3,908</u>	<u>\$ 4,130</u>	<u>\$ 222</u>

General and administrative expenses for the period ended December 31, 2019 were \$3.9 million, compared to \$4.1 million for the year ended December 31, 2020. The increase of \$0.4 million in personnel expenses was due to our increase in headcount related to preparation for an initial public offering in 2021. The decrease of \$0.4 million in professional services is primarily due to reduced costs of consulting and legal services, partially offset by increases to audit and accounting costs. The increase of \$0.2 million in facility related expenses was due to expansions of the square footage under rent in late 2019 and again early in 2020.

Other Income (Expense), Net

Other Income (expense), net for the period ended December 31, 2019 was a net expense of \$1.3 million, compared to a net expense of \$1.6 million for the year ended December 31, 2020. The change was primarily due to the change in fair value of derivative liabilities offset by a reduction in interest expense. The fair value change was due to the increase in the value of the underlying preferred stock, the likelihood of an initial public offering and reduced time to maturity of the term loan. The reduction in interest resulted primarily from the repayment in full of the Purchase Note.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have incurred significant operating losses. To date, we have funded our operations with proceeds from the sales of convertible notes, convertible preferred stock, payments received for royalties and product sales, and proceeds from borrowings. Through March 31, 2021, we have received gross proceeds of \$32.8 million from sales of our convertible preferred stock, \$6.8 million from the issuance of convertible notes and net proceeds of \$15.0 million through borrowings under our 2019 Loan Agreement and our 2021 Loan Agreement. As of March 31, 2021, we had cash of \$17.8 million. Without giving effect to the anticipated net proceeds from this offering, we expect that our existing cash as of March 31, 2021, will be sufficient to fund our operating expenses and capital expenditures through the end of 2021. We believe liquidity provided from our existing cash and available borrowings raise substantial doubt about our ability to fund our operating expenses and capital expenditures for the twelve months following the issuance date of our 2020 consolidated financial statements. We will need to raise additional capital to finance our operations, which cannot be assured.

We will continue to incur significant expenses and expect to incur increasing operating losses for the foreseeable future. We also expect that our expenses and capital expenditures will increase substantially in connection with our ongoing activities, particularly as we:

- seek to develop new products and services and hire additional research, development and engineering personnel;
- expand our distribution and marketing infrastructure to further commercialize current and future products and support our growing customer base;
- add operational, financial, and administrative systems and personnel to support growing sales;

- maintain, expand, enforce, defend and protect our intellectual property portfolio and provide reimbursement of third-party expenses related to our patent portfolio; and
- operate as a public company.

As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of equity offerings, debt financings, or other capital sources, including collaborations with other companies, and other strategic transactions. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of one or more of our products.

The field of synthetic biology is rapidly developing and subject to numerous risks and uncertainties associated with new technologies and novel products. Consequently, we are unable to accurately predict the timing or amount of increased product sales or expenses or when, or if, we will be able to achieve or maintain profitability. Even if we are able to continue to generate significant product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

Cash Flows

Comparison of the Three Months ended March 31, 2020 and 2021

The following table summarizes our consolidated cash flows for the three months ended March 31, 2020 and 2021:

	Three Months ended March 31,	
	2020	2021
	(in thousands)	
Net cash used in operating activities	\$ (3,393)	\$ (5,117)
Net cash used in investing activities	(10)	(99)
Net cash (used in) provided by financing activities	(27)	9,587
Net (decrease) increase in cash	<u>\$ (3,430)</u>	<u>\$ 4,371</u>

Operating Activities

During the three months ended March 31, 2020, we used \$3.4 million of cash in operations, primarily resulting from our net loss of \$3.9 million, partially offset by non-cash charges of \$0.5 million. Non-cash charges consisted primarily of depreciation and amortization expense of \$0.2 million, the change in fair value of derivative liabilities of \$0.1 million, and amortization of right-of-use assets of \$0.1 million.

During the three months ended March 31, 2021, operating activities used \$5.1 million of cash, primarily resulting from our net loss of \$7.4 million, partially offset by non-cash charges of \$1.5 million and net cash provided by changes in our operating assets and liabilities of \$0.8 million. Non-cash charges consisted primarily of the loss on debt extinguishment of \$0.6 million, depreciation and amortization expense of \$0.2 million, amortization of our right-of-use operating lease asset of \$0.2 million, and change in fair value of derivative liabilities of \$0.3 million. Net changes in our operating assets and liabilities for the three months ended March 31, 2021 consisted primarily of a \$1.3 million increase in accounts payable, accrued payroll and accrued liabilities, and a \$0.6 million decrease in accounts receivable, partially offset by a \$0.8 million increase in deposits, prepaid expenses and other current assets.

Investing Activities

During the three months ended March 31, 2020 and 2021, net cash used in investing activities was \$10 thousand and \$0.1 million, respectively, consisting of purchases of property and equipment.

Financing Activities

During the three months ended March 31, 2020, net cash used in financing activities was \$27 thousand, consisting primarily of principal payments on leased equipment.

During the three months ended March 31, 2021, net cash provided by financing activities was \$9.6 million, consisting primarily of proceeds from borrowings of \$14.9 million from the issuance of debt from the 2021 Loan Agreement, partially offset by the \$5.0 million repayment of debt from the 2019 Loan Agreement.

Comparison of the period March 8, 2019 (inception) through December 31, 2019 and Year Ended December 31, 2020

The following table summarizes our consolidated cash flows for the period ended December 31, 2019 and for the year ended December 31, 2020:

	Period from March 8, 2019 (inception) to December 31, 2019	Year Ended December 31, 2020
	(in thousands)	
Net cash used in operating activities	\$ (6,390)	\$ (15,381)
Net cash used in investing activities	(79)	(204)
Net cash provided by (used in) financing activities	35,106	(96)
Net increase (decrease) in cash	<u>\$ 28,637</u>	<u>\$ (15,681)</u>

Operating Activities

During the period ended December 31, 2019, we used \$6.4 million of cash in operations, primarily resulting from our net loss of \$8.3 million, partially offset by net cash provided by changes in our operating assets and liabilities of \$0.2 million and non-cash charges of \$1.7 million. Net changes in our operating assets and liabilities for the period ended December 31, 2019 consisted primarily of a \$0.7 million decrease in inventories, a \$0.2 million increase in accounts payable, accrued payroll and accrued liabilities, and a \$0.2 million increase in deferred rent, partially offset by a \$0.9 million increase in accounts receivable. Non-cash charges consisted primarily of depreciation and amortization expense of \$0.9 million, the change in fair value of derivative liabilities of \$0.5 million, loss on disposal of assets of \$0.2 million and non-cash interest on convertible notes of \$0.1 million.

During the year ended December 31, 2020, operating activities used \$15.4 million of cash, primarily resulting from our net loss of \$18.0 million, partially offset by non-cash charges of \$2.6 million. Non-cash charges consisted primarily of depreciation and amortization expense of \$0.9 million as well as amortization of our right-of-use operating lease asset of \$0.6 million and change in fair value of derivative liabilities of \$0.9 million.

Investing Activities

During the period ended December 31, 2019 and the year ended December 31, 2020, net cash used in investing activities was \$0.1 million and \$0.2 million, respectively, consisting of purchases of property and equipment.

Financing Activities

During the period ended December 31, 2019, net cash provided by financing activities was \$35.1 million, consisting primarily of net proceeds from the issuance of Series A convertible preferred stock and Series A-1 convertible preferred stock of \$32.8 million. We also had borrowings of \$11.3 million from the issuance of debt from convertible notes and a term loan, partially offset by the \$8.9 million repayment of debt from the Purchase Note.

During the year ended December 31, 2020, net cash used in financing activities was \$0.1 million, consisting primarily of principal payments on leased equipment.

2019 Loan and Security Agreement

On September 5, 2019, we entered into a Loan and Security Agreement with Oxford Finance LLC as the lender (the 2019 Loan Agreement). Under the 2019 Loan Agreement we borrowed a total of \$5.0 million in secured loans.

These loans were repaid in full in March 2021. These loans bore interest at the greater of (i) 8.79% per annum and (ii) the sum of (a) the thirty (30) day U.S. LIBOR rate reported in The Wall Street Journal on the last Business Day of the month that immediately precedes the month in which the interest will accrue, plus (b) 6.38%. They would have matured on October 1, 2023 and were secured by substantially all of our assets, other than our intellectual property, which was subject to a negative pledge. In connection with the 2019 Loan Agreement, we have a contingent obligation to pay Oxford a success fee of \$0.8 million upon the completion of this offering. Upon the loan's inception and on December 31, 2019, the fair value of this success fee contingent liability was estimated to be \$0.4 million and was recorded as a derivative liability on our consolidated balance sheets with the corresponding discount applied against the notes. Issuance costs related to the loans, inclusive of the success fee contingent liability, were \$0.5 million.

Payments on the loans were interest-only until May 1, 2021, followed by equal monthly principal payments and accrued interest through the scheduled maturity date of October 1, 2023.

We have identified a contingent liability to pay a success fee to the lender as well as a bifurcated compound derivative liability related to a contingent interest feature and acceleration clause (contingent put option). The success fee contingent liability and the bifurcated embedded derivative were valued and separately accounted for in the accompanying consolidated financial statements. The fair value of the success fee was recorded as a contingent liability within derivative liabilities on our consolidated balance sheets and corresponding discount to the loans under the 2019 Loan Agreement. We classify the contingent put option liability within derivative liabilities on our consolidated balance sheets. We remeasure both liabilities to fair value at each reporting date, and we recognize changes in the fair value as a component of other income (expense) in our consolidated statements of operations and comprehensive loss. We will continue to recognize changes in the fair value of the success fee contingent liability until the success fee is paid. The contingent put option liability was extinguished when the 2019 Loan Agreement was terminated in March 2021.

2021 Loan Agreement

On March 4, 2021, we entered into a Loan and Security Agreement with Silicon Valley Bank (SVB) as the lender (the 2021 Loan Agreement). Under the 2021 Loan Agreement, on March 5, 2021, we borrowed a \$15.0 million senior secured term loan, the proceeds of which were used to repay all of our existing obligations under the 2019 Loan Agreement, with the remaining proceeds available for our working capital and general corporate purposes.

Under the 2021 Loan Agreement, SVB may elect to make a second term loan to us in a principal amount up to but not exceeding \$5.0 million, as the lender may determine in the lender's sole discretion.

In connection with the 2021 Loan Agreement, we issued to SVB a warrant to purchase a number of shares of preferred stock (the Preferred Warrant). The Preferred Warrant is exercisable into the number of preferred shares equal to approximately \$0.2 million divided by the applicable warrant price. The Preferred Warrant is initially exercisable for Series A-1 convertible preferred stock at an exercise price of \$1.20177 per share, and will become exercisable for any series of convertible preferred stock issued by the Company in the future prior to August 1, 2021, at an exercise price equal to the lowest original purchase price paid by investors for such convertible preferred stock. The Preferred Warrant also provides for the grant of additional shares upon the disbursement of an advance under the 2021 Loan Agreement. Such additional shares will be equal to 1.5% of the principal amount of the advance divided by the warrant price. The Preferred Warrant is exercisable at either the original purchase price of the Series A-1 convertible preferred stock or the next convertible preferred stock financing if such round is closed on or before August 1, 2021. If the class of convertible preferred stock which the warrant would be exercisable into is converted into common stock, the warrant holder would have the right to exercise the warrant for such number of common shares into which the preferred shares would have converted into had they been exercised prior to the conversion. The Preferred Warrant may be exercised at any time, in whole or in part. Unless previously exercised, the Preferred Warrant will expire on March 4, 2031. No portion of the Preferred Warrant has been exercised.

The term loans bear interest at a per annum rate equal to the greater of (a) 4.0% above the prime rate and (b) 7.25%. The interest rate as of March 5, 2021 was 7.25% per annum. The loans are secured by substantially all of our assets, other than our intellectual property. We have also agreed not to encumber our intellectual property assets, except as permitted by the 2021 Loan Agreement.

The term loans mature on January 1, 2024; provided, the loan maturity date will be extended by one year to January 1, 2025, if SVB is satisfied that we have achieved at least \$4.0 million in trailing three-month instruments and reagents revenue for any three-month period occurring after March 4, 2021 but ending on or before December 31, 2021, subject to confirmatory lender calls.

Payments on the term loans are interest-only until February 1, 2022, followed by equal principal payments and monthly accrued interest payments through the scheduled maturity date; provided, the interest-only period may be extended to August 1, 2022 if SVB is satisfied that we have achieved at least \$4.0 million in trailing three-month instruments and reagents revenue for any three-month period occurring after March 4, 2021, but ending on or before December 31, 2021, subject to confirmatory lender calls.

We may elect to prepay the term loans, in whole but not in part, at any time. If we elect to voluntarily prepay the term loans before the scheduled maturity date, we are required to pay the lender a prepayment fee, equal to 3.0% of the then outstanding principal balance if the prepayment occurs on or before March 4, 2022, 2.0% of the outstanding principal balance if the prepayment occurs after March 4, 2022, but on or before March 4, 2023, or 1.0% of the outstanding principal balance if the prepayment occurs after March 4, 2023, but on or before the scheduled maturity date. No prepayment fee is applicable to a mandatory prepayment of the loans upon an acceleration of the loans. Upon a voluntary or mandatory prepayment of the loans, we are also required to pay SVB's expenses and all accrued but unpaid interest on the loans through the prepayment date.

A final payment (the Final Payment) equal to \$0.4 million will be due at the earlier of the maturity date, acceleration of the loans, or a voluntary or mandatory prepayment of the loans. The Final Payment is being accrued through interest expense using the effective interest method.

Under the 2021 Loan Agreement, we covenant to maintain as of the last day of each month, certain consolidated trailing three-month minimum revenue levels as set forth in the 2021 Loan Agreement.

The 2021 Loan Agreement includes customary representations and covenants that, subject to exceptions and qualifications, restrict our ability to do the following things: engage in mergers, acquisitions, and asset sales; transact with affiliates; undergo a change in control; engage in businesses that are not related to our existing business; add or change business locations; incur additional indebtedness; incur additional liens; make loans and investments; declare dividends or redeem or repurchase equity interests; and make certain amendments or payments in respect of any subordinated debt. In addition, the 2021 Loan Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, maintenance of our bank accounts, protection of our intellectual property, reporting requirements, compliance with applicable laws and regulations, and formation or acquisition of new subsidiaries.

The 2021 Loan Agreement also includes customary indemnification obligations and customary events of default, including, among other things, payment defaults, breaches of covenants following any applicable cure period, material misrepresentations, a failure of the loans or the lender's security interest in the collateral to have the priority as required under the 2021 Loan Agreement, a material adverse change as defined in the 2021 Loan Agreement (including without limitation as a result of a government approval having been revoked, rescinded, suspended, modified or not renewed), certain material judgments and attachments, and events relating to bankruptcy or insolvency. The 2021 Loan Agreement also contains a cross default provision under which, if a third party (under any agreement) has a right to accelerate indebtedness greater than \$0.5 million, we would be in default of the 2021 Loan Agreement. During the continuance of an event of default, SVB may apply a default interest rate of an additional 5% to the outstanding loan balances, and SVB may declare all outstanding obligations immediately due and payable and may exercise other rights and remedies as set forth in the 2021 Loan Agreement and related loan documents. Acceleration would result in the payment of all outstanding loans, any default interest charged by the lender, all expenses of the lender and the Final Payment.

Funding Requirements

We expect our expenses to increase significantly in connection with our ongoing activities, particularly with respect to research and development efforts related to our future products and our efforts to expand sales of current products and to commercialize future products. In addition, upon the closing of this offering, we expect to incur additional

costs associated with operating as a public company. The timing and amount of our operating and capital expenditures will depend largely on:

- the cost of developing new products that are commercially viable;
- the costs of marketing and selling our products globally; and
- the potential additional expenses attributable to adjusting our development plans (including any supply-related matters) due to the COVID-19 pandemic.

We believe that the net proceeds from this offering, together with our existing cash and available borrowings, will enable us to fund our operating expenses and capital expenditure requirements for the next twelve months.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our research, product development or future commercialization efforts, or grant rights to develop and market products that we would otherwise prefer to develop and market ourselves.

Contractual Obligations and Commitments

The following table summarizes our commitments to settle contractual obligations at March 31, 2021:

	Payments Due by Period				
	Total	Less than 1 Year	1 to 3 Years	4 to 5 Years	More than 5 Years
	(in thousands)				
Operating lease commitments ⁽¹⁾	\$ 3,899	\$ 974	\$ 2,038	\$ 887	\$ —
Finance lease commitments ⁽²⁾	152	90	62	—	—
Debt obligations ⁽³⁾	17,887	1,091	11,627	5,169	—
Total	<u>\$ 21,938</u>	<u>\$ 2,155</u>	<u>\$ 13,727</u>	<u>\$ 6,056</u>	<u>\$ —</u>

(1) Consists of payments due for our lease of office space in San Diego, California that expires in January 2025.

(2) Consists of payments due for our leases of three pieces of equipment that expire between April 2021 and December 2022.

(3) Consists of the contractually required principal and interest payable under the 2021 Loan Agreement. For purposes of this table, the interest due under the 2021 Loan Agreement was calculated using an assumed interest rate of 7.25% per annum, which was the interest rate in effect as of March 31, 2021 and assumes no borrowings under the second term loan.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have any, off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with GAAP. The preparation of our consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, costs and expenses, and the disclosure of contingent assets and liabilities in our consolidated financial statements. We base our estimates on historical experience, known trends and events, and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions. While our significant accounting policies are described in more detail in Note 2 to our audited consolidated financial statements included elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

To date, our revenues have consisted primarily of payments received related to product sales and royalty agreements. We adopted the provisions of ASU 2014-09, Revenue from Contracts with Customers (Topic 606), (ASC 606), at inception. Under ASC 606, we recognize revenue when our customers obtain control of the goods, warranty services are delivered or royalties are earned.

Revenue for our product sales is recognized upon delivery to the customer. Revenue related to product warranty arrangements is deferred and recognized over time, as services are delivered. To determine the appropriate amount of revenue to be recognized for arrangements determined to be within the scope of ASC 606, we perform the following five steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the assessment of the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when, or as we satisfy each performance obligation. As part of the accounting for arrangements under ASC 606, we must use significant judgment to determine: (a) the performance obligations based on the determination under step (ii) above; (b) the transaction price under step (iii) above; and (c) the standalone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above. We also use judgment to determine whether milestones or other variable consideration, except for royalties and sales-based milestones, should be included in the transaction price as described below. The transaction price is allocated to each performance obligation based on the relative stand-alone selling price of each performance obligation in the contract, and we recognize revenue based on those amounts when, or as, the performance obligations under the contract are satisfied.

The standalone selling price is the price at which an entity would sell a promised good or service separately to a customer. Management estimates the standalone selling price of each of the identified performance obligations in our customer contracts, maximizing the use of observable inputs. Because we have not sold the same goods or services in our contracts separately to any customers on a standalone basis and there are no similar observable transactions in the marketplace, we estimate the standalone selling price of each performance obligation in our customer arrangements based on our estimate of costs to be incurred to fulfil our obligations associated with the performance, plus a reasonable margin.

We determined that our only contract liability under ASC 606 is deferred revenue. Amounts received prior to revenue recognition are recorded as deferred revenue in the consolidated balance sheet. Amounts expected to be recognized as revenue within the 12 months following the consolidated balance sheet date are classified as deferred revenue, current in the consolidated balance sheet. Amounts not expected to be recognized as revenue within the 12 months following the consolidated balance sheet date are classified as deferred revenue, net of current portion in the consolidated balance sheet. Amounts are recorded as accounts receivable when our right to consideration is unconditional.

Product Revenue, Net

We recognize revenue on product sales when the customer obtains control of our product, which occurs at a point in time (upon delivery to the customer). We recognize revenue on installation and training when the service has been rendered and warranty revenue over the warranty term. Product revenues are recorded net of variable consideration, including discounts.

Product Returns

We generally do not accept product returns and have received an insignificant amount of returns to date.

Royalty Revenue

We recognize royalty revenue based on historical customer submissions and payments resulting from license agreements we have with customers. The license agreements require our customers to pay us a fixed tiered percentage of sales based on the technology that we have licensed to them. Our customers submit their usage and payments on a quarterly or semiannual basis.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis. Net realizable value is evaluated by considering obsolescence, excess levels of inventory, deterioration and other factors. Adjustments to reduce the cost of inventory to its net realizable value, if required, are made for estimated excess, obsolescence or impaired inventory. Excess and obsolete inventory is charged to cost of revenue and a new, lower-cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Goodwill

We test goodwill for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that the asset might be impaired. Our goodwill impairment tests are performed at the enterprise level as we have concluded that we have one reporting unit and that our chief operating decision maker is our chief executive officer and the executive management team. The fair value of the reporting unit was substantially in excess of the carrying value of the reporting unit at each date impairment was tested and consequently we have not recorded any impairment of goodwill.

Acquired Intangible Assets

Acquired intangible assets consist of rights to technologies and trade names. We engaged third party valuation specialists to assist us with the initial measurement of the fair value of acquired intangible assets. Acquired intangible assets, other than goodwill, are amortized over their estimated useful lives based upon the estimated economic value derived from the related intangible assets.

Stock-Based Compensation

We measure all stock-based awards granted to employees and directors based on their fair value on the date of the grant using the Black-Scholes option-pricing model for options. Compensation expense for those awards is recognized over the requisite service period, which is generally the vesting period of the respective award for the employees and directors.

For stock-based awards granted to non-employees, the measurement date for non-employee awards is the date of the grant. The compensation expense for non-employees is recognized in the same manner as if we had paid cash in exchange for the goods or services, which is generally the vesting period of the award.

We use the straight-line method to record the expense of awards with service-based vesting conditions. As inputs, the Black-Scholes option-pricing model uses the fair value of our common stock and assumptions we make for the volatility of our common stock, the expected term of our common stock options, the risk-free interest rate for a period that approximates the expected term of our common stock options, our expected dividend yield, and an expected forfeiture rate.

Determination of Fair Value of Common Stock

As there has been no public market for our common stock to date, the estimated fair value of our common stock has been determined by our board of directors as of the date of each option grant, with input from management, considering our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation. Our common stock valuations were prepared using either an option pricing method (OPM), or a hybrid method, both of which used market approaches to estimate our enterprise value. The hybrid method also used an income approach to estimate our enterprise value. The hybrid method is a probability-weighted expected return method (PWERM), where the equity value is calculated based on income and market approaches, and that resulting equity value is allocated to the company's classes of stock in one or more scenarios using an OPM. The PWERM is a scenario-based methodology that estimates the fair value of common stock based upon an analysis of future values for the company, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the

valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock. A discount for lack of marketability of the common stock is then applied to arrive at an indication of value for the common stock. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceeded the value of the preferred stock liquidation preferences at the time of the liquidity event, such as a strategic sale or a merger. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, including:

- the prices at which we sold shares of preferred stock and the superior rights and preferences of the preferred stock relative to our common stock at the time of each grant;
- the progress of our research and development programs;
- our stage of development and our business strategy;
- external market conditions affecting the biopharmaceutical and synthetic biology industries and trends within those industries;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results;
- the lack of an active public market for our common stock and our preferred stock;
- the likelihood of achieving a liquidity event, such as an initial public offering, or sale of our company in light of prevailing market conditions; and
- the analysis of initial public offerings and the market performance of similar companies in the biopharmaceutical industry.

The assumptions underlying these valuations represented management's best estimate, which involved inherent uncertainties and the application of management's judgment. As a result, if we had used significantly different assumptions or estimates, the fair value of our common stock and our stock-based compensation expense could have been materially different.

Once a public trading market for our common stock has been established in connection with the completion of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our common stock in connection with our accounting for granted stock options and other such awards we may grant, as the fair value of our common stock will be determined based on the quoted market price of our common stock.

Options Granted

The following table summarizes by grant date the number of shares subject to options granted from January 1, 2020 through the date of this prospectus, the per share exercise price of the options, the estimated per share fair value of the options, and the per share fair value of our common stock on each grant date:

Grant Date	Number of Common Shares Subject to Options Granted	Exercise Price per Share	Estimated Per-Share Fair Value of Options ⁽¹⁾	Estimated Fair Value Per Share of Common Stock at Grant Date
January 29, 2020	538,500	\$ 0.24	\$ 0.09	\$ 0.24
July 23, 2020	223,000	\$ 0.24	\$ 0.09	\$ 0.24
October 22, 2020	147,750	\$ 0.24	\$ 0.09	\$ 0.24
March 3, 2021	1,986,394	\$ 1.46	\$ 0.58	\$ 1.46
April 24, 2021	3,042,700	\$ 1.98	\$ 0.78	\$ 1.98
May 19, 2021	412,500	\$ 3.78	\$ 1.49	\$ 3.78

(1) The estimated per share fair value of options reflects the weighted average fair value of options granted on each grant date, determined using the Black-Scholes option-pricing model.

The intrinsic value of options outstanding at March 31, 2021 is \$1.8 million.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our consolidated financial statements appearing at the end of this prospectus.

Emerging Growth Company Status

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an "emerging growth company," or an EGC, can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an EGC can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for new or revised accounting standards during the period in which we remain an emerging growth company; however, we may adopt certain new or revised accounting standards early.

We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have more than \$1.07 billion in annual revenue; (ii) the date we qualify as a "large accelerated filer," with at least \$700.0 million of equity securities held by non-affiliates; (iii) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period; and (iv) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

Quantitative and Qualitative Disclosures about Market Risks

As of March 31, 2021, we had cash of \$17.8 million. Interest income is sensitive to changes in the general level of interest rates; however, due to the nature of these investments, an immediate 10% change in market interest rates would not have a material effect on the fair market value of our cash balance.

As of March 5, 2021, we had \$15.0 million of borrowings outstanding under the 2021 Loan Agreement. Borrowings under the 2021 Loan Agreement bear interest at a rate equal to the greater of (a) 4.0% above the prime rate and (b) 7.25%. The prime interest rate as of May 17, 2021 was 3.25% per annum. An immediate 10% change in the 30-day prime rate would not have a material impact on our debt-related obligations, financial position or results of operations.

We are not currently exposed to significant market risk related to changes in foreign currency exchange rates. Our operations may be subject to fluctuations in foreign currency exchange rates in the future. We do not believe that inflation has had a material effect on our business, financial condition, or results of operations during the period ended December 31, 2019, the year ended December 31, 2020, and the three months ended March 31, 2020 and 2021. Our operations may be subject to inflation in the future.

BUSINESS

Overview

We believe that we are a leading synthetic biology company focused on enabling researchers to rapidly, accurately and reproducibly build or "write" high-quality synthetic DNA and mRNA that is ready to use in many downstream synthetic biology enabled markets. Our synthetic biology solution addresses the bottlenecks across the multi-step process of building DNA and mRNA, as well as the significant limitations of existing solutions that prevent the rapid building of virtually error-free DNA and mRNA at a useable scale. A key part of our solution is our BioXp system, an end-to-end automated workstation that fits on the benchtop and is broadly accessible due to its ease-of-use and hands-free automation. We believe our BioXp system can democratize synthetic biology by simplifying the process of building DNA and mRNA, thereby accelerating the discovery, development and production of novel high-value products, including antibody-based biologics, mRNA-based vaccines and therapeutics and precision medicines.

Synthetic biology involves the engineering of biological components from a digital DNA sequence, enabling the construction of macromolecules and organisms with new and improved biological functions. It is being used across multiple markets, including:

- healthcare, to discover, develop and produce novel therapeutics and vaccines;
- agriculture, to improve crop yields and create novel food sources;
- technology, to potentially store and retrieve digital data using DNA; and
- various consumer markets.

In its January 2020 report, BCC Research estimated that the global synthetic biology market was \$5.3 billion in 2019 and projected that market to grow at a compound annual growth rate (CAGR) of 29%, reaching an estimated market size of \$18.9 billion by 2024. Of this \$5.3 billion market, BCC Research estimated that enabling technologies, such as our workflow solutions, represented an approximate \$2.6 billion market opportunity in 2019. Additionally, within this market, Transparency Market Research estimated that the *in-vitro* transcription template market (mRNA production) was \$118 million in 2020 and is growing at a CAGR of 19.8%.

Synthetic biology is enabled by numerous technologies that facilitate the *design-build-test* paradigm of new or modified biological components. Any inefficiency across these three phases can create a bottleneck hindering the rapid iteration within product development. In the build phase, the process of writing synthetic DNA or mRNA for an improved biological function is characterized by multiple, complex processes that involve numerous time-consuming and technical steps, including DNA synthesis, DNA assembly, DNA cloning, and DNA scale-up in *E. coli* with multiple DNA purification steps in between. If the final product is mRNA, the process continues with additional technical steps including mRNA synthesis, mRNA modifications at each end and multiple mRNA purification steps. Currently, these processes are carried out in laboratories by highly skilled researchers using multiple kits, each designed to perform one or more of the technical steps. Depending on the length and complexity of the desired synthetic DNA or mRNA product, the build process may involve hundreds of manual steps, require numerous different kits and take days, weeks or months to complete. As an alternative solution, many, but not all, of these steps can be outsourced to a molecular biology contract research organization (CRO) for completion, shifting those challenges from the end user to the CRO. However, outsourcing poses additional limitations including lack of workflow control, unpredictable timelines and data security issues. Whether in-house or through a CRO, existing solutions for building synthetic DNA and mRNA have deficiencies, for instance:

- inconsistent levels of fidelity of DNA and mRNA fragments reducing overall yields of usable material;
- inability to construct stretches of DNA and mRNA sequence that have particular features;
- inability to construct DNA and mRNA sequences above a certain size; and
- inability to produce the end product in sufficient quantities for downstream applications.

All of these limitations produce bottlenecks across the build phase, which have significantly hindered the ability of synthetic biology to deliver on its full potential.

We developed our synthetic biology solution to address the significant unmet need in the market for an approach that can automate, integrate, optimize and standardize the process for building synthetic DNA and mRNA. Our synthetic biology solution is comprised of our:

- *BioXp system*: which we believe is the first commercially available push-button, walkaway, end-to-end automated workstation that empowers researchers to go from a digital DNA sequence to endpoint-ready synthetic DNA in as few as 8 hours and mRNA in less than 24 hours, exclusive of shipment time;
- *BioXp portal*: a user-friendly online portal that offers an intuitive guided workflow and design tools for building new DNA sequences and assembling them into vector(s) of choice;
- *BioXp kits*: contain all the necessary building blocks and reagents, including our proprietary Gibson Assembly branded reagents, for specific synthetic biology workflow applications;
- *Cloud-based scripts*: product-specific and pre-validated scripts that optimize and simplify the use of the BioXp kits on the BioXp system;
- *Benchtop reagents*: contain all the reagents necessary to proceed with a specific synthetic biology workflow on the benchtop using products generated on the BioXp system; and
- *Biofoundry Services*: enable a customer to order and receive any of the BioXp system endpoint-ready products, such as genes, clones, cell-free amplified DNA and variant libraries.

Our solution is designed to offer the following benefits:

- consolidation of the build phase within a single end-to-end automated system;
- flexibility across a variety of DNA and mRNA applications;
- fast and scalable results;
- ability to construct genes, mRNA, and clones across a wide range of sizes and complexity;
- industry-leading quality and performance;
- enhanced productivity; and
- customer protection of proprietary vectors.

We have developed and commercialized products that include BioXp systems, including our current BioXp 3250 system, BioXp kits for generating a wide array of synthetic DNA and mRNA, and benchtop reagents that complement the automated synthetic biology workflow applications and workflow solutions. We believe that our integrated BioXp systems and BioXp kits represent the industry's leading synthetic biology workflow automation solution and provide us with a first mover advantage in the rapidly growing synthetic biology market. As part of our continuing effort to improve the processes of synthetic biology, we are currently developing next-generation BioXp systems and BioXp kits with the goal of transforming rapid demand-response workflows in synthetic biology and consolidating supply chains and enabling global distributed manufacturing for discovery, pre-clinical and clinical applications. We also use our BioXp 3250 system, BioXp kits and benchtop reagents to perform services for customers.

Our BioXp systems are intended to address the needs of the synthetic biology customer by providing an unmatched capability to rapidly synthesize high-quality DNA and mRNA. With future system releases and extensions, we plan to address the continuum of research needs across the central dogma of molecular biology by enabling cell-free production of high-quality synthetic DNA, mRNA and protein for the discovery, development and manufacturing of enabled products across a wide range of markets. We are strategically focused on providing workflow solutions for markets with high-value enabled products such as those in healthcare and technology.

We currently provide workflow solutions for the following areas:

- synthetic DNA for antibody and protein engineering of biologic drugs;
- synthetic DNA for genome editing;
- synthetic DNA for metabolic pathway engineering;
- immune monitoring;
- synthetic mRNA for infectious disease vaccine discovery and development;
- mRNA-based vaccines for precision medicine; and
- mRNA-based therapeutics.

We are currently developing workflow solutions for the following areas:

- global distributed manufacturing of vaccines;
- synthetic protein for biologics discovery; and
- synthetic DNA for digital data storage.

We commercially launched our current synthetic biology solution in September 2019, which now includes the BioXp 3250 system, BioXp kits with associated cloud-based application scripts, and benchtop reagent kits. Since the introduction of our solution through May 1, 2021, we have launched seven BioXp kits, three benchtop reagent kits, and several other synthetic biology products, including 12 SARS-CoV-2 full-length genomes and RNA controls as well as our Vmax X2 cells. We have placed approximately 160 BioXp systems globally. We target customers in the fields of personalized medicine, biologics drug discovery, vaccine development, genome editing and cell and gene therapy. As of May 1, 2021, our customer base was composed of over 300 customers and included 15 of the 25 largest biopharmaceutical companies in the world ranked by 2020 revenue, excluding affiliates of those companies. Our customer base also includes leading academic research institutions, government institutions, CROs and synthetic biology companies.

Industry Overview

Background on Synthetic Biology

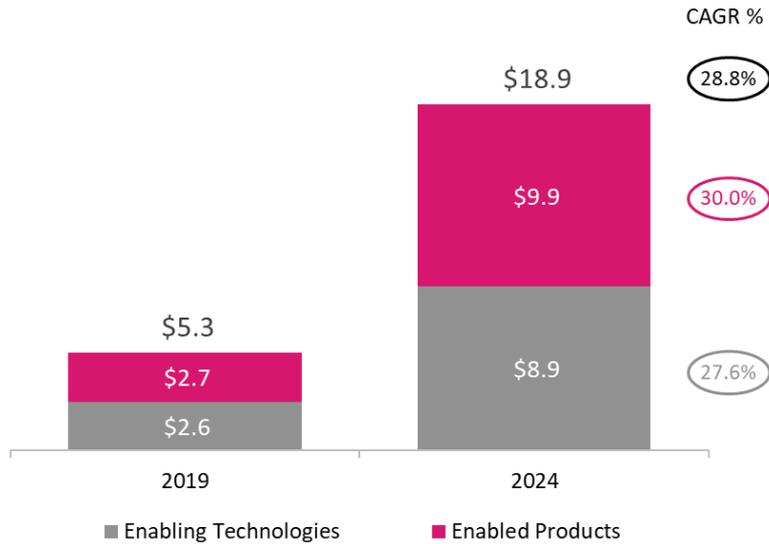
Synthetic biology is a well-established and rapidly expanding field of science that involves the engineering of biological components such as genes, mRNA, proteins, viruses and living cells starting from a digital DNA sequence, enabling the construction of those macromolecules and organisms with new and improved biological functions. The application of synthetic biology is constantly expanding, and new end markets are emerging, driven by continued innovation, a growing understanding of biology and access to novel research tools. For example, in healthcare, synthetic biology is being used to discover, develop and produce novel DNA-, mRNA-, and protein-based therapeutics and vaccines (e.g., antibody-based biologics, mRNA-based COVID-19 vaccines and personalized cancer therapeutics). In agriculture, synthetic biology is being utilized to improve crop yields and create novel food sources (e.g., plant-based meat products). Similarly, in technology, synthetic biology may lead to the ability to store and retrieve digital data using DNA. Finally, in consumer markets, synthetic biology is being employed in a variety of applications. For example, synthetic biology is used to construct clothes from renewable, bio-based sources, to develop biofuels and renewable energy from engineered microbes, and to produce plastics from biodegradable polymers.

In its January 2020 report, BCC Research estimated that the global synthetic biology market was \$5.3 billion in 2019 and projected that market to grow at a CAGR of 29%, reaching an estimated market size of \$18.9 billion by 2024. Additionally, within this market, Transparency Market Research estimated that the *in-vitro* transcription template market (mRNA production) was \$118 million in 2020 and is growing at a CAGR of 19.8%, reaching an estimated market size of \$332 million by 2025.

The synthetic biology market falls into two broad sectors:

- **Enabling technologies:** The molecular biology methods (e.g., DNA sequencing, DNA synthesis, DNA assembly, molecular cloning, mRNA production, protein synthesis and expression, genome editing, and bioinformatics software for DNA sequence design and analysis) that employ molecular biology components (e.g., oligonucleotides, enzymes, buffers, vectors, and competent cells) to engineer higher value products that have new or improved utility from a DNA sequence "blueprint".
- **Enabled products:** These are the end products and include, but are not limited to, therapeutics based on principles of antibody and protein engineering of biologic drugs, mRNA-based vaccines, genetic medicines (e.g. DNA and mRNA therapeutics), and sustainable foods and biofuels resulting from the use of synthetic biology, as well as DNA data storage solutions.

Figure 1: Estimated Global Synthetic Biology Market (\$ Billions)



According to the BCC Research report, a driver of the rapid growth of the synthetic biology market is the advances in enabling technologies and the downstream benefits being realized in key enabled product markets like healthcare. These advances in enabling technologies have increased market demand for high-value products that can be produced by synthetic biology methods. This in turn has resulted in a rapid growth of synthetic biology CROs and molecular biology reagent kits, which have been created to serve the higher demand requirements of an evolving synthetic biology market, particularly for drug discovery, agriculture, consumer and industrial products. Scientists increasingly want to build DNA and introduce those molecules into organisms to create cell-based discovery and production systems for new biologics and small-molecule drugs. Research clinicians are recognizing the importance of synthetic biology and beginning to apply the construction of synthetic DNA and mRNA to the development of precision medicines, in the form of mRNA-based cancer vaccines, particularly for immuno-oncology. Pharmaceutical companies have begun integrating synthetic biology approaches in their facilities to develop state-of-the-art vaccines and biologics that are DNA-, mRNA-, and protein-centric. All of these approaches require the ability to make high-quality synthetic DNA comprising entire gene sequences and, in some instances, expressing those genes to make synthetic mRNA and synthetic proteins. With the success of FDA-approved mRNA-based COVID-19 vaccines, it is expected that interest in mRNA-based therapeutics and vaccines utilizing synthetic biology technology will remain strong.

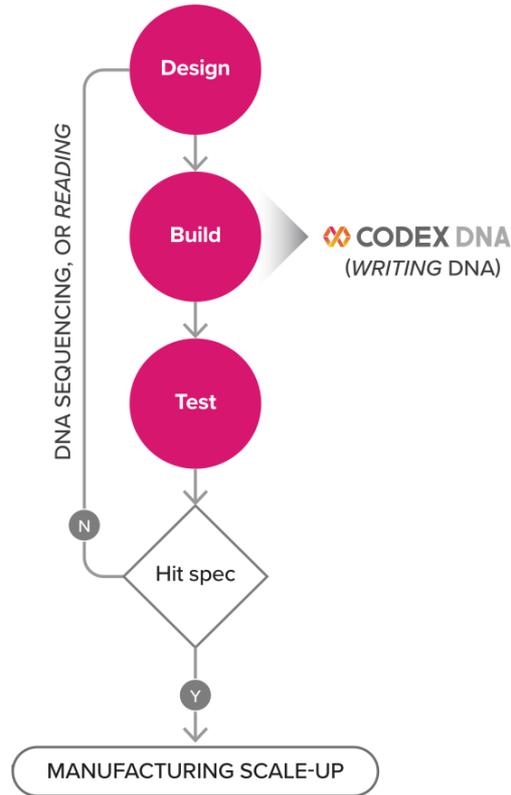
Synthetic biology is enabled by numerous technologies that facilitate highly-iterative experimental design. These technologies permit "reading" of the DNA code of a desired gene, engineering and synthetic construction of biological products using those blueprints, and testing of the constructed products to determine whether they perform in the desired manner. Once a DNA sequence is read, the gene of interest can be built or written from a pool of building blocks using molecular synthesis techniques. In addition, once a gene is read, researchers can redesign the gene to produce new and improved biological functionality, and then build the redesigned gene and analyze its activity in a fully biological system during a test phase. Reading is then used once again to confirm the DNA sequence that provides the desired function of the biological sample that was designed, built and tested. Reading and writing genes opens the door to a new synthetic biology paradigm for iterating on the *design-build-test* phases and creates a powerful and flexible approach to developing a wide variety of enabled products, including

mRNA-based vaccines and protein-based drugs. Decades of gene sequencing work and functional genetic studies to understand what genes do have produced a huge cache of content that researchers can use to design new or modified genetic material.

Over the last 20 years, synthetic biology has experienced a transformation, driven by numerous innovations in enabling technologies. The initial breakthrough was DNA sequencing for reading the DNA and beginning to understand DNA coding. However, early sequencing instruments were slow and expensive, creating a bottleneck in the use of genetic sequence data and its application to both additional research and commercial applications. More recently, the advent of high-performance, low-cost next-generation sequencing (NGS) systems has enabled wide adoption, with over 15,000 such systems installed in research labs globally, resulting in an increase in genetic discoveries in humans and a wide range of organisms, including bacteria, plants and insects and animals. These sequencing systems are generating large amounts of information about genetic composition and have led to the creation of private and public databases around the world containing DNA sequences. Recently, advances in computing power, machine learning and computational modeling have enabled biologists to better analyze this increasing amount of genomic information and inform experimental design or engineering of genes, genetic pathways and even complete chromosomes to achieve the desired biological improvement. Given the volume and understanding of DNA sequence content, the bottleneck in synthetic biology has shifted from reading to writing DNA in an effort to facilitate the rapid design of DNA and mRNA for use in the downstream synthetic biology enabled markets.

The next critical advancement in the field of synthetic biology was the ability to construct genetic sequences *de novo* from their chemical components via DNA synthesis. This enabled researchers to capitalize on the genetic discoveries and improvements in computational design to build or write engineered DNA. The advancements in enabling technologies for both reading and writing DNA have allowed synthetic biologists to engineer changes in genes, metabolic pathways and organisms with greater ease, precision and scale, resulting in a new paradigm with rapid iteration of product cycles and greater predictability of results. The following graphic illustrates this paradigm.

Figure 2: The Synthetic Biology Paradigm



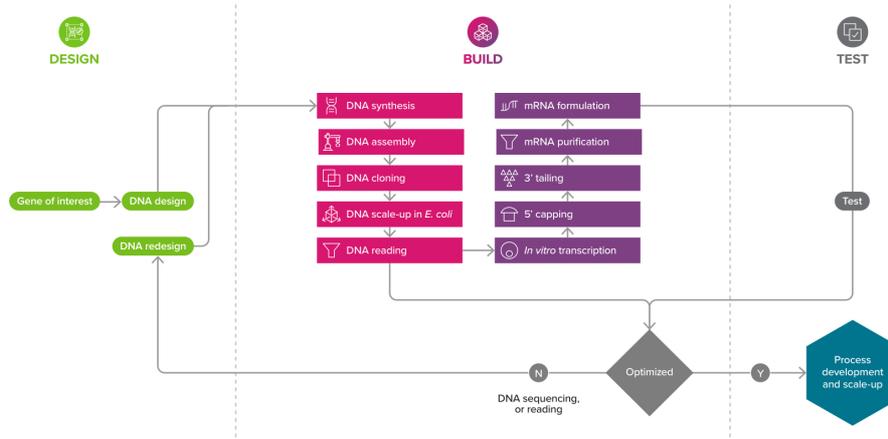
This new paradigm is characterized by three key steps—*design*, *build*, *test*—which are continuously iterated to drive feedback into the design phase for the following iteration until the desired biological result is achieved. With DNA as the software of life, biologists can now write code like software engineers and write genes to perform as desired. The *design-build-test* synthetic biology paradigm begins with the DNA sequencing or reading of a biological sample, providing a “blueprint” for the design phase. The outcome of the design phase is a DNA sequence that is chemically synthesized in the build phase and, as necessary, converted to mRNA or protein. The outcome of the build phase is synthetic DNA or mRNA, which can then be readily assayed for desired function in the test phase.

Under the current paradigm, DNA readers are integrated within the build and test phases to confirm the blueprints are being generated as expected in the build phase for quality control and to identify the DNA sequence of the optimal blueprint discovered in the test phase. If the outcome of the test phase is that further optimization is desired, the process is iterated again, starting at the design phase. This *design-build-test* paradigm highlights the importance and opportunity for products and technologies focused on enhancing the speed and scale of the design phase. This efficiency can be accomplished by placing scalable platform technologies for reading and writing in close proximity.

The Build Phase for Synthetic DNA and mRNA

Any inefficiencies across the design, build, or test phase can create a bottleneck in the highly-iterative *design-build-test* paradigm. This especially holds true for the build phase as the process of “writing” synthetic DNA for an improved biological function is characterized by multiple, complex processes that involve numerous time-consuming and technical steps, including (1) DNA synthesis; (2) DNA assembly; (3) DNA cloning; and (4) DNA scale-up in *E. coli*.

Figure 3: The Build-Phase



Writing synthetic DNA

- DNA synthesis:** DNA is made from four molecular building blocks called nucleotides: adenine (A), cytosine (C), guanine (G) and thymine (T). These closely related molecules form long linear chains consisting of thousands or more nucleotides. In the same way that the “zeroes” and “ones” in digital code can instruct a machine or other computer code to act, the specific order of nucleotides in a strand of DNA imparts the information for an organism to make proteins, which ultimately control the chemical reactions that enable cellular function.
 - The first step towards building synthetic DNA begins with determining the precise sequence of nucleotides of the gene to be synthesized. Computational tools are typically employed to modify, in silico, the sequence of the gene to achieve the desired improvement in biological function.
 - Next, due to challenges in synthetically manufacturing long sequences of DNA, various bioinformatics tools are used to break the desired in silico DNA sequence into short, overlapping pieces of approximately 60 nucleotides in length.
 - The in silico “blueprints” for the desired DNA fragment or gene are then converted into the physical pieces of DNA. To do so, each nucleotide of the desired short gene fragment specified in the blueprints is chemically synthesized and linked together to form oligonucleotides.
- DNA assembly:** During this process, overlapping oligonucleotides are “stitched” together using a complex series of chemical reactions, using enzymes, salts and buffers. These reactions are performed at various temperatures for a large number of cycles until the desired synthetic gene fragment or gene has been assembled.
- DNA cloning:** The resulting synthetic DNA product is typically combined with a DNA vector, which is a circular piece of DNA that acts as a vehicle to transport synthetic DNA fragments or genes, to create a recombinant DNA product for introduction into a host organism. Most commonly this host organism is

E. coli, and it will easily grow into a large population for purposes of producing more of the desired synthetic DNA fragment or gene product.

4. **DNA scale-up in *E. coli*:** *E. coli* cells containing new DNA are plated on Petri dishes, and after a period of growth will result in individual colonies. The colonies of *E. coli* are placed in growth medium and incubated to produce a culture of cells containing the cloned vector. The synthetic DNA is isolated from the cultured cells, and is purified and further processed for DNA sequencing and then analyzed with DNA design tools. Introducing the recombinant DNA product into *E. coli* serves two purposes: first, the methodology filters out unintended DNA sequences from unintended DNA sequences that arise from chemical synthesis of oligonucleotides, which is an imperfect process; and second, it permits exponential scaling up of the amount of synthetic DNA to meaningful quantities for use in downstream applications.

Writing synthetic mRNA

Recently, the building of mRNA has emerged as a highly attractive system for the development of both therapeutics and vaccines, with hundreds of such projects currently in various stages of development. The Moderna and Pfizer COVID-19 vaccines are both mRNA products and each has received Emergency Use Authorization from the FDA. Like DNA, mRNA takes the form of long chains of nucleotides. mRNA transports the instructions encoded in DNA to downstream molecules for molecular "fulfillment" of protein synthesis, in essence acting as DNA's messenger.

Similar to building synthetic DNA, the steps required to build mRNA are numerous, time-consuming and often fraught with difficulties, further, RNA is generally more unstable than DNA, increasing the challenge of synthesis and handling. The steps involved in synthesizing mRNA include all the steps necessary to make synthetic DNA in addition to those outlined below. DNA is used as a template to create mRNA, and this is completed as follows:

1. **In vitro transcription:** The cloned, circular synthetic DNA template is linearized and incubated in an enzymatic reaction containing all the components necessary to turn the synthesized DNA template into the desired mRNA that is then purified.
2. **5' capping:** The mRNA is then further processed to include a "cap" at its 5' end to improve its efficiency as a driver of protein production within cells. The mRNA is then purified once more.
3. **3' tailing:** The capped mRNA then has a poly A tail added at the 3' end to stabilize it and prevent its degradation and is then purified once more.
4. **mRNA purification:** The synthetic mRNA is treated with a DNase enzyme to remove any residual DNA template that may interfere with downstream applications and is then purified one final time.
5. **mRNA formulation:** The mRNA is then formulated by adding carrier molecules (e.g., lipid nanoparticles) to permit its delivery into cells.

Following these steps, the synthetic mRNA is ready to be used in downstream synthetic biology-enabled markets including, in the case of new drug development, biologics (antibody- and protein-based drugs), mRNA-based vaccines for infectious disease and precision medicine, genome and pathway engineering and many other markets.

Key limitations in writing synthetic DNA and mRNA

Despite these substantial advancements, including the accumulation of a large number of functional discoveries resulting from the wide-spread adoption of DNA sequencing instruments, the profound potential of synthetic biology has been hampered by the complexity within, and among, the multi-step process of writing synthetic DNA and mRNA, as well as significant limitations of existing solutions that prevent the rapid building of virtually error-free DNA and mRNA at a useable scale. Both limitations ultimately affect speed and quality of product delivery.

Currently, the process of writing synthetic DNA or mRNA for an improved biological function is carried out in laboratories by highly skilled researchers using multiple kits, each designed to perform one or more of the technical steps. Depending on the length and complexity of the desired synthetic DNA or mRNA product, the process may involve hundreds of manual steps, require numerous different kits and take days, weeks or months to complete. As an alternative solution, many, but not all, of these steps can be outsourced to a molecular biology CRO for completion, shifting those challenges from the end user to the CRO. However, outsourcing poses additional limitations, including lack of workflow control, unpredictable timelines and security issues. Ultimately, this reduces the amount of rapid iteration and refinement by the researcher since multiple *design-build-test* cycles are often needed to optimize the synthesized DNA or mRNA.

Key limitations within the build phase of the synthetic biology paradigm lengthen time to market for a wide array of innovative products within the healthcare, consumer, agriculture and technology markets. Build iterations can take days, weeks or months, depending on project type, using conventional methods with either in-house manual kit-based processes or by outsourcing portions of the project to a CRO. In either case, the key limitations of the build phase include the following:

- long project timelines resulting from non-scalable, manual processes, or the need to use multiple suppliers or CROs. The turn-around-times from CROs differ widely, and the process, depending on the complexity of the product ordered, ranges from days to months. Some CROs will not accept certain projects due to their inherent difficulty. In addition, there are fewer CROs that produce mRNA at scale and no single in-house kit solution for generating synthetic mRNA starting from DNA sequences;
- inconsistent quality and performance resulting from supply chain constraints or the use of different kits if performed in-house, or resulting from using different CROs with inconsistent protocols;
- lack of data standardization across a project or organization which limits predictability and reproducibility;
- partial order fulfillment due to variations in project acceptance criteria, such as DNA sequence complexity;
- lack of workflow control and timing of project integration into parallel programs; and
- difficulty in controlling intellectual property and security concerns around sensitive DNA designs potentially becoming exposed to security vulnerabilities during transfer. Researchers would prefer to control their intellectual property, particularly within biopharmaceutical companies where hundreds of millions of dollars are spent on the development of proprietary DNA sequences.

Existing solutions for writing synthetic DNA and mRNA are insufficient.

The current processes for building synthetic DNA have several significant limitations including:

- inconsistent levels of fidelity of DNA fragments resulting from DNA synthesis errors, thereby reducing overall yields of usable material;
- inability to construct some stretches of DNA sequence that have particular features, such as extreme imbalances in nucleotide content (%G+C vs. %A+T) and repetitive sequences;
- inability to construct DNA sequences above a certain size; and
- inability to scale the material to a suitable yield such that it is usable in downstream applications.

The current processes for building synthetic mRNA have the same inherent limitations as building DNA since the construction of synthetic DNA is a prerequisite for making mRNA. In addition, there are several other key challenges including:

- the handling requirements of the mRNA products, which are highly unstable and susceptible to rapid degradation;
- the multi-step processes involved in producing purified, biologically active mRNA; and
- scaling the mRNA to high yields from DNA templates.

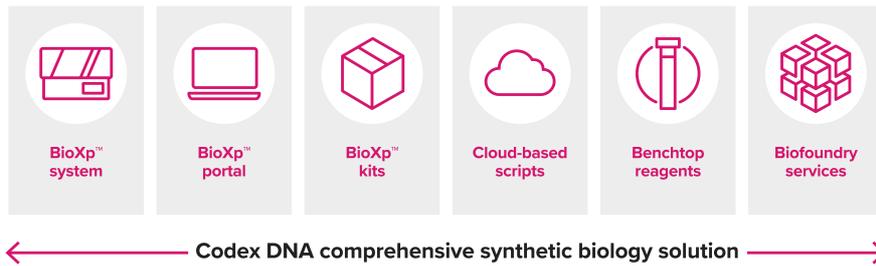
These limitations produce bottlenecks across the build phase, which have significantly hindered the ability of the synthetic biology paradigm to deliver on its full potential. This inefficiency has created a significant unmet need in the market for an approach that can automate, integrate, optimize and standardize the process, and thereby enhance the speed, predictability and reproducibility of the *design-build-test* paradigm.

The Codex DNA Solution

Our synthetic biology solution, which leverages our industry-standard Gibson Assembly method, is aimed at addressing the bottlenecks across the build phase in order to accelerate the *design-build-test* paradigm. Key to our solution is our BioXp system, an end-to-end automated system for synthetic biology that fits on the benchtop and is broadly accessible due to its ease-of-use and hands-free automation. We have developed and commercialized the current version of the BioXp system, the BioXp 3250 system. We believe our BioXp system can democratize synthetic biology by making the build phase broadly accessible in terms of simplicity, accelerating applications and workflows, and greatly facilitating development of novel high-value products across a wide range of synthetic biology

enabled markets. Our BioXp system empowers users to rapidly, accurately and reproducibly create high quality synthetic DNA and mRNA that is ready for use in many downstream synthetic biology workflows.

Figure 4: Our Comprehensive Synthetic Biology Solution



Our synthetic biology solution is comprised of:

- *The BioXp system*: which we believe is the first commercially available push-button, walkaway, end-to-end automated workstation, which requires only a few minutes of set up time, that empowers researchers to translate a digital DNA sequence to endpoint-ready synthetic DNA in as few as 8 hours and mRNA in less than 24 hours, exclusive of shipment time, using a benchtop instrument that is run by sophisticated onboard software;
- *The BioXp portal*: a user-friendly online portal that offers an intuitive guided workflow and design tools for building new DNA sequences and assembling them into vector(s) of choice using Gibson Assembly on the BioXp system;
- *The BioXp kits*: contain all the necessary building blocks and reagents, including our proprietary Gibson Assembly branded reagents, for specific synthetic biology workflow applications;
- *Cloud-based scripts*: product-specific and pre-validated scripts that optimize and simplify the use of the BioXp kits on the BioXp system (e.g., the BioXp system automatically scans barcodes from reagent plates to download scripts, enabling hands-free operation);
- *Benchtop reagents*: contain all the reagents necessary to proceed with a specific synthetic biology workflow on the benchtop using products generated on the BioXp system, providing additional flexibility to the customer and furthering our end-to-end solution; and
- *Biofoundry Services*: enable a customer to order and receive any of the BioXp system endpoint-ready products, such as genes, clones, cell-free amplified DNA and variant libraries.

Our solution is designed to offer the following benefits:

- *Consolidation of the build phase within a single end-to-end automated system*: We provide researchers all the hardware, software, materials and methodologies required to rapidly and accurately design and build large quantities of synthetic DNA and mRNA, with BioXp kits for synthetically produced protein under development. Our BioXp system reduces the turnaround time for such workflows to days or hours. Moreover, researchers no longer require multiple vendors to complete such workflows, eliminating related bottlenecks and security concerns. We believe that using our BioXp system saves significant time and potentially accelerates time to market for critical products. The time savings which we believe can be achieved for various workflows using synthetic DNA or mRNA is depicted in the following graphic.

Figure 5: Using the BioXp system saves significant time and potentially accelerates time to market for critical products.

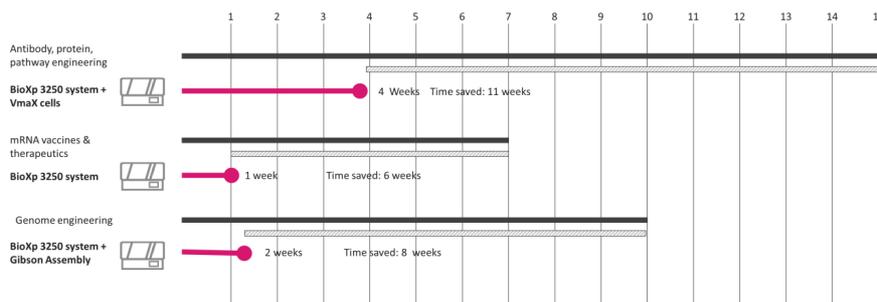


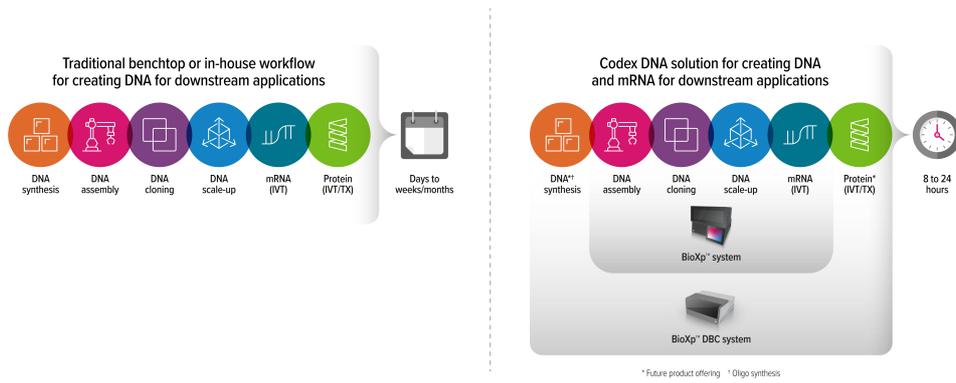
Figure 5 is derived from Company calculations and publicly available information from certain of the Company's competitors determined by management to offer the most comparable service for each workflow, and excludes shipping times for products.

- Increased speed and scale:** Our BioXp system has the capacity to parallel process as many as 32 samples at once within an 8- to 24-hour period, depending on the BioXp kit being used. It also has the capacity to generate high quality and diverse libraries with short lead times, allowing innovation to be maintained in-house.
- Capacity to construct a wide array of product formats:** Our BioXp system was designed such that future applications would not require hardware upgrades but only software upgrades that could be installed remotely. This feature has facilitated new product development efforts to enhance current product specifications and to develop new kits that extend beyond the production of synthetic DNA. For example, since the BioXp system was launched, new scripts have been developed to produce larger gene products, cell-free amplification of cloned DNA, and production of synthetic mRNA. Likewise, new scripts are currently being developed to enhance the mRNA product offering and develop protein synthesis BioXp kits. This capability provides substantial time-to-product and workflow control advantages for customers and gives them the flexibility to select the workflows that meet their unique needs.
- Ability to construct larger and more complex DNA and mRNA sequences:** Our BioXp system uses proprietary protocols developed for robust DNA synthesis, assembly, and cloning enabling the construction of genes, mRNA, and clones across a wide range of sizes and complexity.
- Industry-leading quality and performance:** Our BioXp system uses a proprietary two-step error correction process to generate virtually error-free synthetic genes every time. When compared to certain of our competitors, we have observed a 2.74 fold increase in sequence precision.
- Enhanced productivity:** Our BioXp system creates finished DNA products in as few as eight hours. In addition, it includes protocols for the cell-free amplification of cloned DNA, obviating the need to use *E. coli*, reducing the time to product by days or even weeks. Altogether, we believe that this could represent at least a 20-fold productivity increase through accelerated iterations of the *design-build-test* paradigm. Ultimately, product development cycles are accelerated because the desired biological results are identified more quickly.
- Protection of proprietary vectors:** Our BioXp system permits our customers to maintain their proprietary vectors on site, protecting their intellectual property throughout their entire development lifecycle.

The metrics described above were calculated using averages derived from publicly available information and quotes received for comparable product offerings by some of our competitors, some of which included shipping times, and averages from our workflows.

In summary, our solution addresses key limitations of the build phase by offering many benefits as highlighted in the graphic below.

Figure 6: Benefits of our BioXp system.



*Future product offering

Our Growth Strategy

Our goal is to establish our solution, including our BioXp family of systems, as the industry standard for building synthetic DNA, mRNA and protein, and to democratize synthetic biology, thus accelerating its applications and workflows across a wide range of industries. To achieve this objective, we intend to:

- *Drive new customer adoption of our BioXp systems.* As of May 1, 2021, we have placed approximately 160 BioXp systems, including 43 BioXp systems in 2020, which represents a 187% increase year-over-year from 2019. We intend to drive customer adoption globally within our targeted synthetic biology enabled workflows for antibody and protein engineering of biologic drugs, mRNA-based therapeutics and vaccines for infectious disease and precision medicine, genetic medicines, sustainable foods, biofuels and. resulting from the use of synthetic biology DNA data storage solutions. We intend to accomplish this through business development efforts, establishing and nurturing relationships with KOLs, a direct sales model in North America and four major European markets (United Kingdom, Germany, France, Benelux), as well as through more than 15 channel partners across Europe, the Middle East, Africa and Asia Pacific. We intend to sell our suite of products and services to academic research organizations and universities, CROs, and pharmaceutical, biotechnology, agricultural, consumer and technology companies. We believe that initially focusing on the pharmaceutical and biotechnology companies currently using readers as a part of the design-build-test cycle will facilitate the adoption of our products and synthetic biology enabled workflows for biologics and mRNA-based therapeutics and vaccines due to the benefits of having readers and writers within close proximity to each other.
- *Maximize the utilization of BioXp system by developing additional BioXp kits for our customers' workflows.* As of May 1, 2021, we have launched a total of seven BioXp kits that are used at the most iterative, costly and time-consuming steps across our customers' workflows. Our BioXp kits contain all the reagents necessary for a specific synthetic biology workflow applications, including gene fragment synthesis, DNA cloning, building DNA libraries, cell-free DNA scale-up and small-scale mRNA synthesis. To expand system utilization even further, we plan to commercially launch three BioXp kits in the first half of 2022. These include a rapid-scale mRNA synthesis kit, a large-scale mRNA synthesis kit and a protein synthesis kit. Additional BioXp kits are currently in development.
- *Continue to expand into other attractive markets for synthetic biology that are currently under-served.* We believe our solution is universal and can support DNA, mRNA and protein synthesis for almost any synthetic biology application. We plan to continue to invest in the development of high-value BioXp kits for core workflows in our target markets including biologics drug discovery, vaccine development, and genome engineering and in additional emerging markets such as DNA data storage and cell and gene therapy.
- *Develop and commercialize new, disruptive BioXp systems to further increase utilization, expand breadth of applications, and accelerate product development cycles.* These include:
 - The BioXp 9600 system. A higher throughput system permitting more DNA, mRNA and protein samples to be processed per run.
 - The BioXp Oligo Printer system. An oligonucleotide printing system to construct short DNA fragments.
 - The BioXp DBC system. A complete made-to-stock automated system that combines the two innovations above, permitting digital DNA sequences as input.
 - The BioXp Needle Ready Vaccine Printer system. An automated system that enables the globally distributed manufacturing of vaccines from digital sequence data, combining a BioXp kit for DNA, mRNA, or protein scale-up with modules for quality control, lot release testing and fill and finish.
- *Continue to innovate across our synthetic biology product portfolio.* We intend to continue developing enabling technologies across our portfolio, including continued research and development on existing and emerging workflows and applications leveraging synthetic DNA, mRNA and protein.
- *Establish strategic partnerships leveraging our core competencies and validating our technology.* The discovery, development and launch of synthetic biology advances can be time-consuming and expensive. Through our existing partnerships, we are accelerating time-to-market for our technologies and products. We intend to continue adding new strategic relationships across both existing and new markets. In doing so, we can accelerate the development of various markets for our solution, potentially

generate royalties and other forms of economic benefits and leverage third-party insights to help us design new solutions.

- *Continue to attract leading scientists to work at our company.* Our ability to continue discovering new synthetic biology applications and developing new technologies and products depends on our ability to attract top talent from industry and academia. We believe that our strong existing team and groundbreaking accomplishments to date will continue to attract leading scientists.

Our Products

We have developed and commercialized products that include BioXp systems, BioXp kits for generating a wide array of synthetic DNA and mRNA formats, and benchtop reagents that complement the automated synthetic biology workflow applications and workflow solutions. We believe that the BioXp kits that we incorporate into our integrated system represent the industry's leading synthetic biology workflow automation solution. We believe our fully automated workflow solutions, coupled with our expanding menu of BioXp kits, will enable us to establish a first mover advantage in the rapidly growing synthetic biology market.

Our BioXp 3250 system

Our BioXp 3250 system was launched in September 2020, replacing a legacy BioXp 3200 system. We believe that it is the first commercially available fully automated benchtop instrument that enables numerous synthetic biology workflows by providing a turn-key, end-to-end solution for generating synthetic DNA and mRNA starting from DNA sequence. Through a combination of increased throughput and scale and reduced hands-on time, we estimate that the BioXp 3250 system offers the potential to significantly enhance productivity several fold, accelerating the development of critical new products in enabled markets. The BioXp 3250 system accelerates the *design-build-test* phases of the customer's product development cycle by enabling rapid, automated synthesis of genes, clones, variant libraries and mRNA. Unlike traditional approaches that can take days, weeks or months, the BioXp 3250 system achieves these workflows in a single run, which can be completed in 8 to 24 hours.

Figure 7: BioXp 3250 system



The BioXp 3250 system has the capacity to build 32 gene-fragments of up to 1.8 kilobase pairs (kb) in length or four fragments of up to 7.2 kb in length and has an extensive selection of off-the-shelf vectors, as well as the ability to bypass plasmid preps. It allows users to clone single or multiple genes into our, or customer-provided, vectors. In addition, it permits the synthesis of transfection-ready DNA quantities of an average of 10 micrograms per sample, variant libraries up to 1.8 kb in length in as few as 8 hours, exclusive of shipping time, and biologically active

synthetic mRNA with quantities of an average of 10 micrograms per sample in as few as 24 hours, exclusive of shipping time.

Additionally, the BioXp 3250 system's ability to provide on-deck custom cloning obviates the need for subcloning or out-sourcing development of proprietary vectors to CROs allowing laboratories to maintain complete control of intellectual property relating to their proprietary vectors.

As of May 1, 2021, we have sold approximately 36 BioXp 3250 systems, including to many leading global pharmaceutical and biotechnology companies.

Our portfolio of commercialized kits for the BioXp 3250 system

BioXp kits contain all the requisite Gibson Assembly branded reagents and allow our BioXp system to perform the steps required to produce various DNA and mRNA products designed for a range of synthetic biology applications. BioXp kits are designed to be backwards compatible with legacy systems and forward compatible with systems under development.

- BioXp gene synthesis kit. Contains all the Gibson Assembly reagents necessary to make error-corrected, *de novo* synthetic genes of up to 1.8 kb in length.
- BioXp DNA cloning kit. Contains all the Gibson Assembly reagents necessary to make error-corrected, *de novo* synthetic genes of up to 7.2 kb in length using a standard made-to-stock vector.
- BioXp DNA custom cloning kit. Contains all the Gibson Assembly reagents necessary to make error-corrected, *de novo* synthetic genes of up to 7.2 kb in length using a customer's specific vector.
- BioXp RapidAMP cell-free DNA amplification kit. Contains all the Gibson Assembly reagents necessary to amplify error-corrected genes cloned into either a made-to-stock or customer vector, to make up an average of 10 micrograms of DNA per sample.
- BioXp site saturation scanning libraries kit. Libraries with specific mutations distributed over the sequence space to achieve the desired diversity.
- BioXp alanine scanning libraries kit. Libraries with varied single, contiguous amino acid sites, including site-saturation and alanine scanning libraries.
- BioXp combinatorial libraries kit. Libraries with varied, multiple non-contiguous amino acids sites using degenerate bases to optimize protein binding and function.
- BioXp small-scale mRNA synthesis kit. Contains all the Gibson Assembly reagents necessary to make an average of 10 micrograms of biologically active synthetic mRNA per sample using *de novo* synthesized, error-corrected gene fragments (mRNA template) of up to 1.8 kb in length.

By incorporating these application-specific BioXp kits into our BioXp 3250 system, we are able to provide simple, push-button, walkaway, end-to-end automation of important synthetic biology workflows. We believe our products enable unrivalled time-to-product, quality, and workflow control advantages for our customers.

Figure 8: Our BioXp system provides a simple, hands-free, end-to-end experience for our customers.



Our benchtop reagents

We offer benchtop reagents that are synergistic with our BioXp system and BioXp kits to accelerate the build phase of the *design-build-test* synthetic biology paradigm.

- Gibson Assembly HiFi and Ultra kit. Contains all the reagents necessary to simultaneously assemble as many as 10 DNA fragments into a vector to produce a final product that is several hundred kilobase pairs in length.
- Gibson Assembly RapidAMP kit. Contains all the reagents necessary to simultaneously assemble and clone DNA using Gibson Assembly, and then amplify the resultant product to produce an average of 10 micrograms of DNA per sample.
- Vmax X2 cells. Transformation-ready competent cells for introducing plasmids for protein expression applications.
- SARS-CoV-2 synthetic genomes. Twelve different “off the shelf” SARS-CoV-2 synthetic genomes for use in the development of vaccines, therapeutics, and diagnostics for COVID-19 research.
- SARS-CoV-2 RNA controls. SARS-CoV-2 RNA controls are useful as quality control measures for the verification and validation of both NGS and reverse transcriptase-polymerase chain reaction (RT-PCR) diagnostic assays.

Our products in development

As part of our continuing effort to improve the processes of synthetic biology, we are currently developing next-generation BioXp systems and BioXp kits with an aim to radically transform rapid demand-response workflows in synthetic biology by consolidating supply chains and enabling global distributed manufacturing for both discovery and clinical applications. Our ultimate goal is to build what we describe as the Digital-to-Biological Converter (DBC). The DBC’s approach would begin not with oligonucleotides, which can take days to procure, but with DNA sequence data. The system we envision would take data and produce synthetic genes, or even convert those automatically into mRNA or protein. This would enable the “sequence-in, vaccines-out” concept that could replace the months-long manufacturing processes required today with a process that can be carried out in a matter of days. Each of the systems described below builds from the fundamental technology that serves as the basis of our BioXp 3250 system.

BioXp systems in development

BioXp 9600 system. This higher-throughput BioXp system leverages the foundational technology underlying the current BioXp 3250 system and has an advanced motion control system allowing for higher processing speed and greater reliability. It is designed to include additional reagent capacity and consumables that enable approximately three times as many DNA, mRNA and protein samples to be processed for each run while retaining all the functionalities of the BioXp 3250 system. In addition, we envision the BioXp 9600 system will be linked to our BioXp Oligo Printer system, which is also in development, enabling global distributed manufacturing through the launch of the BioXp DBC system. This system is currently in development with beta launch anticipated by the end of 2021 and full commercial launch anticipated in 2022.

Figure 9: Our BioXp 9600 high throughput system for synthetic DNA, mRNA and protein



BioXp Oligo Printer system. The BioXp Oligo Printer system is enabled by our proprietary enzymatic DNA synthesis reagent solution that has been successfully demonstrated in manual workflows. Unlike traditional oligonucleotide

synthesizers using hazardous chemicals (phosphoramidites) and newer oligonucleotide synthesis technologies using enzymatic chemistry (TdT), the BioXp Oligo Printer system uses a DNA ligation and amplification process to generate oligonucleotides from a made-to-stock universal library of short DNA building blocks. The BioXp Oligo Printer system will physically connect to the BioXp 9600 system as the front-end system for on-demand enzymatic DNA synthesis manufacturing of oligonucleotides of up to 100 nucleotides in length to complete the BioXp DBC system. In addition, we anticipate using this system in our facility to reduce cost of goods and to improve BioXp kit turnaround times for BioXp 3250 and BioXp 9600 customers. The BioXp Oligo Printer system may also be commercialized as a standalone instrument to serve the polymerase chain reaction (PCR) primer and oligonucleotide markets. The system is currently in development with commercial launch anticipated after 2022.

Figure 10: Our BioXp Oligo Printer system based on our proprietary enzymatic DNA synthesis technology



BioXp DBC system. This system is assembled through the integration of our BioXp Oligo Printer system and BioXp 9600 system, which we expect will have been individually developed. This system provides the ability to take digitized DNA code sent over the internet and automatically print DNA, mRNA and protein in a field-deployable system. We believe that by starting with a DNA sequence and made-to-stock biological components, the BioXp DBC system will disrupt the normal development cycles for precision medicine and infectious disease by providing a path towards an on-demand printer that can produce needle-ready vaccines with the push of a button. This system is currently in development with commercial launch anticipated after 2022.

Figure 11: Our BioXp DBC system for fully-integrated on-demand writing of synthetic DNA, mRNA and protein



BioXp Needle-Ready Vaccine Printer system. This system is enabled by the technology used to build the BioXp DBC system and is dependent on its completion. It builds off the BioXp DBC system and includes a module for DNA, mRNA, or protein scale-up with modules for quality control, lot release testing and fill and finish. The BioXp Needle-Ready Vaccine Printer system will enable the globally distributed manufacturing of vaccines from digital sequence data, producing hundreds of doses of a DNA or mRNA vaccine per run with each run estimated to take a matter of days. This system is currently in development with commercial launch anticipated after 2022.

New BioXp kits in development

- BioXp rapid-scale mRNA synthesis kit. This kit will contain all the reagents necessary to rapidly produce up to 100 micrograms of biologically active mRNA from previously cloned DNA of up to 20 kb in length. Full commercial launch is anticipated in the first half of 2022.
- BioXp large-scale mRNA synthesis kit. This kit will contain all the reagents necessary to make 100 micrograms of biologically active synthetic mRNA using *de novo* synthesized, error-corrected gene fragments (i.e., an mRNA template) of up to 7.2 kb in length and will also include custom-cloning vector capabilities. Full commercial launch is anticipated in the first half of 2022.
- BioXp protein synthesis kit. This kit will contain all the reagents necessary to rapidly produce microgram-scale quantities of biologically active protein, with or without post-translational modifications, using *de novo* synthesized, error-corrected gene fragments (i.e., a protein template) of up to 7.2 kb in length and will include custom-cloning vector capabilities. We anticipate that this kit will enable broad adoption for the small-scale production of research grade protein for several workflows especially for biologics discovery and development. Full commercial launch is anticipated in the first half of 2022.

New benchtop reagents in development

- Vmax C1 cells. Transformation-ready competent cells for introducing plasmids for molecular cloning applications.

Our Biofoundry Services

We use our BioXp 3250 system, BioXp kits and benchtop reagents to perform biofoundry services for customers. Typically, these customers have not yet purchased our BioXp system or they have custom requirements. We apply sophisticated security protocols to these services designed to protect our customers' intellectual property rights, which is a key concern for customers.

The scale of our services is currently relatively small and is intended to facilitate new customer development. Our biofoundry services are performed in-house at our San Diego facility.

Our biofoundry services were established in 2020 as a value-added service intended to support customers both in their efforts to accelerate the discovery and development of therapeutics and vaccines to combat COVID-19, and to overcome challenges in their value chain created by the COVID-19 health crisis. These services enable a customer to order and receive any of the BioXp system endpoint-ready products, such as genes, clones, cell-free amplified DNA and variant libraries. As all offerings are built on the industry leading BioXp technology, customers experience the value of high quality products, with expedited turnaround times compared to similar offerings in the industry.

Importantly, our biofoundry services are strategically used in a consultative partner approach through our pilot program, allowing customers to see specific proof points prior to potentially purchasing a BioXp system. Additionally, our biofoundry services are employed to assist current BioXp system users with overflow peak volume needs or to create highly complex products, providing additional value to our BioXp installed base and creating deeper engagement with such customers. Finally, our service offerings represent a solution for those customers whose volume needs do not currently support a BioXp system purchase. In such situations, our service offerings further enable our consultative partner approach so as to engage more deeply with such customers and help demonstrate the value of the BioXp system to their ongoing research and development activities.

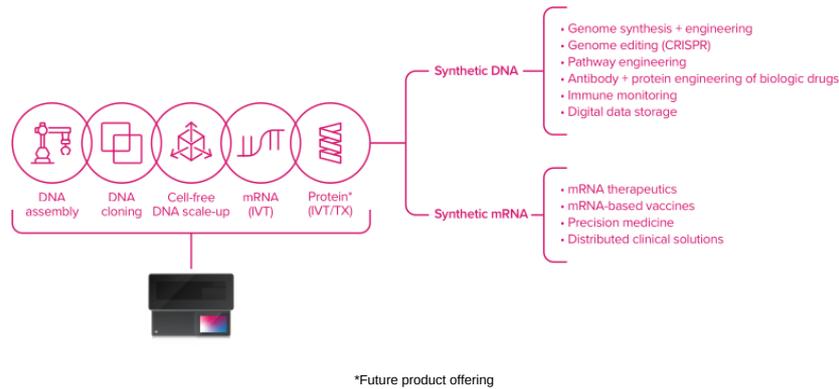
We believe that we are a world leader in genome synthesis and assembly technologies and are leveraging this capability to construct complete viral and bacterial genomes as a service for our customers. Over the past year, our custom genome synthesis service has primarily focused on producing variations of the SARS-CoV-2 genome, including new variants as they emerge. As many customers have similar interests, once constructed, many of these custom genomes become an off-the-shelf offering in our product catalog.

Workflow Solutions for Synthetic Biology Enabled Markets

Our current and future BioXp systems are intended to address the needs of the synthetic biology customer across discovery and pre-clinical development by providing an unmatched capability to synthesize high-quality DNA in as few as 8 hours and mRNA in less than 24 hours, exclusive of shipment times. With future system releases and extensions, we plan to address the continuum of research needs across the central dogma of molecular biology by

enabling cell-free production of high-quality synthetic DNA, mRNA and protein for the discovery, development and manufacturing of enabled products across a wide range of markets.

Figure 12: Our automated DNA and mRNA solutions for synthetic biology enabled workflows



We are strategically focused on providing workflow solutions for markets with high-value enabled products such as those in healthcare and technology. These solutions are all based on our core portfolio of BioXp kits. Specific design software and BioXp kits (e.g., oligonucleotides) are employed depending on the desired enabled product. The appropriate application-specific BioXp kits are inserted into the BioXp system to perform the workflow solution tailored to meet the needs of the customer.

We target high-value application workflows within the synthetic biology-enabled markets. Key workflow examples are described below.

Synthetic DNA Application Workflows

We believe that with the BioXp system, scientists can perform rapid, high-throughput gene synthesis, regardless of vector size and complexity in a hands-free, automated fashion in 8 to 24 hours, exclusive of shipment times. We believe that our BioXp system offers a comprehensive value proposition that includes reduced turnaround time, increased throughput and scale, enhanced quality, complete workflow control and both synthetic DNA and mRNA formats. Our solutions allow customers to save time, improve scale and throughput and improve productivity for many synthetic biology enabled research and development workflows across multiple market segments, including the following:

1. *Synthetic DNA for genome synthesis and engineering.* DNA synthesis has become a fundamental tool throughout genetic research with increasing demand from scientists who are continuously looking to incorporate synthetic DNA into new cell-based discovery and production workflows. Addressing this growing demand requires the ability to quickly make large virtually error-free DNA molecules comprising entire gene sequences. Traditional molecular cloning and gene editing steps are tedious, manual in nature and require cellular transformation, which can take three to four weeks. Moreover, in addition to being time-consuming, classic genome engineering and DNA assembly techniques are limited in the size and complexity of constructs that can be engineered.

BioXp system benefits: Overall, our automated workflow solution allows users to: (1) engineer genomes and vaccine scaffolds that were previously inaccessible due to size, complexity and resource limitations; (2) engineer fully-synthetic genomes lacking pathogenicity through rational redesign; and (3) rapidly pursue research and development of emerging strains or modify existing genomic constructs based on experimental results. Our BioXp system overcomes these barriers and enables rapid synthesis within days to weeks, as well as the ability to modify large constructs and full-length genomes.

Figure 13: Example of how using the BioXp in combination with our Gibson Assembly benchtop reagents can save significant time when engineering genomes



SARS-CoV-2 genome construction case study. By using several molecular biology tools that we developed over the last decade, we built all the parts of the full-length (30 kb) SARS-CoV-2 genome using Gibson Assembly reagents and the BioXp system in a single run, which can be completed in 8 to 24 hours, and then rapidly generated a completely synthetic version of the SARS-CoV-2 genome in just seven days, where comparable approaches could take as long as twelve weeks.

To support researchers worldwide in their fight against COVID-19, we have taken advantage of the rapid-iteration capabilities offered through our BioXp library kits to produce additional variants of the SARS-CoV-2 genome within just a few days. Our full-length SARS-CoV-2 synthetic genomes have been widely adopted for the development of various preventive and treatment measures. Synthetic genomes enable researchers to safely study the pandemic-causing virus and develop therapies and diagnostics without the highly regulated biosecurity facilities required for studying a dangerous pathogen.

2. *Synthetic DNA for genome editing.* CRISPR-powered genome editing has enabled significant improvements in the ability to fine-tune genomes. Originally discovered as an mRNA-based adaptive immune response in *E. coli*, the CRISPR/Cas9 system contains both guide mRNA for sequence-specific targeting and a Cas9 endonuclease that removes foreign DNA and allows integration of synthetic DNA into the host genome. That synthetic DNA is designed to specifically target a region in the host genome and make alterations (e.g. add genes, remove genes, correct mutations).

BioXp system benefits: The system enhances productivity during the design phase of the customer's product development cycle by enabling rapid, automated synthesis of gene fragments, clones, and variant libraries. We believe that with the BioXp system, scientists can perform rapid, high-throughput gene synthesis and cloning of mRNA constructs into expression vectors, regardless of vector size and complexity, using Gibson

Assembly. In addition, our Gibson Assembly RapidAMP technology, which permits cell-free amplification of microgram quantities of DNA, means plasmid design no longer has to be tethered to an *E. coli* cloning system. In addition, our Gibson Assembly RapidAMP technology combines cloning and vector amplification in smaller mini-circle plasmids absent *E. coli*-based genes, thus improving overall transfection efficiency.

3. *Synthetic DNA for metabolic pathway engineering.* Metabolic engineering involves reconstructing and optimizing biosynthetic pathways in model organisms, creating robust "cellular factories" designed to carry out a specific task. Pathway modifications typically rely on recombinant or novel genes or gene circuits. Using recombinant or novel genes or gene circuits, metabolic pathways are modified or introduced into genomes of microbe hosts like *E. coli* or yeast. These genetically engineered hosts are routinely employed to more effectively produce valuable biomolecules for a variety of biomedical, industrial and research applications.

BioXp system benefits: With the gene synthesis capabilities of our BioXp system and the complex genetic circuitry made possible with Gibson Assembly technology, we are able to improve the speed and accuracy of metabolic engineering for even the most complex genetic circuitry.

4. *Synthetic DNA for antibody and protein engineering of biologic drugs.* Biologics-based (e.g., antibody or protein) discovery of novel therapeutics is one of the most important areas of research for improving medical advances through engineering of antibodies or other proteins for cancer treatment, infectious diseases and inflammatory or autoimmune disorders. Monoclonal antibodies, antibody-drug conjugates, single-domain antibody variants, chimeric antigen receptor T cells (CAR-Ts) and T cell receptors (TCRs) have become invaluable therapies due to their robust recognition of targets and relatively lower side effects compared to traditional small molecule therapies.

Desirable properties for therapeutic antibody products include high antigen-binding affinity, specificity, low immunogenicity, solubility, stability, manufacturability and adequate pharmacokinetics. Researchers involved in biologics discovery and antibody and protein engineering often leverage DNA variant library screening as an essential step in the discovery workflow. A major constraint in antibody discovery has been long lead times associated with sourcing custom-built DNA libraries used to screen new antibody variants.

Figure 14: Our synthetic DNA libraries significantly accelerate the build phase for antibody- and protein-based drug candidates

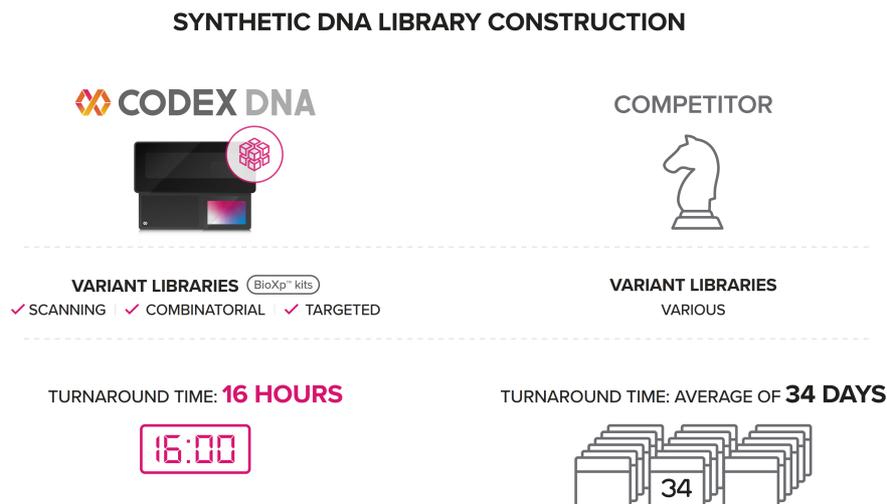


Figure 14 assumes a standard antibody or protein engineering workflow which requires the synthesis of two synthetic DNA libraries for both our BioXp system and the competitor. The turnaround time estimate for our competitors is based on the average product delivery times not including ship-days for similar products from IDT, a division of Danaher Corporation, Twist Bioscience Corporation, GENEWIZ Group, GenScript Biotech Corporation and Thermo Fisher Scientific Inc.

Customers are increasingly using our BioXp kits for variant libraries to accelerate the *design-build-test* phases for their antibody screening and optimizations stages. Specifically, we believe that utilizing libraries on the BioXp system across library synthesis, affinity maturation and codon optimization workflows accelerates research by improving productivity and reducing the time and costs associated with certain drug discovery and development programs. Additionally, we believe, with our broad menu and wide selection of library types, including combinatorial, scanning and custom libraries, we provide flexibility in antibody screening and optimization analysis to serve different needs (e.g., stability, epitope optimization) at various points in the workflow. Furthermore, these libraries are synthesized with our proprietary error-correction technology, resulting in high-fidelity genes, with what we believe to be the lowest error rate in the industry, with a median error rate of approximately one per 14 kb based on company testing.

Protein engineering is another synthetic biology enabled workflow of significant importance and caters to the growing need for improved enzymes and bioproducts for industrial production. Enzyme engineering typically begins with research to find a candidate with the best starting properties to use as a template followed by engineering cycles to find enzymes with enhanced properties.

After enzyme discovery, the build phase involves iterative rounds of library synthesis with an improved variant from the previous round selected as the template for the subsequent round. Subsequent build phase construction is rate limiting because of its sequential nature: design iterations cannot be conducted in parallel because the output from the previous phase is required as input for the next phase. Finding ways to shorten the time in this phase is key to reducing the overall project timeline. A second consideration is the burden of screening. Library synthesis can generate thousands or even hundreds of thousands of variants that must be screened to identify beneficial ones. Limiting the number of variants with a rational approach to library design combined with an automation system that amplifies and assembles constructs with high

fidelity is a key strategy to minimizing project timelines while also maximizing the probability of identifying the most beneficial variants in an unbiased manner.

BioXp system benefits: Our BioXp system provides an accelerated path for antibody and pathway engineering work flows and when compared to certain of the company's competitors determined by management to offer comparable services, reduces build phase time by over 70%. A key part of the accelerated timeline is the BioXp system's ability to deliver up to 32 libraries in 8 to 24 hours once the reagents are received, compared to the traditional method, which, depending on the method used, can take days or weeks. We believe adopting the BioXp system into the antibody or protein engineering workflow often results in the increased generation of validated leads.

5. *Immune monitoring.* Immune monitoring for patients receiving cancer immunotherapy is vital for understanding the process and efficacy throughout the course of the treatment. Characterizing the immune status for insights into the therapy's potential is essential, particularly in patients who are receiving novel immune-modulating therapies. Speed and efficiency of immune assays allow for real-time feedback and the ability to be agile in a patient's treatment regimen.

BioXp system benefits: The BioXp system's high-throughput gene synthesis and flexible cloning modalities allow for quick screening and design of novel chimeric antigen receptors (CARs), engineered TCRs, and artificial transcription factors. Different CAR designs can therefore be investigated to enhance their tumor specificity or to fine-tune T cell activity. Further, the development of novel gene circuits or CARs to increase effectiveness of CAR-T therapy by engineering T cell mobility or mitigating immunosuppressive cues in the cancer microenvironment can help drive improved efficacy.

Synthetic mRNA Application Workflows

With the BioXp system, scientists can perform rapid, high-throughput synthesis of biologically active mRNA in a hands-off, automated fashion within 24 hours once the reagents are received. Our BioXp system is able to fully automate mRNA synthesis for the research market and offers what we believe to be a comprehensive value proposition that includes reduced turnaround time from weeks to days, enhanced quality and complete workflow control. Our solutions allow customers to address many target applications across multiple market segments.

1. *Synthetic mRNA for infectious disease vaccine discovery and development.* The need for rapid vaccine development in response to emerging pathogens has become increasingly clear during the COVID-19 pandemic. However, vaccine manufacturing is consistently complicated for manufacturers, regulators and public health officials, especially for endemic viruses (e.g., influenza), where manufacturers must adjust the vaccine to counter the virus' constant antigenic variation. To start a new influenza vaccine manufacturing campaign, a key material, the vaccine seed virus, must be changed frequently to match circulating strains in order to track the virus' antigenic evolution. The existing systems for accomplishing vaccine strain changes have required the shipment of viruses and other biological materials around the globe, which have caused delays in vaccine availability. Existing systems have also used legacy techniques such as egg-based virus cultivation, resulting in vaccine mismatches.

In comparison, mRNA vaccine production is simple, cost-effective and can be easily adapted to accommodate new candidates within an established manufacturing pipeline. Given this, vaccinology has recently seen a shift toward synthetic mRNA approaches, which allow for rapid, scalable and cell-free manufacturing of prophylactic and therapeutic vaccines. For development of mRNA vaccines, *de novo* gene synthesis allows for increased specificity of antigen proteins, more efficient vaccine adjuvants, and safer specialized vectors. Through codon-optimization of these genes and vectors, targeted and safe vaccines can be created rapidly to treat newly emerging viral threats, such as influenza, coronaviruses and Ebola.

Gene synthesis with codon-optimization and mutant libraries using the BioXp system is designed to accelerate the speed of vaccine development by improving the efficacy and safety of the resulting recombinant genes, adjuvants and vectors. Also, pairing antigen epitope mapping technology with the BioXp system's ability to rapidly iterate is accelerating rational design strategies for vaccine development.

BioXp system benefits: We believe our end-to-end solution for the rapid and accurate production of cell free synthetic DNA and mRNA, when combined with our BioXp protein kit that is currently in development,

positions the BioXp system for rapid adoption within high-growth vaccine and therapeutic markets, as it allows for the acceleration of product development cycles by addressing critical bottlenecks. This is especially important for infectious disease vaccine development, such as for influenza, where the key bottleneck is the lack of quick strain *design-build-test* cycles close to flu season that makes vaccine response unpredictable.

2. *mRNA-based vaccines for precision medicine.* Neoantigens, or tumor mutated specific antigens, are major tumor rejection antigens, allowing tumors to activate the immune system and induce an efficient anti-tumor response. As personalized medicine for cancer therapeutics ramps up and becomes more feasible and affordable, individual patient neoantigen development is increasingly important. Identification of these neoantigens has greatly improved with recent advancements in deep sequencing and bioinformatics technologies. Gene synthesis and mRNA production then allow for these predicted neoantigens to be synthesized and tested for T cell reactivity, differentiating true immunogenic neoepitopes from putative ones. Since patients' mutated antigens are largely unique to the individual, speed is one of the most important goals in identifying and verifying true neoantigens for induction of the T cell-mediated immune response.

BioXp system benefits: The BioXp system's on demand high-throughput gene and mRNA synthesis and flexible cloning into a variety of vectors allow for quick screening and development of the best personalized cancer treatments. In addition, our Gibson Assembly RapidAMP cloning and amplification process avoids the use of *E. coli*, thus eliminating endotoxin contamination and unwanted immunogenicity.

Figure 15: Our solution can deliver an average of 10 micrograms per well of biologically active mRNA in a single automated run

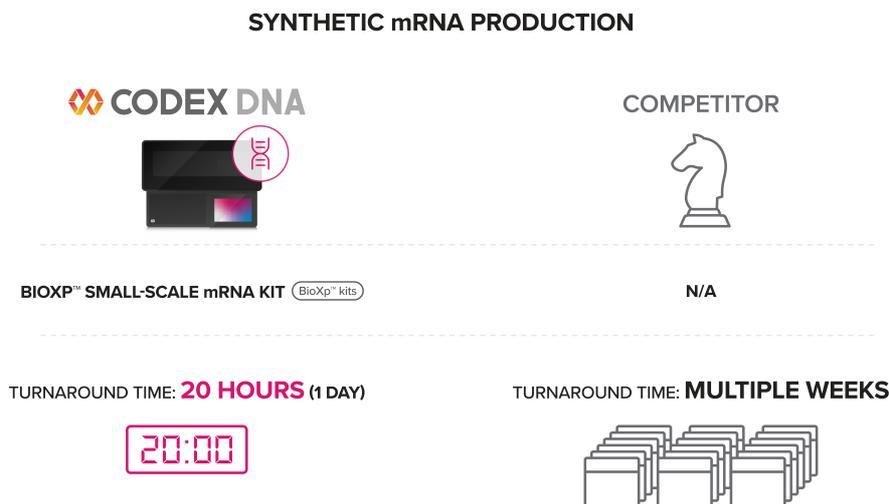


Figure 15 assumes optional runs of the BioXp system allow for pooling of up to 16 wells from a single kit, with each generating an average of 10 micrograms mRNA per well. The turnaround time estimate for our competitors is based on the general turnaround time for Aldevron, LLC, Trilink Biotechnologies, Inc., Bio-Synthesis, Inc. and others who were selected by management because of their comparable product offerings.

3. *mRNA-based therapeutics.* With COVID-19 vaccines leading the way, mRNA has become one of the more promising classes of therapeutics and is being validated by key industry players (e.g., Avantor, Inc.,

Moderna, Inc., and Maravai LifeSciences Holdings, Inc.) and emerging mRNA delivery companies (Precision NanoSystems Inc., Nutcracker Therapeutics, Inc.). Monoclonal antibody-based drugs require complex production and purification processes and aberrant post-translational modifications of the antibody are a problem. An mRNA-based approach is a possible solution, whereby the genetic information of the antibody, not the antibody itself, is delivered. Transient gene transfer aims at administering the mAb-encoding nucleotide sequences in DNA or mRNA form, rather than the mAb protein itself, directly to patients. This allows for the *in situ* production of biologicals in a cost- and labor-effective manner, potentially for a prolonged period of time. Although past research has been mainly focused on the development of plasmid DNA, the limitations associated with these "classical" approaches and the recent improvements in stability and translatability of *in vitro* transcribed (IVT) mRNA have recently led to an increased interest in mRNA as a delivery vector. In addition to safer pharmaceutical properties, such as no risk of genome integration, the transient expression of mRNA-encoded antibodies enables a more controlled exposure, with more protein production during peak expression compared to plasmid DNA.

4. **BioXp system benefits:** Our BioXp system can be used to rapidly produce small-scale, biologically active mRNA for accelerated iteration of the design-build-test paradigm for the identification of therapeutic candidates. In addition, a wide menu of on demand automated library synthesis enables the customer to further speed up iterative design-build-test paradigm during the drug discovery and development continuum. When library synthesis is used in combination with mRNA production, we estimate that a customer can reduce turnaround times by weeks or months when using the BioXp system for screening and optimizing the mRNA products that have the most desirable pharmaceutical properties.

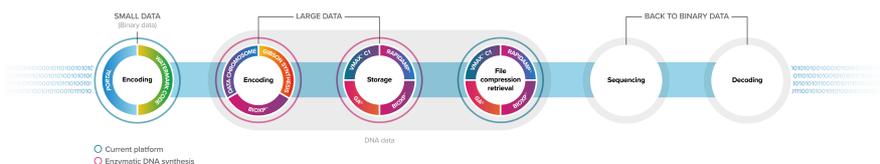
Workflow solutions in development

1. **Global distributed manufacturing of vaccines:** We aim to transform public health by enabling a new approach to producing vaccines, therapeutics and diagnostics. Based on our proprietary automated synthesis technology, we are building a self-contained system that can print life-saving treatments, starting only from information delivered digitally on our DBC system.

By activating a global network of DBC systems, we believe it will be possible to accelerate the development and delivery of "on-demand" vaccines anywhere in the world, ultimately allowing rapid responses to disease outbreaks. We believe that the instantaneous electronic exchange of sequence data, followed by local gene synthesis and vaccine production, may replace the cumbersome isolation and shipment of viruses and nucleic acids between geographically dispersed sites where vaccines are manufactured. Also, by stocking systems with all of the materials needed for vaccine synthesis, the DBC network is designed to overcome many of the supply chain challenges that have emerged during the COVID-19 pandemic. Thus, we believe our technology will be able to replace antiquated centralized manufacturing systems with a modern distributed manufacturing systems.

2. **Synthetic DNA for digital data storage:** DNA data storage has been a growing area of interest due to its encoding power with a capacity to store more than 200 petabytes (each one million gigabytes) of data per gram of DNA. Our technology can be mapped to nearly all of the critical steps in the DNA data storage workflow, including (1) encoding a binary digital file into a DNA sequence data file, (2) synthesizing the DNA data file, (3) storing millions of DNA data files in one tube of DNA and (4) retrieving the DNA data file from the tube. Using our BioXp system, which is designed to have the capacity to store 108 kilobytes of data (e.g., single web pages and small images) per instrument per day, the entire DNA data storage workflow can be collapsed into a single automated system.

Figure 16: We envision our BioXp digital data storage solutions will be critical to enabling the broad-based use of distributed applications.



Our Technology

Our system is powered by many key innovations that provide unparalleled capabilities, notably:

Gene synthesis

Our robust gene synthesis process is proprietary and enables the simultaneous assembly of hundreds of oligonucleotide pools of up to several thousand kilobase pairs in length, including a wide range of complexity (e.g., 20-70% GC content, repetitive DNA sequence). Our proprietary error-correction process produces synthetic DNA sequences, virtually error-free, from beginning to end. BioXp Gene synthesis kits leverage this proprietary gene synthesis technology, which involves:

- the design of single-stranded oligonucleotide sequences comprising a DNA sequence, and novel chemistry and thermal cycling parameters for the robust assembly of those chemically synthesized oligonucleotides into long double-stranded DNA products; and
- a two-step error-correction process where error-containing DNA products are removed through a combination of a mismatch-specific endonuclease working in concert with an exonuclease.

In the final step, only error-free genes are amplified by PCR resulting in high yields of error-free DNA. Because all applications currently rely on gene synthesis, this technology is used within every BioXp kit. We have also developed a second proprietary gene synthesis process that uses ultra-short oligonucleotides that assemble into high-fidelity synthetic genes without enzymatic error correction procedures.

Library synthesis

Our robust gene synthesis technology enables the construction of several DNA variant library types including:

- scanning libraries with varied single, contiguous amino acid sites, including site-saturation and alanine scanning libraries;
- combinatorial libraries with varied, multiple non-contiguous amino acids sites using degenerate bases to optimize protein binding and function; and
- targeted libraries, with specific mutations distributed over the sequence space to achieve the desired diversity.

Our library synthesis technologies are powerful tools for manipulating protein structures for optimization studies in biologics discovery, protein engineering and several other disciplines. This technology is included in our BioXp library kits and enables the BioXp system to generate as many as 32 libraries per instrument in a single 8 hour run, with each library containing an amino acid diversity as high as 10^{10} .

DNA cloning

Our robust molecular cloning method is proprietary and commonly referred to as Gibson Assembly across the industry. The method can simultaneously combine as many as 10 DNA fragments based on sequence identity. It requires that the DNA fragments contain approximately 20 to 40 base pair overlaps with adjacent DNA fragments. These DNA fragments are mixed with a cocktail of three enzymes, along with buffer components. The three required enzyme activities are: exonuclease, DNA polymerase, and DNA ligase. The exonuclease splits DNA from one of its ends resulting in single-stranded regions on adjacent DNA fragments, which can anneal to each other. The DNA polymerase incorporates nucleotides to fill in any gaps. The DNA ligase covalently joins the DNA of adjacent

segments, thereby removing any imperfections in the DNA. The resulting product is different DNA fragments joined into one. Either linear or closed circular molecules can be assembled. With over 6,000 citations in scientific literature, Gibson Assembly is one of the most widely-used molecular cloning methods used to create recombinant DNA. It is named after its creator, Dr. Daniel Gibson, who is our Chief Technology Officer and co-founder. We believe that the Gibson Assembly method can be used to rapidly clone multiple DNA fragments into any vector in one hour or less without the use of restriction enzymes.

Figure 17: Gibson Assembly technologies for DNA assembly



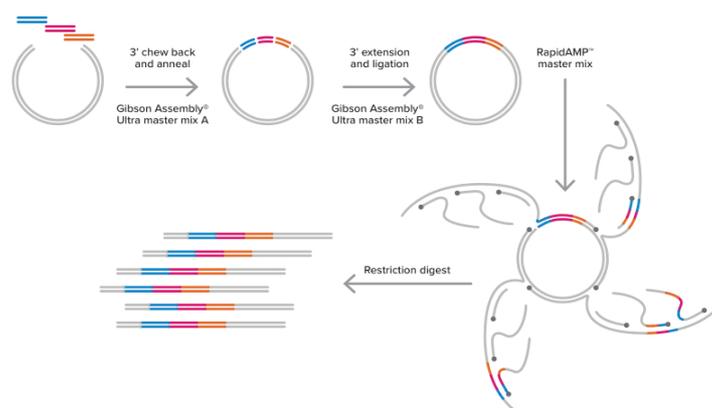
The BioXp cloning kits leverage Gibson Assembly in a proprietary fashion to bring together up to four gene fragments in up to four vectors, permitting larger DNA to be constructed and providing increased flexibility in cloning strategies. Multi-fragment assembly and cloning on the BioXp system gives customers the power to design, build, test and iterate genes more rapidly.

Cell-free amplification of cloned DNA

The Gibson Assembly process generates circular products that are permanently sealed by DNA ligase. We have taken advantage of these two essential features to develop a proprietary cell-free amplification process that combines our Gibson Assembly technology with components of the well-established rolling circle amplification (RCA) technology. Once the Gibson Assembly reactions are complete, reaction products are incubated for several hours in a mixture containing a DNA polymerase and random hexamers. The BioXp RapidAMP cell-free DNA amplification kit and the benchtop Gibson Assembly RapidAMP kit leverages this technology to allow users to assemble and amplify constructs to achieve transfection-ready DNA in a single day. With this technology, high-quality, high-fidelity DNA can be rapidly produced, all while eliminating tedious tasks associated with transformation, cell culture and *E. coli* harvest. Gibson Assembly RapidAMP reagents are available as a benchtop reagent kit or an automated cell-free amplification solution for the BioXp system. Benefits include:

- accelerated design-build-test cycles;
- endotoxin-free DNA products;
- an alternative to amplification strategies that fail due to biological reasons within host organisms; and
- propagation of DNA without unwanted vector elements.

Figure 18: Gibson method for cell-free DNA production



System engineering and automation

The BioXp system contains fluid processing and precise thermal control to run all applications, including the synthesis and scale-up of DNA and mRNA. The proprietary and highly reliable automation components of the BioXp system include patented thermalcycler technology and sample handling and sealing devices. Significant software development has resulted in an easy-to-use interface with robust diagnostics and error detection as well as remote access capability to quickly address any issues. Job processing commands are highly tuned, resulting in consistent performance and reliability. Key features of the BioXp 3250 system include:

- a high precision patented thermalcycler for precise control of thermal cycling parameters;
- a high-precision fluid handling system for accurate transfer and mixing of reagents;
- a high-reliability 5-axis motion control system for accurate positioning;
- an integrated camera system for confirmation of proper loading and reading barcodes on the components of BioXp kits;
- a touchscreen interface and integrated computer processor, which allows for simple, intuitive operation;
- internet connectivity enabling custom scripts to be loaded for each customer's needs, post-run data to be retrieved and remote service/updates to be performed;
- a proprietary sample handling system that allows movement of samples throughout the process; and
- a flexible system design that anticipates development of new protocols to continue collapsing customer workflows.

Cloud-based design and analytics

The BioXp portal includes design tools used to break down desired DNA sequences into building blocks sent to the user, ultimately to be synthesized and assembled on the BioXp system. Our predictive modeling of the complexity and level of difficulty ensures that the probability of success in building a DNA sequence is greater than 98%. The co-development process by our biologists and engineers has resulted in a proprietary combination of synthetic biology and automation. The BioXp system is highly flexible and is controlled by processing information from the cloud, tailored for a user's specific application. There is no need for the user to develop custom processing scripts or modify parameters because our ordering software and associated BioXp barcodes ensure that the desired application is processed.

Large and complex DNA synthesis up to complete genomes

Our gene synthesis technology in combination with the Gibson Assembly cloning process is what enables us to excel in the automated synthesis and engineering of large and complex DNA constructs. Our proprietary tools combine

novel DNA design, synthesis and assembly techniques to manufacture long DNA constructs, including the synthesis of a complete genome or chromosome. Using these technologies, our team has chemically synthesized several bacterial and viral genomes, including some of the largest chemically-defined structures ever synthesized in a laboratory.

The final genetic constructs required to develop many commercial applications are longer than those that can be readily synthesized using standard industry techniques. While a simple sequence of genes may be several thousand base pairs long, the genomes of many bacteria may be up to several million base pairs long, while the genomes of some viruses can exceed one million base pairs in length. Traditional DNA synthesis and assembly approaches are not practical for synthesizing genomes of that length.

Vmax host cell engineering

Vmax is an engineered form of *Vibrio natriegens*, which, under optimal conditions, has the fastest known growth rate of any non-pathogenic organism. Vmax has high-value applications in research and commercial production. Many high-value pharmaceuticals, industrial enzymes and chemicals are currently made in bacteria such as *E. coli*. We aim to improve the manufacturing of these products with Vmax, especially the high-value biologics. We are developing an advantaged Vmax strain and reagents for molecular cloning (Vmax C1) and have developed an advantaged Vmax strain for protein expression (Vmax X2) applications. We have commercialized Vmax X2 and intend to commercialize the Vmax C1 as benchtop reagents. We believe that, in one to two years, Vmax could be capable of challenging the dominance of the prevailing *E. coli* cell-based production systems that are used to produce many high-value pharmaceuticals, industrial enzymes and chemicals. We plan to monetize Vmax cell lines through arrangements with biopharmaceutical companies.

Research and Development

Our research and development team has been at the forefront of discovery and development of synthetic biology workflows for over 15 years, including more than 10 years of experience automating many of those processes. We believe that this experience gives us industry-leading know-how, intellectual property and time-to-market advantages with respect to new products. We have specific and valuable experience and knowledge related to problem solving and have a deep knowledge of applicable synthetic biology research and development methodologies. We have particularly strong technical core competencies related to constructing large and complex strands of DNA and automating synthetic biology applications across multiple end-to-end workflows.

The overarching goals of our research and development programs are to continue to bring new technologies to market that address the most pressing questions in synthetic biology solutions. Our research and development department hosts the key proprietary synthetic biology tools and technologies, with applications across a wide variety of industries, sponsors research and development efforts to apply those tools and develops new opportunities. To this end, we plan to focus our research and development efforts on the following areas:

- *Strategic partnerships:* We focus partnering efforts in the areas of mRNA vaccines, biologics discovery, cell engineering and DNA data storage validating our technology systems.
- *New capabilities and solutions for our current BioXp system:* Our development efforts include new reagent modules such as a protein synthesis kit and a large-scale mRNA synthesis kit. The BioXp protein synthesis kits will be designed to enable broad adoption for the small-scale production of research-grade protein for several workflows, especially for biologics discovery and development. The BioXp large-scale mRNA synthesis kit will contain all the reagents necessary to make 100 micrograms of biologically active synthetic mRNA and will include custom-cloning vector capabilities. In addition, we are developing a product line extension for our BioXp system in the form of a higher throughput BioXp 9600 automated workstation, which has approximately three times the processing capability of our current system.
- *New workflow solution-focused products:* In the near-to-medium term, our primary focus is on perfecting our enzymatic DNA synthesis reagent solution which will enhance our margins by allowing us to in-source the production of key reagent components. Once developed, this technology will be integrated into the BioXp Oligo Printer system, which will physically connect to the BioXp 9600 system as the front-end system for the on-demand enzymatic DNA synthesis manufacturing of oligonucleotides.
- *A distributed drug manufacturing system:* Longer term, we aim to develop reagent and instrumentation solutions that will enable the distributed manufacturing of biological materials on the BioXp DBC

system. Following this, we aim to develop the BioXp Needle-Ready Vaccine Printer system, a fully automated, push-button and walkaway printer that is designed to enable the distributed manufacturing of vaccines. This system is intended to produce several hundred doses of a DNA or mRNA vaccine per run in a matter of days.

As of May 1, 2021, we employed 23 employees in R&D, primarily located in San Diego, California. The R&D team consists of two teams, a scientific and an engineering team.

- **Scientific Team:** Twelve experienced scientists, approximately two-thirds of whom hold a Master's degree and one-third of whom hold a Ph.D. The majority of the scientists are molecular biologists with vast experience in building new technologies related to benchtop and automation procedures for DNA sequencing and synthetic biology workflows. The team is led by Dr. Daniel Gibson, who is responsible for some of the foundational discoveries in synthetic biology, including the Gibson Assembly method.
- **Engineering Team:** Eleven personnel with expertise in software, fluidics, mechanical, electrical and embedded firmware development in both RUO and good manufacturing practice (GMP) environments. The team has decades of experience in applications of state-of-the-art engineering designs and solving complex systems for laboratory and medical devices. They are experts in translating the latest molecular biology workflows into reliable, repeatable robotic fluid handling steps processed under precise temperature controls.

Manufacturing

Our product portfolio includes the BioXp 3250 system, Gibson Assembly, Vmax X2 cells and biofoundry services. Our operational infrastructure ensures that the entire production line, including supply chain, reagent kit manufacturing, biofoundry services, quality control, process development, filling and packaging, quality assurance and logistics, is fully integrated and coordinated.

We utilize single-source third parties for assembly of key components of our BioXp instrument and other suppliers to provide key reagents. We have identified a list of our single-source suppliers for key reagents and have started to identify and validate new second-source suppliers for those key reagents. Having dual sources for certain of our raw materials will reduce the risk of a potential production delay caused by a disruption in the supply of a critical raw material or component. Our mitigation plans for these single-source key reagents is to have six to twelve months of safety stock inventory on hand as we qualify new second-source suppliers. For the key reagents where we cannot find a suitable second-source supplier, we plan to continue to maintain our six to twelve month safety stock inventory.

We create validation protocols for each potential new second-source supplier and only add those new second-source suppliers once they have met the validation requirements. We require testing on three separate lots of the new key reagent and we validate key reagent performance and expiration dating compared to the current key reagent performance and dating criteria. Each validation protocol is different as each key reagent will have different characteristics and testing protocols as well as acceptance criteria and expiration dating.

BioXp 3250 system manufacturing is contracted out to D&K Engineering, Inc. (D&K), a third-party ISO 13485 Certified and FDA registered contract manufacturer located in San Diego, California. D&K services several of the largest life science instrument companies. It has proven capabilities related to design optimization, new product launches and product line extensions, as well as an ability to facilitate a substantial scale-up of unit volumes, thereby supporting our growth for the foreseeable future. Its capabilities include GMP-compliant manufacturing, which may be relevant to our future product launches. We do not have a long term supply agreement with D&K, and rely on it to provide quotes and accept purchase orders that we issue from time-to-time. Our outsourced production strategy is intended to drive cost leverage and scale and avoid the high capital outlays and fixed costs related to constructing and operating a manufacturing facility. Under the terms of our relationship with D&K, we have historically benefited from volume-based pricing on our purchase orders. We perform final quality control testing of the BioXp 3250 system in-house at our facility in San Diego. Turnaround time for BioXp 3250 production is typically two to three weeks. We keep the contract manufacturer aware of our future supply needs based on a rolling three-quarter forecast and typically maintain less than thirty days of inventory.

In October 2015, we entered into a Supply Agreement with Integrated DNA Technologies, Inc. (IDT), a division of Danaher Corporation, which was amended in March 2020 (the Supply Agreement), pursuant to which IDT agreed to

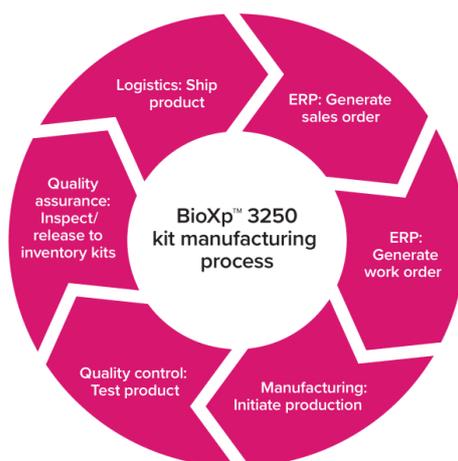
supply us with oligonucleotides, which we use as reagents in our research and commercial operations. The prices of the oligonucleotides purchased pursuant to the Supply Agreement are fixed during the term of the Supply Agreement, subject to minimum ordering requirements. The Supply Agreement contains certain dedicated capacity representations, but does not commit IDT to supply any minimum amount of oligonucleotides outside of accepted purchase orders. The initial term of the Supply Agreement was for a period of five years, which expired in October 2020, but automatically renews for consecutive one-year terms, unless a cancellation notice is given by either party ninety days prior to the end of the then current term.

Figure 19: Manufacturing process for the BioXp 3250 system



Reagent manufacturing and storage is completed within our headquarters in San Diego, California. All reagents are manufactured, quality-control tested and released to inventory by our quality assurance department certifying that our reagents meet our quality standards. We maintain safety stocks of key reagents in quantities that we believe mitigate the effects of any supply disruptions. As a result, customer orders for reagents can typically be completed for next-day delivery. Key components of the reagents are sourced from well-established third parties, most notably, IDT and Eurofins Scientific SE.

Figure 20: Manufacturing of BioXp kits and benchtop kits



As of May 1, 2021, we had 17 employees dedicated to operations, with ten focused on manufacturing, three focused on quality control and four focused on logistics.

Commercial Operations

We commercially launched our current solution in September 2019, which now includes the BioXp 3250 system, BioXp kits with associated cloud-based application scripts, and benchtop reagent kits. From the initial launch of our solution through May 1, 2021, we have launched a total of seven BioXp kits, three benchtop reagent kits, and several other synthetic biology products, including 12 SARS-CoV-2 full-length genomes as well as our Vmax X2 cells. We have placed approximately 36 BioXp 3250 systems globally. We target customers in the fields of personalized medicine, biologics drug discovery, vaccine development, genome editing and cell and gene therapy. As May 1, 2021, our customer base was composed of over 300 customers and included 15 of the 25 largest biopharmaceutical companies in the world ranked by 2020 revenue, excluding affiliates of those companies. Our customer base also includes leading academic research institutions, government institutions, CROs and synthetic biology companies.

One of our customers, NEB, accounted for 21% of our revenue for the year ended December 31, 2020, based on royalties paid under a Confidential Settlement Agreement. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" for further discussion on our relationship with NEB.

As of May 1, 2021, we employed a commercial team of 42 employees, many with significant industry experience. Of the 42 commercial employees, 33 were in sales, marketing and corporate development. As of May 1, 2021, our commercial team included 18 quota carrying sales professionals spanning business development managers, inside sales and field application scientists. We employ a direct sales model in North America and four major European markets (United Kingdom, Germany, France and Benelux), while selling through more than 15 channel partners across Europe, the Middle East, Africa and Asia Pacific.

Our commercial team is focused on driving active placements of BioXp systems and maximizing their utilization at the most iterative, costly and time-consuming steps across our customers' workflows. Potential customers can gain access to our system via direct purchases, services offerings or through strategic partnerships.

To maximize our commercial reach, we have distribution agreements with international channel partners for our products. These agreements allow us to reach approximately 60 countries globally, with key focus on networks in

Europe, the Middle East, Africa and Asia Pacific. We have a key European logistics hub in Italy in partnership with Bright Bioworks S.r.l and a relationship with a European software engineering company, Solvd, Inc., to support our customer portal and to provide European customer and technical support. We sell our products directly in the U.S., providing instrument field services through a hybrid of in-house and third party-contracted engineering support.

As of May 1, 2021, we employed a service and support team of nine employees focused on delivering an outstanding customer experience.

Competition

Our market is characterized by highly competitive and dynamic products, rapid technological advancements and continually evolving customer demands. We face competition from core synthetic biology systems, such as Thermo Fisher Scientific Inc.; Danaher Corporation; CureVac N.V.; GENEWIZ Group, which was acquired by Brooks Automation, Inc.; GenScript Biotech Corporation; DNA Script SAS; Integrated DNA Technologies, Inc.; Molecular Assemblies, Inc.; Nuclera Nucleics Ltd; Nutcracker Therapeutics, Inc.; Twist Bioscience Corporation; Aldevron, LLC; TriLink BioTechnologies, Inc. and others. Our competitors and their products and services are focused on discrete steps across various synthetic biology applications including gene synthesis, protein engineering, cell engineering, tools and automation, software, food and agriculture, materials, aquaculture, biopharmaceutical, health and others.

While our industry is composed of many companies offering services or discrete products, we believe there is a lack of an existing, comprehensive solution enabling end-to-end control of biologics and vaccine discovery and development workflows in-house.

Arrangements with Commercial and Governmental Entities

We believe that our technology is applicable to discovery and development in the following fields: vaccines, biologics, diagnostics, agriculture, animal health and food science. In the ordinary course of business, we enter into arrangements with commercial channel partners and others to maximize our commercial reach. For example:

- Our BioXp system allowed for rapid and accurate production of the SARS-CoV-2 spike protein gene used in the COVID-19 vaccine developed by Pfizer, Inc.
- We are in the process of establishing evaluation and service agreements with several smaller vaccine and therapeutically focused biotechnology companies.
- We have completed multiple outlicense and service/supply agreements with diagnostic product providers, enabling engineered synthetic controls for laboratory proficiency and diagnostic kits or drug screening services.
- We provided biofoundry services to Cellibre, Inc. and provided enriched libraries of synthetic DNA related to its cellular agriculture services.
- We have licensed our DNA technology to a food sciences company for cellular engineering in plant-based meat products.
- For product development and commercialization, we have entered into early access and beta test agreements with target customers to obtain their feedback on near-launch products prior to global product launch. Recent examples include Vmax C1 beta test material transfer agreements and BioXp script development agreements.
- We have also granted non-exclusive research product outlicenses to three research reagent providers under our Gibson Assembly patents and receive ongoing royalties on their sales of licensed products.

We are a sub-awardee of a multimillion-dollar, multiyear grant from the United States Department of Agriculture relating to screening and prevention of citrus greening diseases. We also work with several U.S. government laboratories and large state health laboratories to ensure prompt access to synthetic genomes useful for monitoring pandemic response.

We enter into these arrangements in the ordinary course of business and do not consider any one of them to be material to our business.

Intellectual Property

Protection of our intellectual property is fundamental to the long-term success of our business and is an important commercial strategy. Like other companies in the life sciences industry, we seek to protect our significant technologies by pursuing and maintaining patent protection. We also seek to protect aspects of our business as confidential know-how and as trade secrets. Our commercial success depends in part upon our ability to obtain and maintain protection afforded by laws directed toward intellectual property rights, to defend and enforce these rights and to operate without infringing the intellectual property rights of others.

The patent positions for high-technology, life sciences companies like ours are generally uncertain and can involve complex legal, scientific and factual issues. Issued patents are subject to interpretation as to their scope and applicability, and that uncertainty is typically not resolved in whole or in part except in litigation. Patent applications involve even more uncertainty because the scope of claims pending in a patent application may be significantly reduced or otherwise changed in order to obtain the grant of a patent. Moreover, even if granted, the scope, validity and enforceability of granted claims can be challenged in a variety of proceedings. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the relevant patent office, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, outside of the context of litigation *per se*. Such mechanisms include *ex parte* re-examination, *inter partes* review, post-grant review, derivation and pre- and post-grant opposition proceedings.

As a result, we cannot guarantee that any of our products or technologies will be protected or remain protectable by enforceable patents. We cannot predict whether any particular patent application that we are currently pursuing in any particular jurisdiction will be granted as a patent or whether the claims of any patents we obtain will sufficiently exclude others from making, using or selling products or services in competition to us. Nor can we guarantee that third parties will not circumvent our patent claims by designing around them.

Changes in the patent laws or interpretation of the patent laws in the United States or in other jurisdictions could increase these uncertainties and the costs surrounding prosecution of patent applications and enforcement or defense of issued patents. For instance, under the Leahy-Smith America Invents Act (the America Invents Act), enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application on a given invention is entitled to a patent on the invention regardless of whether a third party was the first to invent the claimed invention. The America Invents Act also provides for third-party submission of prior art to the USPTO during patent prosecution and additional procedures to challenge the validity of a patent after grant, including post-grant review and *inter partes* review. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Furthermore, the courts have held that patent claims that recite laws of nature are not patent eligible, but patent claims that recite sufficient additional features that provide practical assurance that claimed processes are genuine inventive applications of those laws may be patent eligible. But what constitutes a "sufficient" additional feature is the subject of uncertainty. The USPTO has published and continues to revise and publish guidelines for patent examiners to apply when examining claims for patent eligibility as the case law continues to evolve. Patent eligibility is also an area of the law under continual development in other jurisdictions around the world.

In addition, U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained.

Our patent portfolio includes more than 300 pending or issued cases worldwide. The portfolio focuses on instruments, devices and methods for synthesizing and assembling high-fidelity DNA, while also including genome engineering and editing technologies. The instrument portfolio includes domestic (U.S.) and foreign patents for the BioXp and the DBC instruments, which allow users to synthesize DNA molecules of specific sequence from pre-synthesized oligonucleotides or directly from digital DNA sequence using nucleotides, thus allowing users to rapidly synthesize DNA molecules on demand in their own laboratory. Further protection is provided by method patents

relating to molecular biology processes performed on the instruments, patents protecting a key instrument component and a bio-security component useable with the instruments to counter misuse. The DNA synthesis portfolio features the widely used Gibson Assembly method, a staple method in DNA laboratories around the world that allows users to join multiple DNA fragments in a single reaction.

Other highlights of the portfolio include a genome editing technology that provides an alternative technique to CRISPR/Cas9, a technology for generating synthetic genomes that permits the user to “pop in” novel genome segments containing pre-programmed functions, and a “watermarking” DNA data storage method for encoding human readable text conveying a non-genetic message into nucleic acid sequences. The portfolio also includes issued patents directed to “endotoxin free” *Vibrio* organisms that provide researchers with the ability to use the ultra-fast-growing *Vibrio natriegens* (Vmax) organism in research and production applications with reduced risks of endotoxin in the product. More recently filed patent applications relate to a technology focused on building DNA molecules of ultra-high fidelity suitable for synthetic biology applications, and a technology permitting users to synthesize any possible DNA sequence at high fidelity from a library having a limited number of oligonucleotide members.

The portfolio contains U.S. patents or allowed U.S. applications relating to the BioXp and DBC instruments, and our Gibson Assembly methods and several foreign patents relating to the BioXp systems and Gibson Assembly. The portfolio also contains U.S. patents or allowed U.S. applications relating to our fast-growing *Vibrio natriegens* host cell organisms and numerous granted foreign patents for our various DNA synthesis methods.

The portfolio includes patents and pending patent applications in three main technology areas of instrumentation, DNA synthesis and assembly and genome engineering, as follows:

Instrumentation

As of March 1, 2021, this section of the portfolio contains one allowed U.S. patent application relating to the BioXp and an issued U.S. patent for the DBC. In Australia, we have patents for both BioXp and DBC; and in Japan we have a patent for BioXp and a pending application for DBC. Other patent applications are pending in the EPO, Canada, China, Israel, and India. The nominal terms of the foregoing patents (including any patents granted on the pending applications) will expire in 2033. In addition, the portfolio contains patents to a key instrument component, a lid engineered to enclose a sample retention area within the very small confines of a laboratory instrument, issued in the U.S., Australia, and China, with a corresponding application pending in the EPO. The nominal terms of the foregoing patents (including any patent granted on the pending application) will expire in 2035. This section of the portfolio also features two U.S. patents relating to a bio-security component to counter misuse of the BioXp and DBC instruments; the nominal term of these patents will expire in 2035.

DNA Synthesis and Assembly

This section of the portfolio features the Gibson Assembly patents, and contains patents in the U.S., Europe (validated in seven European Patent Convention (EPC) member countries), Japan, India, Israel, and Canada, with pending applications in China and Singapore. The nominal terms of the foregoing patents (including any patents granted on the pending applications) will expire in 2029. In addition, this section includes a recently filed U.S. application and PCT application, and a second recently filed U.S. application, each relating to advanced methods of enzymatic DNA synthesis from a pre-manufactured library of components. These applications are still unpublished and remain confidential. Additionally, as of March 1, 2021, this section of the portfolio features:

- patents for our advanced error correction technology in the U.S., Europe (validated in seven EPC member countries), Japan, Australia, and China, expiring in 2033; corresponding applications are pending in Israel, India, Singapore. The portfolio also contains patents to an earlier error correction technology issued in the U.S., Europe (validated in six EPC member countries), Japan, Canada, and Australia, expiring in 2026;
- a pending U.S. application to a “PCR variant” method for assembling DNA molecules. The nominal term of any patent granted on this application would expire in 2037;
- patents covering our earlier (pre-Gibson Assembly) DNA assembly methods issued in the U.S. (two patents), Canada (one patent), Malaysia (one patent), and Europe (two patents, each validated in six EPC member countries), expiring in 2026;

- patents relating to a method of sequencing and retrieving individualized or monoclonized nucleic acids from a solid support, issued in the U.S. (four patents) and Europe (three patents, each validated in eight EPC member countries), expiring in 2027;
- issued patents to a PEG-mediated DNA assembly method in Europe (validated in seven EPC member countries), Australia, and Singapore, expiring in 2033, with corresponding applications pending in the U.S., Japan, Israel, India, Canada, and China;
- patents relating to a method of building large DNA molecules, issued in the U.S., Europe (validated in six EPC member countries), Japan, India, China, Australia, Singapore, and Malaysia, expiring in 2028; and
- issued patents to our Rolling Circle Amplification method in the U.S., Europe (validated in six EPC member countries), China, India, Australia, Israel, Brazil, and Hong Kong, expiring in 2026.

Genome engineering

This portfolio family contains one U.S. patent covering a vector useful in *Vibrio* organisms, expiring in 2036. This family also contains applications for a low endotoxin *Vibrio natriegens* host cell in the U.S. (allowed), Europe and Canada, which if granted as patents would expire in 2037. Additionally, this portfolio contains pending U.S. and European applications relating to a *Vibrio* organism that remains culturable after storage at low temperatures, which if granted would expire in 2038. Additionally, as of March 1, 2021, this section of the portfolio features:

- a recently allowed U.S. patent application covering our genome editing “pop in cassette” technology, as well as pending foreign applications in Canada and Australia;
- one recently allowed U.S. patent application relating to a method of editing a gene (an alternate method to CRISPR-Cas9). This family also includes patents relating to methods of cloning donor genomes and making synthetic cells issued in the U.S. (two patents), Europe (one patent validated in five EPC member countries), Japan (three patents), China (two patents), India (one patent), Australia (one patent) and Israel (two patents), expiring in 2030;
- patents relating to methods of creating synthetic cells and nucleic acid constructs issued in the U.S. (two patents), Europe (two patents, each validated in six EPC member countries), Japan (two patents), Canada (two patents), Australia (two patents) and Taiwan (one patent), expiring in 2026;
- patents relating to transplantation of a *Mycoplasma* genome issued in the U.S., Europe (validated in five EPC member countries), Japan, China, India, Australia, Israel and Singapore, expiring in 2028;
- patents relating to encoding identifying watermark sequences into genomes issued in the U.S., Europe (validated in six EPC member countries), Canada, Australia and South Africa, expiring in 2030; and
- patents relating to a method of transferring a genome from a bacteria into a yeast host cell issued in the U.S. and Europe (validated in the UK, Germany, and France), expiring in 2033.

We protect other valuable aspects of our business as confidential know-how, and, if eligible, as trade secrets. For example, we protect certain aspects of our manufacturing processes as trade secrets. Although trade secret protection does not expire as long as the protected information is kept secret from the public, it can be challenging to maintain such efforts. We implement measures designed to protect our trade secrets and other confidential proprietary information, including by physically restricting access to our premises and physically or electronically securing our confidential information, as well as by requiring our employees, consultants, scientific advisors, contractors and commercial partners to execute non-disclosure agreements. However, third parties may independently develop the subject matter of trade secrets that we hold, in which case we have no remedy if such parties should use such subject matter in furtherance of their own commercial interests. Further, while the law may provide remedies against third-party misappropriation or other unlawful access to our trade secrets and other proprietary information, such remedies may be difficult to obtain in practice and may not make our business whole even if successfully obtained. As a result, we may be unable to obtain meaningful benefits from laws intended to protect trade secrets or similar intellectual property rights.

In addition, third parties may initiate litigation against us alleging infringement, misappropriation or other violation of their proprietary rights or seeking a declaration of their noninfringement of our intellectual property rights. An adverse result in any such proceeding could include enjoining of the commercialization of our products, result in significant damages and have a material adverse effect on our business. Even if we are successful in any such

litigation, we may be required to incur significant costs and dedicate significant personnel time in defending such litigation.

Government Regulation

FDA Medical Device Regulation

The development, testing, manufacturing, marketing, post-market surveillance, distribution, promotion, advertising and labeling of certain of medical devices are subject to regulation in the United States by the FDA under the Federal Food, Drug, and Cosmetic Act (FDC Act) and comparable state and international agencies. FDA defines a medical device as an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent or other similar or related article, including any component part or accessory, which is (i) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or (ii) intended to affect the structure or any function of the body of man or other animals and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes. Medical devices to be commercially distributed in the United States must receive from the FDA either clearance of a premarket notification, known as 510(k), or premarket approval pursuant to the FDC Act prior to marketing, unless subject to an exemption.

The FDA classifies medical devices into one of three classes. Devices deemed to pose lower risk to the patient are placed in either class I or II, which, unless an exemption applies, requires the manufacturer to submit a pre-market notification requesting FDA clearance for commercial distribution pursuant to Section 510(k) of the FDC Act. This process, known as 510(k) clearance, requires that the manufacturer demonstrate that the device is substantially equivalent to a previously cleared and legally marketed 510(k) device or a "pre-amendment" class III device for which pre-market approval applications (PMAs) have not been required by the FDA. This FDA review process typically takes from four to twelve months, although it can take longer. Most class I devices are exempted from this 510(k) premarket submission requirement. If no legally marketed predicate device can be identified for a new device to enable the use of the 510(k) pathway, the new device is automatically classified under the FDC Act as class III, which generally requires PMA approval. However, FDA can reclassify or use *de novo* classification for a device that meets the FDC Act standards for a class II device, permitting the device to be marketed without PMA approval. To grant such a reclassification, FDA must determine that the FDC Act's general controls alone, or general controls and special controls together, are sufficient to provide a reasonable assurance of the device's safety and effectiveness. The *de novo* classification route is generally less burdensome than the PMA approval process.

Devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting, or implantable devices, or those deemed not substantially equivalent to a legally marketed predicate device, are placed in class III. Class III devices typically require PMA approval. To obtain PMA approval, an applicant must demonstrate the reasonable safety and effectiveness of the device based, in part, on data obtained in clinical studies. All clinical studies of investigational medical devices to determine safety and effectiveness must be conducted in accordance with FDA's investigational device exemption (IDE) regulations, including the requirement for the study sponsor to submit an IDE application to FDA, unless exempt, which must become effective prior to commencing human clinical studies. PMA reviews generally last between one and two years, although they can take longer.

Additionally, modifications that could significantly affect the safety and effectiveness of any FDA cleared or approved products, such as changes to the intended use or technological characteristics of the products, will require new 510(k) clearances or PMAs for those distributed in the U.S., or similar foreign marketing authorizations for those distributed outside of the U.S., or require the manufacturer to recall or cease marketing the modified devices until these clearances or approvals are obtained. In particular, even after approval of a PMA, a new PMA or PMA supplement may be required in the event of a modification to the device, its labeling or its manufacturing process. Supplements to a PMA may require the submission of the same type of information required for an original PMA, except that the supplement is generally limited to that information needed to support the proposed change from the product covered by the original PMA.

If we decide to expand our products in the future to include clinical or diagnostic products that are regulated by FDA as medical devices, we will be required to delay marketing and commercialization while we obtain premarket clearance or approval from the FDA. There would be no assurance that we could ever obtain such clearance or approval. Obtaining the requisite regulatory approvals, including the FDA quality system inspections that are required for PMA approval, can be expensive and time consuming. The regulatory approval process for such

products may be significantly delayed, may be significantly more expensive than anticipated, and may conclude without such products being approved by the FDA. Without timely regulatory clearance or approval, we will not be able to launch or successfully commercialize any diagnostic or clinical medical devices that we may develop in the future.

If regulated as a medical device, after a medical device is placed on the market, numerous regulatory requirements apply, including but not limited to the quality manufacturing requirements set forth in the QSRs, labeling regulations, the FDA's general prohibition against promoting products for unapproved or "off label" uses, registration and listing, the Medical Device Reporting regulation, and the Reports of Corrections and Removals regulation. The FDA can enforce pre- and post-market requirements by unannounced inspection, market surveillance and other means. If the FDA finds a violation, it can institute a wide variety of enforcement actions, ranging from an untitled regulatory letter or a warning letter, to more severe sanctions such as fines, injunctions and civil penalties; recall or seizure of products; operating restrictions, partial suspension or total shutdown of production; refusing requests for 510(k) clearance or PMA approval of new products; withdrawing 510(k) clearance or PMA approvals already granted; and criminal prosecution.

Products Labeled and Marketed for Research Use Only

We label and sell our products for research use only (RUO) and expect to sell them to academic institutions, life sciences and research laboratories that conduct research, and pharmaceutical and biotechnology companies for non-diagnostic and non-clinical purposes. Our RUO products are not intended or promoted for use in clinical practice in the diagnosis of disease or other conditions, and they are labeled for research use only. Accordingly, we believe our products, as we currently intend to market them, are not subject to regulation by FDA. Although FDA regulations require that RUO products be labeled with "For Research Use Only. Not for use in diagnostic procedures," the regulations do not subject such products to the FDA's jurisdiction or the broader pre- and post-market controls for medical devices.

In November 2013, the FDA issued a final guidance on products labeled RUO, which, among other things, reaffirmed that a company may not make any clinical or diagnostic claims about an RUO product, stating that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA's clearance, approval, or other regulatory requirements if the totality of circumstances surrounding the distribution of the product indicates that the manufacturer knows its product is being used by customers for diagnostic uses or the manufacturer intends such a use. These circumstances may include, among other things, written or verbal marketing claims regarding a product's performance in clinical or diagnostic applications and a manufacturer's provision of technical support for such activities. If FDA were to determine, based on the totality of circumstances, that our products labeled and marketed for RUO are intended for diagnostic purposes, they would be considered medical devices that will require clearance or approval prior to commercialization. Further, sales of devices for diagnostic or clinical purposes may subject us to additional healthcare regulation. We continue to monitor the changing legal and regulatory landscape to ensure our compliance with any applicable rules, laws and regulations.

As discussed above, although our products are currently labeled and sold for research purposes only, the regulatory requirements related to marketing, selling, and supporting such products could be uncertain and depend on the totality of circumstances. This uncertainty exists even if such use by our customers occurs without our consent. If the FDA or other regulatory authorities assert that any of our RUO products are subject to regulatory clearance or approval, our business, financial condition, or results of operations could be adversely affected.

In the future, certain of our products or related applications could become subject to regulation as medical devices by the FDA. For example, if we wish to label and expand product lines to address the diagnosis of disease or for use for a clinical purpose, regulation by governmental authorities in the United States and other countries will become an increasingly significant factor in development, testing, production, labeling, promotion, and marketing. Products that we may develop in the diagnostic, clinical, and healthcare markets, depending on their intended use, may be regulated as medical devices or in vitro diagnostic products (IVDs) by the FDA and comparable agencies in other countries. In the United States, distribution or marketing of medical devices will require us to comply with pre-market and post-market controls imposed by the FDA, unless an exemption applies, and we would be required to obtain either prior 510(k) clearance or prior premarket approval from the FDA before commercializing such medical device.

Laboratory Developed Tests (LDTs)

In some cases, our customers may use our RUO products in their own LDTs or in other FDA-regulated products for clinical diagnostic use, which can also increase our liability. LDTs are developed, validated and used within a single laboratory. In the past, the FDA generally exercised enforcement discretion for LDTs and did not require clearance or approval prior to marketing. On October 3, 2014, FDA issued two draft guidances that proposed to actively regulate LDTs using a risk-based approach, which would have required 510(k)s or PMAs for certain "moderate" or "high" risk devices. However, in late November 2016, FDA announced that it would not finalize the 2014 draft LDT guidance. More recently, the FDA has issued warning letters to genomics labs for illegally marketing certain genetic tests without prior FDA clearance or approval, noting that the FDA has not created a legal "carve-out" for LDTs and retains discretion to take action when appropriate, such as when certain genomic tests raise significant public health concerns. As manufacturers develop more complex genetic tests and diagnostic software, the FDA may increase its regulation of LDTs.

In August 2020, the HHS announced rescission of guidance and other informal issuances of the FDA regarding premarket review of LDT absent notice-and-comment rulemaking, stating that, absent notice-and-comment rulemaking, those seeking approval or clearance of, or an emergency use authorization, for an LDT may nonetheless voluntarily submit a premarket approval application, premarket notification or an Emergency Use Authorization request, respectively, but are not required to do so. The impact of this HHS rescission policy, including whether or how this policy will be implemented under the current administration, as well as other legislative, executive, and agency actions of the current administration remains unclear. The Biden administration has also issued a "regulatory freeze" memorandum that directs department and agency heads to review any new or pending rules of the prior administration. Any restrictions or heightened regulatory requirements on LDTs, IVDs, or RUO products by the FDA, HHS, Congress, or state regulatory authorities may decrease the demand for our products, increase our compliance costs, and negatively impact our business and profitability. We will continue to monitor and assess the impact of changing regulatory landscape on our business.

International Medical Device Regulation

To the extent we decide to seek regulatory marketing authorization for certain of our products in countries outside of the United States, we or our partners, or collaborators, will need to obtain regulatory marketing authorization for such products for the intended use in the jurisdiction where such products will be marketed. Regulatory clearance or approval in one jurisdiction does not mean that we will be successful in obtaining regulatory marketing authorization in other jurisdictions where we conduct business.

Sales of such medical products outside the United States will likely be subject to foreign regulatory requirements, which can vary greatly from country to country, as well as FDA regulation on export of medical devices. The European Commission has adopted numerous directives and standards that address regulation of the design, manufacture, labeling, clinical studies and post-market vigilance for medical devices. Under the centralized authorization procedure, devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be marketed throughout the European Union and European Economic Area member states. The European Medical Device Regulation (MDR), which will replace Europe's Medical Device Directive (MDD), will be effective on May 26, 2021. Additionally, the In Vitro Diagnostic Regulation (IVDR 2017/746), which addresses several weaknesses of the In Vitro Diagnostic Directive (IVDD 98/79/EC), will apply starting on May 26, 2022. Compliance with these and other regulations outside of the United States will increase our compliance costs and exposure to liability.

Other Government Regulations

In the United States, various federal and state regulators, including governmental agencies like the Consumer Financial Protection Bureau and the Federal Trade Commission, have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international or other state laws, and such laws may differ from each other, all of which may complicate compliance efforts. For example, the CCPA, which increases privacy rights for California residents and imposes obligations on companies that process their personal information, came into effect on January 1, 2020. Among other things, the CCPA requires covered companies to provide new disclosures to California consumers and provide such consumers new data protection and privacy rights, including the ability to opt-out of certain sales of personal information. The CCPA

provides for civil penalties for violations, as well as a private right of action for certain data breaches that result in the loss of personal information. This private right of action may increase the likelihood of, and risks associated with, data breach litigation. In addition, laws in all 50 U.S. states require businesses to provide notice to consumers whose personal information has been disclosed as a result of a data breach. State laws are changing rapidly and there is discussion in the U.S. Congress of a new comprehensive federal data privacy law to which we would become subject if it is enacted.

Although we take measures to protect sensitive data from unauthorized access, use or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers or viruses or breached due to employee error, malfeasance or other malicious or inadvertent disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, manipulated, publicly disclosed, lost or stolen. Any such access, breach or other loss of information could result in legal claims or proceedings, and liability under federal or state laws that protect the privacy of personal information, such as the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Health Information Technology for Economic and Clinical Health Act, and regulatory penalties. Notice of breaches must be made to affected individuals, the Secretary of the Department of HHS, and for extensive breaches, notice may need to be made to the media or State Attorneys General. Such a notice could harm our reputation and our ability to compete.

In the future, to the extent we develop any clinical or diagnostic medical devices, our operations in the United States and abroad will be subject to various healthcare laws and enforcement by the applicable government agencies. Such laws include, without limitation, federal and state anti-kickback or anti-referral laws; healthcare fraud and abuse laws; false claims laws; federal and state privacy and security laws, such as HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), CCPA, and CPRA; Physician Payments Sunshine Act and related state transparency and manufacturer reporting laws; marketing compliance and advertising laws; and other laws and regulations applicable to medical device manufacturers. If we expand our business outside of the United States, we would be subject to additional laws and regulations in countries where we conduct business, including but not limited to the GDPR. These laws may impact our operations directly, or indirectly through our contractors, agents, or customers, and may impact, among other things, our sales and marketing strategy.

If our operations are found to be in violation of any of the federal, state, and foreign laws described above or any other current or future fraud and abuse or other healthcare laws and regulations that apply to us, we may be subject to significant penalties, including significant criminal, civil, and administrative penalties, damages, fines, imprisonment for individuals, exclusion from participation in government programs, such as Medicare and Medicaid, and we could be required to curtail or cease our operations. Any of the foregoing consequences could seriously harm our business and our financial results.

Given the evolving nature of our industry, legislative bodies or regulatory authorities may adopt additional regulation or expand existing regulation to include our products and services. Changes to the current regulatory framework, including the imposition of additional or new regulations, could arise at any time, and we may be unable to obtain or maintain comparable regulatory authorization for our products and services, if required. These regulations and restrictions may materially and adversely affect our business, financial condition, and results of operations.

Facilities

Our principal facility is located at 9535 Waples Street in San Diego, California and functions as our worldwide headquarters. The facility is approximately 28,000 sq. ft. on two stories and was leased from BioMed Realty. The lease expires in January 2025 and has an option to extend for an additional five years at the then current fair market value rental rate for comparable office and laboratory space. The 9535 Waples building contains infrastructure for reagent manufacturing and for research and development of new products, as well as for supporting supply chain, logistics, and office space for administrative and commercial functions. The facility includes wet labs for both reagent manufacturing and research and development on both floors as well as specialized labs for instrument engineering to support the development of new instruments. A designated instrument services lab space supports our current instrument installed base customers.

Employees and Human Capital

As of May 1, 2021, we had 96 full-time employees in the United States and five full-time employees located internationally. Our team includes: 42 in commercial sales, marketing, and support, 17 in manufacturing and

operations, 12 in research and development, 11 in engineering, and 19 in general and administrative functions. None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

Our people and culture objectives include, as applicable, identifying, recruiting, retaining, and integrating our existing and new employees, advisors and consultants into our company and culture. The principal purposes of our cash and equity incentive plans are to attract, retain and reward personnel through the granting of cash-based and stock-based compensation awards, in order to increase stockholder value and the success of our company by incentivizing such individuals to perform to the best of their abilities and achieve our short- and long-term business goals.

We offer other elements of compensation to our employees like health and wellness benefits. Our full-time employees are eligible to participate in our health plans, including medical, dental and vision benefits; flexible spending accounts; short-term and long-term disability insurance; and life and accidental death and disability insurance. We believe that providing a 401(k) savings plan for our employees also promotes financial wellness during retirement.

A great culture attracts great people. We strive to create an environment where our people are always innovating and creating solutions that will change the world. We have a customer first mindset which includes understanding customer needs and delivering value every day. We grow and develop our people, and similarly, we are relentless about growing the impact of synthetic biology. We build trust by conducting our business with honesty, integrity and respect. We also listen and collaborate to promote an inclusive environment.

Legal Proceedings

From time to time, we are involved in claims and legal proceedings or investigations, that arise in the ordinary course of business. Such matters could have an adverse impact on our reputation, business and financial condition and divert the attention of our management from the operation of our business. These matters are subject to many uncertainties and outcomes that are not predictable.

Codexis Trademark Litigation

In May 2020 Codexis, Inc. (Codexis) filed a complaint against us relating to our CODEX DNA name based on its rights in the CODEX and CODEXIS mark in the U.S. District Court, Northern District of California for federal and common law trademark infringement and unfair competition/false designation (the Complaint). Codexis seeks injunctive relief, including that we cease all use of the term CODEX and any other trademark confusingly similar to the marks CODEX and CODEXIS and not apply for registration of or register the CODEX mark or any other mark confusingly similar to the CODEX or CODEXIS marks, transfer to Codexis all domain names and social media accounts/user names that include the term "codex" and pay damages (consisting of Codexis's actual damages, a disgorgement of our profits and punitive damages as permitted by California common law) as well as attorneys' fees and costs.

According to the Complaint, Codexis primarily operates in the field of protein engineering and began using the CODEXIS and CODEX marks in or before 2006 and 2007, respectively. Codexis also asserts that it owns U.S. Trademark Registrations 3177355, 3779907, 87706489, 87706494 for the marks CODEXIS, CODEX, CODEXIS & Design, and CODEXIS PROTEIN ENGINEERING EXPERTS & Design for biochemical, chemical and scientific research services and product development and chemicals and biochemicals for research and commercial applications pertaining to chemistry, pharmaceuticals and medicines, among other things.

We do not currently own a U.S. trademark registration or U.S. trademark application for CODEX or Codex DNA but we do not believe there is any material customer confusion as a result of our use of the CODEX DNA name. In April 2020, we began using the name CODEX DNA, a rebrand from our prior name SGI-DNA to empower scientific researchers in academic and commercial setting. We plan to vigorously defend ourselves. This litigation is in the discovery phase and no dispositive motions have been filed. If we cannot resolve this matter with Codexis, then a jury trial is set for March 2022.

Eurofins Pharma Non-Competition/Non-Solicitation Litigation

In October 2018, Eurofins Pharma US Holdings II, Inc. (EPUSH II) and Eurofins DiscoverX Corporation (Eurofins DiscoverX) (collectively, Plaintiffs) filed a complaint against Todd R. Nelson, SGI-DNA, Inc. (SGI-DNA, which is our

prior name) and Synthetic Genomics, Inc. (our former parent company, and together with Dr. Nelson and SGI-DNA, the Defendants) to enforce non-competition and non-solicitation provisions of an agreement.

In September 2017, EPUSH II acquired DiscoveRx (now Eurofins DiscoverX), with Dr. Nelson as the acting Chief Executive Officer. As a condition of the closing, in July 2017, Dr. Nelson signed a Confirmation of Sales of Shares of Stock and Goodwill by Merger with Covenant Not to Compete Agreement (the Non-Compete Agreement). The Non-Compete Agreement established that Dr. Nelson would transfer stock and goodwill. In addition, the Non-Compete Agreement stipulated that for a period of three years, Dr. Nelson agreed not to hire, influence or solicit any employee of DiscoveRx or its affiliates. He also agreed to disclose the Non-Compete Agreement and its restrictions to any future employer and to notify EPUSH II of any employment with another entity during the three-year period. According to the complaint, in July 2018, Dr. Nelson became the Chief Executive Officer of SGI-DNA but failed to provide notice of the employment to EPUSH II. Subsequently, Dr. Nelson allegedly also solicited and hired two Eurofins DiscoverX employees. In August 2018, Plaintiffs sent a letter to Dr. Nelson and SGI-DNA claiming that Dr. Nelson breached the Non-Compete Agreement and seeking concessions from Defendants. Defendants have denied liability, challenged the enforceability of the Non-Compete Agreement and rejected Plaintiffs' demands.

The complaint, filed in the Superior Court of California, County of San Diego, charges Dr. Nelson with breach of contract, SGI-DNA with tortious interference, and both with unfair competition. The complaint seeks permanent injunctive relief, monetary damages and other equitable relief (including restitution) against the Defendants. The civil jury trial, initially scheduled for April 24, 2020, has been rescheduled to August 27, 2021.

On April 9, 2021, the Defendants filed a motion for summary judgment, or in the alternative, summary adjudication, with regard to all causes of action. A hearing on this motion has been scheduled for June 25, 2021.

MANAGEMENT

Executive Officers, Key Employees and Directors

The following table sets forth the names, positions and ages of our executive officers, key employees and directors as of March 31, 2021:

Name	Age	Position
Executive Officers:		
Todd R. Nelson	54	President, Chief Executive Officer & Director
Timothy E. Cloutier	47	Senior Vice President, Commercial Operations
Daniel G. Gibson	44	Chief Technology Officer
Jennifer I. McNealey	47	Chief Financial Officer
Key Employees:		
Thomas H. Braden	65	Vice President, Global Operations
Justin O. Emory	42	Vice President, Information Technology
Laura B. Puga	41	Vice President, People and Culture
Madoo Varma	64	Vice President, Corporate Development
Laurence Warden	57	Vice President, Engineering and Instrumentation
Non-Employee Directors:		
Sharon Kedar ⁽⁴⁾	46	Director
Andrea L. Jackson ⁽²⁾⁽³⁾⁽⁴⁾	42	Director
Jami D. Nachtsheim ⁽²⁾⁽³⁾⁽⁵⁾	62	Director
William F. Snider ⁽¹⁾⁽²⁾	51	Director
Christine A. Tsingos ⁽¹⁾⁽⁶⁾	62	Director
Franklin R. Witney ⁽¹⁾⁽²⁾	67	Chair of the Board of Directors

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the corporate governance and nominating committee

(4) Ms. Jackson replaced Ms. Kedar on the board of directors in May 2021

(5) Ms. Nachtsheim has agreed to join the board of directors in June 2021

(6) Ms. Tsingos joined the board of directors in May 2021

Executive Officers

Todd R. Nelson. Dr. Nelson has served as our President and Chief Executive Officer and a member of our board of directors since July 2018. Prior to joining our company, Dr. Nelson served as the Chief Executive Officer of several life science companies through expansive phases of financial and commercial growth. From December 2014 until its acquisition by Beacon Discovery, Inc. in September 2017, Dr. Nelson served as Chief Executive Officer of DiscoverX Corporation, a leading developer and manufacturer of reagents intended for drug discovery. From September 2011 to October 2014, Dr. Nelson served as Chief Executive Officer of MP Biomedicals, LLC a global manufacturer and distributor of products and services for the life science, fine chemicals, diagnostics and dosimetry markets. From June 2007 to January 2011, Dr. Nelson served as Chief Executive Officer of eBioscience, Inc., a manufacturer and distributor of immunology reagents used in pharmaceutical research. Dr. Nelson also previously served as Vice President of Global Corporate Development and Strategy at Life Technologies Corporation (now Thermo Fisher Scientific Inc.), as First Vice President Global Securities and Economics at Merrill Lynch & Co., and as Global Head of Life Sciences at RBC Capital Markets LLC. Dr. Nelson currently serves on the board of directors of Tonbo Biosciences Corporation and TCRx Corporation. Dr. Nelson received a B.A. in Psychology, a Ph.D. from the University of Minnesota and an M.B.A. in Finance from the Carlson School of Management at the University of

Minnesota. Dr. Nelson also completed clinical fellowship training at Mayo Graduate School of Medicine in clinical chemistry from 1996 to 1998.

We believe that Dr. Nelson is qualified to serve on our board of directors due to his leadership track record, broad experience in the life sciences industry, and his service as our chief executive officer and president.

Timothy E. Cloutier. Dr. Cloutier has served as our Senior Vice President of Commercial Operations since September 2020. From April 2019 to August 2020, Dr. Cloutier served as Vice President of Marketing and Portfolio Strategy at BioLegend, Inc., global developer and manufacturer of antibodies and reagents used in biomedical research. While at BioLegend, Dr. Cloutier led the development and execution of strategic business, marketing, and commercial plans. From May 2016 to April 2019, Dr. Cloutier served as Director of Strategic Marketing and Portfolio Management at Progenity, Inc. a biotechnology company that provides molecular and diagnostic prenatal tests. From January 2013 to May 2016, Dr. Cloutier served as Director of Commercialization Operations at Illumina, Inc., a developer and manufacturer of integrated systems for the analysis of genetic variation and biological function. Dr. Cloutier received a B.S. in Zoology from Michigan State University and a Ph.D. in Biochemistry from the Albert Einstein College of Medicine.

Daniel G. Gibson. Dr. Gibson has served as our Chief Technology Officer since August 2018. From February 2011 to August 2018, Dr. Gibson served in various roles at Synthetic Genomics, Inc., our former parent company and a biotechnology company focused on synthetic biology, including Principal Scientist and Vice President of DNA Technology. Dr. Gibson was responsible for developing new synthetic biology technology for application in a broad range of industries. Since 2004, Dr. Gibson has also served as a professor in the synthetic biology group at the J. Craig Venter Institute, a non-profit genomics research institute. Dr. Gibson earned a B.S. in Biological Sciences from the State University of New York at Buffalo and a Ph.D. in Molecular Biology from the University of Southern California.

Jennifer I. McNealey. Ms. McNealey has served as our Chief Financial Officer since March 2021. From February 2015 to March 2021, she served as Vice President of Investor Relations and Strategy at Calithera Biosciences, Inc., a clinical-stage biopharmaceutical company. Prior to that, Ms. McNealey served as an advisor to other biotechnology companies, and founded Laurient, LLC, an independent research company focused on the biotechnology and pharmaceutical industries. Ms. McNealey has also served as a portfolio manager and biotechnology analyst at Franklin Templeton Investments, Amerindo Investment Advisors and Morgan Stanley Dean Witter Advisors. Ms. McNealey currently serves as a member of the board of directors of Antibe Therapeutics, Inc. and Enzon Pharmaceuticals, Inc. Ms. McNealey received a B.A. and an M.H.A. from Cornell University.

Each of our executive officers serves at the discretion of our board of directors and holds office until his successor is duly elected and qualified or until his earlier resignation or removal.

Key Employees

Thomas H. Braden. Mr. Braden has served as our Vice President of Global Operations since July 2018. From March 2016 to July 2018, Mr. Braden served as a Biotech Consultant at Braden Consulting, LLC, a consulting services company. From March 2009 to March 2016, Mr. Braden served as Vice President of Global Operations at eBioscience, Inc., a manufacturer and distributor of reagents and key substances used in pharmaceutical research. Mr. Braden has previously served as Vice President of Operations of several life sciences companies including Pharmingen Inc. and Invitrogen Corporation and as an independent Biotechnology Consultant for DiscoverX Corporation, Tonbo Biosciences Corporation, and Tearfilm Incorporated. Mr. Braden earned a B.S. in Biology/Chemistry from Eastern Kentucky University.

Justin O. Emory. Mr. Emory has served as our Vice President of Information Technology since January 2021. From August 2015 to January 2021, Mr. Emory held various information technology leadership roles at Illumina, Inc., a developer and manufacturer of integrated systems for the analysis of genetic variation and biological function. While at Illumina, Mr. Emory was responsible for leading the commercial digital transformation across marketing, sales and service. Mr. Emory earned a B.S. in Business Administration in Management Information Systems and Production Operations Management from California State University, Chico.

Laura B. Puga. Ms. Puga has served as our Vice President of People and Culture since October 2019. From May 2017 to July 2019, Ms. Puga held various roles in human resources at DexCom, Inc., a company that develops,

manufactures, and distributes continuous glucose monitoring systems for diabetes management. From March 2015 to May 2017, Ms. Puga served as Associate Director of Human Resources, Global Operations and Quality at Illumina, Inc., a developer and manufacturer of integrated systems for the analysis of genetic variation and biological function. Ms. Puga earned a B.S. in Industrial and Labor Relations from Cornell University and an M.B.A in Managerial and Organizational Behavior from the University of Chicago Booth School of Business.

Madoo Varma. Dr. Varma has served as our Vice President of Corporate Development since January 2021. From January 2019 to December 2020, Dr. Varma served as Head of External Innovation and Business Development at Danaher Corporation, Molecular Devices, a global life science and technology innovator, which Dr. Varma joined via Danaher's acquisition of Labcyte, Inc. From January 2018 to January 2019, Dr. Varma served in various roles, including as a consultant and as Vice President of Business Development at Labcyte, Inc., a global biotechnology tools company. From April 2017 to December 2017, Dr. Varma served as an advisor to various life science start-ups and for a not-for-profit funding agency. From January 2016 to April 2017, Dr. Varma served as Managing Director, Licensing & Ventures at SRI International, a non-profit scientific research institute, where Dr. Varma was responsible for monetizing SRI International's small molecule and biologic assets to bio pharma companies. From January 2006 to January 2016, Dr. Varma served as General Manager, DNA sequencing incubation effort at Intel Corporation, a semiconductor technology company. Dr. Varma has over 25 years' experience serving in senior leadership roles in business and R&D management functions, including positions held at Applied Biosystems, Inc., Intel Corporation, Agilent Technologies, Inc., Genelabs Technologies, Inc. and Adeza Biomedical Corporation. In addition, Dr. Varma has had the unique experience of straddling both traditional biotech, diagnostics, and life sciences tool companies, as well as high tech focused on bioelectronics/digital health. Dr. Varma earned a B.S. from Delhi University and a Ph.D. in Genetics from Punjab Agricultural University in India. Dr. Varma earned her post-doctorate from Cambridge University on a Common-Wealth Scholarship.

Laurence Warden. Mr. Warden has served as our Vice President of Engineering and Instrumentation since March 2019. From June 2013 to March 2019, Mr. Warden served as Vice President of Engineering and Instrumentation at Synthetic Genomics, Inc., our former parent company and a biotechnology company focused on synthetic biology. Mr. Warden earned a B.A. in Industrial Arts from San Diego State University.

Non-Employee Directors

Andrea L. Jackson. Ms. Jackson has served as a member of our board of directors since May 2021. Ms. Jackson is a Director at Northpond Ventures, a science, medical and technology focused venture capital firm founded in 2018. Prior to joining Northpond in March 2020, Ms. Jackson served as the commercial lead at Farcast Biosciences, an oncology clinical diagnostic company. Prior to Farcast Ms. Jackson held various senior commercial leadership roles in life science startups and large companies such as PerkinElmer, Inc. and Millipore. Before her operating roles, Ms. Jackson worked on JPMorgan's Healthcare Investment Banking team and focused on life science tools, diagnostics, and biotechnology companies. Ms. Jackson is a board director of other emerging growth companies, including Current Health, NanoView Biosciences, Octave Bioscience, Outcomes4Me, Scitara Corporation, Syapse, Inc., VieCure and Vizgen. Ms. Jackson received an M.B.A. from Kellogg School of Management at Northwestern University and a B.A., with honors, from Washington University in St. Louis.

We believe that Ms. Jackson is qualified to serve on our board of directors because of her operational expertise and her experience as an investor in emerging growth companies.

Jami D. Nachtsheim. Ms. Nachtsheim has agreed to serve as a member of our board of directors starting in June 2021. From June 1980 until her retirement in June 2000, Ms. Nachtsheim served in a variety of positions at Intel Corporation, a semiconductor company, most recently as Corporate Vice President of the Sales and Marketing Group and Director of Worldwide Marketing. Since April 2016, Ms. Nachtsheim has served on the board of directors of Intuitive Surgical, Inc., a developer, manufacturer and marketer of robotic products designed to improve clinical outcomes of patients through minimally invasive surgery. Since March 2019, Ms. Nachtsheim has served on the board of directors of Cerus Corporation, a biomedical products company. Ms. Nachtsheim has previously served as a member of the board of directors of several privately held companies, including FEI Company, Affymetrix, Inc., Southwall Technologies Inc., ACT Conferencing, Inc. and Vixel Corporation. Ms. Nachtsheim received a B.S. in Business Management from Arizona State University.

We believe that Ms. Nachtsheim is qualified to serve on our board of directors because of her extensive experience in the life science industry and her service as a director of various public and private companies.

William F. Snider. Mr. Snider has served as a member of our board of directors since September 2019. Since 2006, Mr. Snider has served as Partner at BroadOak Capital Partners, LLC, a merchant bank with a focus on the life sciences industry. Prior to joining BroadOak, Mr. Snider was a general partner and co-founder of Emerging Technology Partners, LLC, a life sciences focused venture capital firm. Prior to Emerging Technology Partners, he was a vice president and portfolio manager at T. Rowe Price Group, Inc., a global investment management firm, where his responsibilities included managing mutual funds and institutional client portfolios. Mr. Snider also serves on the board of directors of Halo Labs, Inc., Science and Medicine Group, IXRF Systems, Inc., Cellaria Bio, Tonbo Biotechnologies, Inc., Empire Genomics and MdBio Foundation. Mr. Snider is a CFA charterholder and earned a B.S.E. in Finance and an M.B.A. from the Wharton School at the University of Pennsylvania.

We believe Mr. Snider is qualified to serve on our board of directors because of his extensive experience as an investor in the life sciences industry and his service on a number of boards of biotechnology companies.

Christine A. Tsingos. Ms. Tsingos has served as a member of our board of directors since May 2021. From 2002 until her retirement in April 2019, Ms. Tsingos served as the Executive Vice President and Chief Financial Officer of Bio-Rad Laboratories, Inc. Prior to 2002, Ms. Tsingos held executive positions at Autodesk, Inc., The Cooper Companies, Inc. and Attest Systems, Inc. Ms. Tsingos also serves on the board of directors of Envista Holdings, Inc., Onto Innovation Inc. (formerly Nanometrics Incorporated) and Varex Imaging Corporation. Ms. Tsingos earned her B.A. in International Studies from the American University in Washington D.C. and an M.B.A. in International Business from the George Washington University.

We believe Ms. Tsingos is qualified to serve on our board of directors because of her over 25 years of financial and operational experience and experience serving on other boards of directors.

Franklin R. Witney. Dr. Witney has served as a member of our board of directors since December 2020. Since September 2016, Dr. Witney has served as an Operating Partner at Ampersand Capital Partners, a private equity firm. From July 2011 to March 2016, Dr. Witney served as President and Chief Executive Officer of Affymetrix, Inc., a provider of life science products and molecular diagnostic products, until Affymetrix, Inc. was acquired by Thermo Fisher Scientific Inc. From April 2009 to May 2011, Dr. Witney served as President and Chief Executive Officer of Dionex Corporation, a provider of analytical instrumentation and related accessories and chemicals. From December 2008 to April 2009, Dr. Witney served as Affymetrix's Executive Vice President and Chief Commercial Officer. From July 2002 to December 2008, Dr. Witney served as President and Chief Executive Officer of Panomics Inc. Dr. Witney currently serves on the board of directors of PerkinElmer Inc. and Cerus Corporation and the private companies Nexcelom Biosciences LLC, and Emulate, Inc. He has previously served on the boards of Gyros Protein Technologies, RareCyte Inc., GeneOptx and Canopy Bioscience. Dr. Witney earned a B.S. in microbiology from the University of Illinois and a M.S. in microbiology and Ph.D in molecular and cellular biology from Indiana University.

We believe Dr. Witney is qualified to serve on our board of directors because of his substantial experience in the life science industry, which he acquired in various roles as officer and director of public and private companies.

Family Relationships

There are no family relationships among any of our directors or executive officers.

Board Composition

As of June 1, our board of directors will consist of six members. After the completion of this offering, the number of directors will be fixed from time to time by our board of directors, subject to the terms of our amended and restated certificate of incorporation and amended and restated bylaws. Each of our current directors will continue to serve as a director until the election and qualification of his or her successor, or until his or her earlier death, resignation or removal.

Our amended and restated certificate of incorporation will provide that our board of directors will be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective three-year terms. Our current directors will be divided among the three classes as follows:

- the Class I directors will be Todd R. Nelson and William F. Snider, and their terms will expire at the annual meeting of stockholders to be held in 2022;

- the Class II directors will be Andrea L. Jackson and Franklin R. Witney, and their terms will expire at the annual meeting of stockholders to be held in 2023; and
- the Class III directors will be Christine A. Tsingos and Jami D. Nachtsheim, and their terms will expire at the annual meeting of stockholders to be held in 2024.

At each annual meeting of stockholders, upon the expiration of the term of a class of directors, the successor to each such director in the class will be elected to serve from the time of election and qualification until the third annual meeting following his or her election and until his or her successor is duly elected and qualified, in accordance with our amended and restated certificate of incorporation. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one third of our directors.

This classification of our board of directors may have the effect of delaying or preventing changes in control of our company.

Director Independence

Upon the completion of this offering, we anticipate that our common stock will be listed on the Nasdaq Global Market. Under the rules of Nasdaq, independent directors must comprise a majority of a listed company's board of directors within one year of the completion of this offering. In addition, the rules of Nasdaq require that, subject to specified exceptions, each member of a listed company's audit, compensation and corporate governance and nominating committees be independent. Audit committee members and compensation committee members must also satisfy the independence criteria set forth in Rule 10A-3 and Rule 10C-1, respectively, under the Exchange Act. Under the rules of Nasdaq, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered to be independent for purposes of Rule 10A-3 and under the rules of Nasdaq, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries or (2) be an affiliated person of the listed company or any of its subsidiaries.

To be considered independent for purposes of Rule 10C-1 and under the rules of Nasdaq, the board of directors must affirmatively determine that each member of the compensation committee is independent, including a consideration of all factors specifically relevant to determining whether the director has a relationship to the company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including: (i) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the company to such director and (ii) whether such director is affiliated with the company, a subsidiary of the company or an affiliate of a subsidiary of the company.

Our board of directors undertook a review of its composition, the composition of its committees and the independence of our directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that Andrea Jackson, Jami D. Nachtsheim, William F. Snider, Christina A. Tsingos and Franklin R. Witney, representing five of our six directors, do not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the rules of Nasdaq.

In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director, and the transactions involving them described in the section titled "Certain Relationships and Related Party Transactions."

Board Leadership Structure

Our board of directors is currently chaired by Franklin R. Witney. As a general policy, our board of directors believes that separation of the positions of Chair of our board of directors and Chief Executive Officer reinforces the independence of our board of directors from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of our board of directors as a whole. As such, Todd R. Nelson serves as our Chief Executive Officer while Mr. Witney serves as the Chair of our board of directors but is not an officer.

Role of the Board in Risk Oversight

Our board of directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. Our board of directors is responsible for general oversight of risks and regular review of information regarding our risks, including credit risks, liquidity risks and operational risks. The compensation committee is responsible for overseeing the management of risks relating to our executive compensation plans and arrangements. The audit committee is responsible for overseeing the management of risks relating to accounting matters and financial reporting. The corporate governance and nominating committee is responsible for overseeing the management of risks associated with the independence of our board of directors and potential conflicts of interest. Although each committee is responsible for evaluating certain risks and overseeing the management of such risks, our entire board of directors is regularly informed through discussions from committee members about such risks.

Board Committees

Prior to the completion of this offering, our board of directors will have an audit committee, a compensation committee, and a nominating and corporate governance committee, each of which will have the composition and the responsibilities described below.

Audit Committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, the members of our audit committee will be Christine A. Tsingos, Franklin R. Witney and William F. Snider. Ms. Tsingos will be the chair of our audit committee and is an audit committee financial expert, as that term is defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act, and possesses financial sophistication, as defined under the rules of Nasdaq. Our audit committee will oversee our corporate accounting and financial reporting process and assist our board of directors in monitoring our financial systems. Our audit committee will also:

- select, retain, compensate, evaluate, oversee, and where appropriate, terminate the independent registered public accounting firm to audit our consolidated financial statements;
- help to ensure the independence and performance of the independent registered public accounting firm;
- approve audit and non-audit services and fees;
- review consolidated financial statements and discuss with management and the independent registered public accounting firm our annual audited and quarterly consolidated financial statements, the results of the independent audit and the quarterly reviews and the reports and certifications regarding internal controls over financial reporting and disclosure controls;
- prepare the audit committee report that the SEC requires to be included in our annual proxy statement;
- review reports and communications from the independent registered public accounting firm;
- review the adequacy and effectiveness of our internal controls and disclosure controls and procedure;
- review our policies on risk assessment and risk management;
- review the overall adequacy and effectiveness of our legal, regulatory, and ethical compliance programs and reports regarding compliance with applicable laws, regulations, and internal compliance programs;
- review related party transactions; and
- establish and oversee procedures for the receipt, retention and treatment of accounting related complaints and the confidential submission by our employees of concerns regarding questionable accounting or auditing matters.

Our audit committee will operate under a written charter, to be effective upon the effectiveness of the registration statement of which this prospectus forms a part, which will satisfy the applicable rules of the SEC and the listing standards of Nasdaq.

Compensation Committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, the members of our compensation committee will be Franklin R. Witney, Andrea L. Jackson and William F. Snider. Mr. Witney will be the chair of our compensation committee. Our compensation committee will oversee our compensation policies, plans and benefits programs. The compensation committee will also:

- oversee our overall compensation philosophy and compensation policies, plans and benefit programs;
- review and recommend for approval to the board of directors compensation for our executive officers and directors;
- prepare the compensation committee report that the SEC will require to be included in our annual proxy statement; and
- administer our equity compensation plans.

Our compensation committee will operate under a written charter, to be effective upon the effectiveness of the registration statement of which this prospectus forms a part, which will satisfy the applicable rules of the SEC and the listing standards of Nasdaq.

Nominating and Corporate Governance Committee

Upon the effectiveness of the registration statement of which this prospectus forms a part, the members of our nominating and corporate governance committee will be Jami D. Nachtsheim and Andrea L. Jackson. Ms. Nachtsheim will be the chair of our nominating and corporate governance committee. Our nominating and corporate governance committee will oversee and assist our board of directors in reviewing and recommending nominees for election as directors. Specifically, the nominating and corporate governance committee will:

- identify, evaluate and make recommendations to our board of directors regarding nominees for election to our board of directors and its committees;
- consider and make recommendations to our board of directors regarding the composition of our board of directors and its committees;
- review developments in corporate governance practices;
- evaluate the adequacy of our corporate governance practices and reporting;
- evaluate the performance of our board of directors and of individual directors; and
- review and monitor conflicts of interest situations, and approve or prohibit any involvement in matters that may involve a conflict of interest or taking of a corporate opportunity.

Our nominating and corporate governance committee will operate under a written charter, to be effective upon the effectiveness of the registration statement of which this prospectus forms a part, which will satisfy the applicable rules of the SEC and the listing standards of Nasdaq.

Director Compensation

Prior to this offering, we have not implemented a formal policy with respect to compensation payable to our non-employee directors. From time to time, we have granted cash retainers and equity awards to attract them to join our board of directors and for their continued service on our board of directors. We reimburse our directors for expenses associated with attending meetings of our board of directors and its committees.

In connection with this offering, we have adopted and intend to ask our stockholders to approve the terms of our non-employee director compensation policy.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)	All Other Compensation (\$)	Total (\$)
Sharon Kedar	—	—	—	—
William F. Snider	—	—	—	—
Franklin R. Witney	3,383 ⁽¹⁾	—	—	3,383

(1) Consists of a prorated portion of a \$70,000 annual retainer that was offered to Mr. Witney beginning in December 2020.

Dr. Nelson was our only employee who served as a director during 2020. See the section titled "Executive Compensation" for information about Dr. Nelson's compensation, which includes compensation Dr. Nelson received for serving as our Chief Executive Officer during 2020.

Non-Employee Director Compensation Policy

Prior to preparing for this offering, we did not have a formal policy with respect to compensation payable to our non-employee directors for their service as directors. In connection with this offering, our board of directors has adopted and we intend to ask our stockholders to approve a new compensation policy for our non-employee directors that will be effective as of the date of the effectiveness of the registration statement of which this prospectus forms a part. It is designed to attract, retain, and reward non-employee directors.

Under this compensation policy, each non-employee director will receive the cash and equity compensation for board services described below. We also will continue to reimburse our non-employee directors for reasonable, customary and documented travel expenses to board of directors meetings.

The compensation policy includes a maximum annual limit of \$750,000 of cash compensation and equity awards that may be paid, issued, or granted to a non-employee director in any fiscal year, increased to \$1,000,000 in an individual's first year of service as a non-employee director. For purposes of this limitation, the value of equity awards is based on the grant date fair value (determined in accordance with GAAP). Any cash compensation paid, or equity awards granted to a person for their services as an employee, or for their services as a consultant (other than as a non-employee director) or prior to the effective date of the compensation policy, will not count for purposes of the limitation. The maximum limit does not reflect the intended size of any potential compensation or equity awards to our non-employee directors.

Cash Compensation.

Following the completion of this offering, non-employee directors will be entitled to receive the following cash compensation for their services under the outside director compensation policy:

- \$40,000 per year for service as a board member;
- \$35,000 per year for service as non-executive chair of the board;
- \$20,000 per year for service as chair of the audit committee;
- \$10,000 per year for service as member of the audit committee;
- \$15,000 per year for service as chair of the compensation committee;
- \$7,500 per year for service as a compensation committee member;
- \$10,000 per year for service as chair of the nominating and corporate governance committee; and
- \$5,000 per year for service as a member of the nominating and corporate governance committee.

Each non-employee director who serves as the chair of a committee will receive only the additional annual cash fee as the chair of the committee, and not the annual fee as a member of the committee, provided that any non-employee director who serves as the non-executive chair will receive the annual fee for service as a board member and an additional annual fee as the non-executive chair. All cash payments to non-employee directors are paid quarterly in arrears on a pro-rated basis.

Equity Compensation.

Initial Award: Each person who first becomes a non-employee director following the effective date of the policy will receive, on the first trading date on or after the date on which the person first becomes a non-employee director, an initial award of options to purchase 100,000 shares of our common stock (the Initial Award). The Initial Award will vest as to one-thirty-sixth of the shares subject to the Initial Award each month following the grant date, subject to the non-employee director's continued service through the applicable vesting date. If the person was a member of our board of directors and also an employee, becoming a non-employee director due to termination of employment will not entitle them to an Initial Award.

Annual Award: Each non-employee director automatically will receive, on the date of each annual meeting of our stockholders following the effective date of the policy, an annual award of options to purchase 50,000 shares of our common stock (the Annual Award; provided, however, that a non-employee director who has not been a director for at least six months prior to the date of the applicable annual meeting of our stockholders will not receive an Annual Award. Each Annual Award will vest in its entirety on the earlier of (x) the one year anniversary of the Annual Award's grant date, or (y) the day immediately prior to the date of the next annual meeting of our stockholders that follows the grant date of the Annual Award, subject to the non-employee director's continued service through the applicable vesting date.

In the event of a "change in control" (as defined in our 2021 SIP), each non-employee director will fully vest in their outstanding company equity awards issued under the director compensation policy, including any Initial Award or Annual Award, immediately prior to the consummation of the change in control provided that the non-employee director continues to be a non-employee director through such date. The term of each option granted under this compensation policy is ten years, subject to earlier termination as provided in the 2021 SIP.

Compensation Committee Interlocks and Inside Participation

None of the members of our board of directors who will serve on our compensation committee upon the effectiveness of the registration statement of which this prospectus forms a part is or has been an officer or employee of our company. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Code of Business Conduct and Ethics

Prior to the effectiveness of the registration statement of which this prospectus forms a part, we intend to adopt a written code of business conduct and ethics that will apply to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions. Following this offering, the code of business conduct and ethics will be available on our website at www.codexdna.com. We intend to disclose future amendments to such code, or any waivers of its requirements, applicable to any principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions or our directors on our website identified above or in a Current Report on Form 8-K. Information contained on the website is not incorporated by reference into this prospectus and should not be considered to be part of this prospectus. The inclusion of our website address in this prospectus is for reference only, and our website is not incorporated by reference into this prospectus.

EXECUTIVE COMPENSATION

Our named executive officers for 2020, which consist of each person who served as our principal executive officer during 2020 and our next two most highly compensated executive officers during 2020, are:

- Todd R. Nelson, our President and Chief Executive Officer;
- Daniel G. Gibson, our Chief Technology Officer; and
- Timothy E. Cloutier, our Senior Vice President Commercial Operations.

Summary Compensation Table

The following table sets forth information regarding the compensation of our named executive officers for the year ended December 31, 2020.

Name and Principal Position	Year	Salary (\$)	Bonus (\$) ⁽¹⁾	Option Awards (\$) ⁽²⁾	All Other Compensation (\$) ⁽³⁾	Total (\$)
Todd R. Nelson <i>President and Chief Executive Officer</i>	2020	583,846	150,000	-	1,932	783,779
Daniel G. Gibson <i>Chief Technology Officer</i>	2020	324,923	40,000	-	732	375,655
Timothy E. Cloutier ⁽⁴⁾⁽⁵⁾ <i>Senior Vice President Commercial Operations</i>	2020	79,615	-	8,209	267	88,091

- (1) Due to the effects of COVID-19 pandemic, the Company did not meet its management incentive compensation plan targets and consequently no bonuses were payable under such plan. However, the board of directors exercised its discretionary authority to award bonuses to management, based on services performed in 2020, including awards of \$150,000 to Todd R. Nelson and \$40,000 to Dan G. Gibson. Timothy E. Cloutier was not eligible for a discretionary bonus based on his hire date.
- (2) The amounts reported represent the aggregate grant-date fair value of the stock options awarded to the named executive officer in 2020, calculated using the Black-Scholes option-pricing model.
- (3) The amounts reported reflect insurance premiums paid by, or on behalf of, the Company during 2020 with respect to life insurance for the benefit of such named executive officer.
- (4) Dr. Cloutier joined Codex DNA as Senior Vice President of Commercial Operations in September 2020, and therefore the compensation set forth in the table above reflects the amount earned for the portion of 2020 in which he was employed by Codex DNA.
- (5) Dr. Cloutier began his employment with Codex DNA in September 2020 and was not eligible for a bonus in 2020.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning outstanding equity awards held by each of our named executive officers as of December 31, 2020:

Name	Grant Date ⁽¹⁾	Number of Securities Underlying Unexercised Options (#) Exercisable	Option Awards		Option Exercise Price (\$) ⁽²⁾	Option Expiration Date
			Number of Securities Underlying Unexercised Options (#) Unexercisable			
Daniel G. Gibson	3/8/19	103,707	133,339 ⁽³⁾		\$0.13	3/8/29
	10/24/19	109,375	140,625 ⁽³⁾		\$0.24	10/24/29
Timothy E. Cloutier	10/22/20	-	90,000 ⁽⁴⁾		\$0.24	10/22/30

(1) Each of the equity awards was granted pursuant to our 2019 Plan.

(2) This column represents the fair market value of a share of our common stock on the date of grant, as determined by our board of directors.

(3) Twenty five percent of the shares subject to the award vested on March 8, 2020, and one-forty-eighth of the shares subject to the award shall vest each month thereafter on the same day of the month.

(4) Twenty five percent of the shares subject to the award vest on the one year anniversary of September 15, 2020, and one-forty-eighth of the shares subject to the award shall vest each month thereafter on the same day of the month.

Employment Arrangements With Our Named Executive Officers

Todd R. Nelson

We have entered into a confirmatory employment agreement with Dr. Nelson, our President and Chief Executive Officer. The confirmatory employment agreement has no specific term and provides for at-will employment. Dr. Nelson's current annual base salary is \$618,000, and Dr. Nelson's annual target bonus is 50% of his annual base salary.

Daniel G. Gibson

We have entered into a confirmatory employment agreement with Dr. Gibson, our Chief Technology Officer. The confirmatory employment agreement has no specific term and provides for at-will employment. Dr. Gibson's current annual base salary is \$339,000, and Dr. Gibson's annual target bonus is 35% of his annual base salary.

Timothy E. Cloutier

We have entered into a confirmatory employment agreement with Dr. Cloutier, our Senior Vice President, Commercial Operations. The confirmatory employment agreement has no specific term and provides for at-will employment. Dr. Cloutier's current annual base salary is \$300,000, and Dr. Cloutier's annual target bonus is 30% of his annual base salary.

Potential Payments Upon Termination or Change in Control

We intend to enter into a change in control severance agreement with each of our named executive officers that provides for the severance and change in control benefits only in the circumstances as described below. Each change in control severance agreement will supersede any prior agreement or arrangement the named executive officer may have had with us that provides for severance and/or change in control payments or benefits.

Each change in control severance agreement will terminate on the date that all of the obligations of the parties to the change in control severance agreement have been satisfied.

If a named executive officer's employment is terminated outside the period beginning three months before a change in control and ending 12 months following a change in control (the change in control period), either (i) by us (or any of our subsidiaries) without "cause" (and other than by reason of death or disability) or (ii) by the named executive officer for "good reason" (as such terms are defined in the named executive officer's change in control severance

agreement), the named executive officer will receive the following benefits if he timely signs and does not revoke a release of claims in our favor:

- a lump-sum payment equal to 12 months (in the case of Dr. Nelson), nine months (in the case of Dr. Gibson) or six months (in the case of Dr. Cloutier) of the named executive officer's annual base salary as in effect immediately prior to such termination (or if such termination is due to a resignation for good reason based on a material reduction in base salary, then as in effect immediately prior to the reduction); and
- payment of premiums for coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (COBRA), for the named executive officer and the named executive officer's eligible dependents, if any, for up to 12 months (in the case of Dr. Nelson), nine months (in the case of Dr. Gibson) or six months (in the case of Dr. Cloutier), or taxable monthly payments for the equivalent period in the event payment of the COBRA premiums would violate, or be subject to an excise tax under, applicable law.

If, within the change in control period, the named executive officer's employment is terminated either (i) by us (or any of our subsidiaries) without cause (and other than by reason of death or disability) or (ii) by the named executive officer for good reason, the named executive officer will receive the following benefits if the named executive officer timely signs and does not revoke a release of claims in our favor:

- a lump-sum payment, less applicable withholdings, equal to the sum of (x) 18 months (in the case of Dr. Nelson), 12 months (in the case of Dr. Gibson) or nine months (in the case of Dr. Cloutier) of the named executive officer's annual base salary as in effect immediately prior to such termination (or if such termination is due to a resignation for good reason based on a material reduction in base salary, then as in effect immediately prior to the reduction or if greater, at the level in effect immediately prior to the change in control) and (y) in the case of Dr. Nelson and Dr. Gibson only, 150% and 100%, respectively, of the named executive officer's target annual bonus as in effect for the fiscal year in which the termination occurs;
- payment for premiums for coverage under COBRA for the named executive officer and the named executive officer's eligible dependents, if any, for up to 18 months (in the case of Dr. Nelson), 12 months (in the case of Dr. Gibson) or nine months (in the case of Dr. Cloutier); and
- 100% accelerated vesting and exercisability (as applicable) of all outstanding equity awards and, in the case of an equity award with performance-based vesting unless otherwise specified in the applicable equity award agreement governing such award, all performance goals and other vesting criteria will be deemed achieved at 100% of target levels.

If any of the amounts provided for under these change in control severance agreements or otherwise payable to our named executive officers would constitute "parachute payments" within the meaning of Section 280G of the Code and could be subject to the related excise tax, the named executive officer would be entitled to receive either full payment of benefits under his change in control severance agreement or such lesser amount which would result in no portion of the benefits being subject to the excise tax, whichever results in the greater amount of after-tax benefits to the named executive officer. The change in control severance agreements do not require us to provide any tax gross-up payments.

Employee Benefit and Stock Plans

2021 Stock Incentive Plan (2021 SIP)

In May 2021, our board of directors adopted, and our stockholders approved, our 2021 SIP. Our 2021 SIP will become effective on the business day immediately prior to the effective date of the registration statement of which this prospectus forms a part. Our 2021 SIP will provide for the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, RSUs and performance awards to our employees, directors, and consultants and our parent and subsidiary corporations' employees and consultants. Our 2021 Plan will terminate immediately prior to the effectiveness of the 2021 SIP with respect to the grant of future awards.

Authorized Shares. Subject to the adjustment provisions of and the automatic increase described in our 2021 SIP, a total of 10,500,000 shares of our common stock will be reserved for issuance pursuant to our 2021 SIP. In addition, subject to the adjustment provisions of our 2021 SIP, the shares reserved for issuance under our 2021 SIP also will include (i) any shares that, as of the day immediately prior to the effective date of the registration statement of which this prospectus forms a part, have been reserved but not issued pursuant to any awards granted under the 2021 Plan, and are not subject to any awards thereunder, plus (ii) any shares subject to stock options, RSUs, or similar awards granted under our 2021 Equity Incentive Plan or our 2019 Plan that, on or after the effective date of the registration statement of which this prospectus forms a part, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by us for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by us due to failure to vest (provided that the maximum number of shares that may be added to our 2021 SIP pursuant to the foregoing is 7,379,911 shares). Subject to the adjustment provisions of our 2021 SIP, the number of shares available for issuance under our 2021 SIP will also include an annual increase on the first day of each fiscal year beginning with the 2022 fiscal year and ending on the ten year anniversary of the date our board of directors approved the 2021 SIP, in an amount equal to the least of:

- 15,750,000 shares of our common stock;
- 5% of the total number of shares of all classes of our common stock outstanding on the last day our immediately preceding fiscal year; or
- a lesser number of shares determined by the administrator.

If a stock option or stock appreciation right granted under the 2021 SIP expires or becomes unexercisable without having been exercised in full or is surrendered pursuant to an exchange program or, with respect to restricted stock, RSUs or stock-settled performance awards, is forfeited to, or repurchased by, us due to failure to vest, then the unpurchased shares (or for awards other than stock options or stock appreciation rights, the forfeited or repurchased shares) which were subject thereto will become available for future issuance under the 2021 SIP (unless the 2021 SIP has terminated). With respect to stock appreciation rights, only the net shares actually issued will cease to be available under the 2021 SIP and all remaining shares under stock appreciation rights will remain available for future issuance under the 2021 SIP (unless the 2021 SIP has terminated). Shares that have actually been issued under the 2021 SIP under any award will not be returned to the 2021 SIP; provided, however, that if shares issued pursuant to awards of restricted stock, RSUs or performance awards are repurchased or forfeited to us due to failure to vest, such shares will become available for future grant under the 2021 SIP. Shares used to pay the exercise price of an award or to satisfy the tax withholding obligations related to an award will become available for future issuance under the 2021 SIP. To the extent an award is paid out in cash rather than shares, the cash payment will not result in a reduction in the number of shares available for issuance under the 2021 SIP.

Plan Administration. Our compensation committee is expected to administer our 2021 SIP and may further delegate authority to one or more subcommittees or officers to the extent such delegation complies with applicable laws. Subject to the provisions of our 2021 SIP, the administrator will have the power to administer our 2021 SIP and make all determinations deemed necessary or advisable for administering our 2021 SIP, including but not limited to: the power to determine the fair market value of our common stock; select the service providers to whom awards may be granted; determine the number of shares covered by each award; approve forms of award agreements for use under our 2021 SIP; determine the terms and conditions of awards (including, but not limited to, the exercise price, the time or times when the awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver or forfeiture restrictions, and any restriction or limitation regarding any award or the shares relating thereto); construe and interpret the terms of our 2021 SIP and awards granted under it, including but not limited to determining whether and when a change in control has occurred; establish, amend, and rescind rules and regulations relating to our 2021 SIP, and adopt sub-plans relating to the 2021 SIP; interpret, modify, or amend each award, including but not limited to the discretionary authority to extend the post-termination exercisability period of awards; allow participants to satisfy tax withholding obligations in any manner permitted by the 2021 SIP; delegate ministerial duties to any of our employees; authorize any person to take any steps and execute, on our behalf, any documents required for an award previously granted by the administrator to be effective; temporarily suspend the exercisability of an award if the administrator deems such suspension to be necessary or appropriate for administrative purposes, provided that, unless prohibited by applicable laws, such suspension shall be lifted in all cases not less than ten trading days before the last date that the award may be exercised; allow a participant to defer the receipt of payment of cash or the delivery of shares that would otherwise be due to such participant under an award; and make any determinations necessary or appropriate under the adjustment provisions of the 2021 SIP. The administrator also has the authority to institute and determine the terms of an exchange program under which

outstanding awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, or cash; participants would have the opportunity to transfer any outstanding awards to a financial institution or other person or entity selected by the administrator; or the exercise price of an outstanding award is increased or reduced. The administrator's decisions, interpretations, and other actions will be final and binding on all participants and holders of awards to the full extent permitted by law.

Stock Options. Our 2021 SIP permits the grant of options. The exercise price of options granted under our 2021 SIP must be at least equal to the fair market value of our common stock on the date of grant, except that options may be granted with a lower exercise price to a service provider who is not a U.S. taxpayer, or pursuant to certain transactions. The term of an option is determined by the administrator, provided that the term of an incentive stock option may not exceed ten years. With respect to any employee who owns more than 10% of the voting power of all classes of our outstanding stock or the stock of any parent or subsidiary, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator determines the methods of payment of the exercise price of an option, which may include cash, check or wire transfer, cashless exercise, net exercise, promissory note, shares, or other consideration or method of payment acceptable to the administrator, to the extent permitted by applicable law. After the termination of service of an employee, director, or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the option will remain exercisable for six months. In all other cases, in the absence of a specified time in an award, the option will remain exercisable for thirty days. These exercise periods may be tolled in certain circumstances, for example if exercise prior to the end of the applicable period is not permitted because of applicable laws, other than the rules of any stock exchange or quotation system on which the common stock is listed or quoted. However, in no event may an option be exercised later than the expiration of its term. To the extent that the aggregate fair market value of the shares with respect to which incentive stock options under Code Section 422(b) are exercisable for the first time by a participant during any calendar year (under all of our plans and agreements) exceeds \$100,000, the incentive stock options whose value exceeds \$100,000 will be treated as nonstatutory stock options.

Stock Appreciation Rights. Our 2021 SIP permits the grant of stock appreciation rights. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The term of stock appreciation rights is determined by the administrator. After the termination of service of an employee, director, or consultant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her stock appreciation rights agreement. In the absence of a specified time in an award agreement, if termination is due to death or disability, the stock appreciation rights will remain exercisable for six months. In all other cases, in the absence of a specified time in an award agreement, the stock appreciation rights will remain exercisable for thirty days following the termination of service. These exercise periods may be tolled in certain circumstances, for example if exercise prior to the end of the applicable period is not permitted because of applicable laws, other than the rules of any stock exchange or quotation system on which the common stock is listed or quoted. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2021 SIP, the administrator determines the other terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right must be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock. Our 2021 SIP permits the grant of restricted stock. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator determines the number of shares of restricted stock granted to any employee, director, or consultant and, subject to the provisions of our 2021 SIP, determines the terms and conditions of such awards. The administrator has the authority to impose whatever conditions to vesting it determines to be appropriate (for example, the administrator will be able to set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally have voting rights with respect to such shares upon grant without regard to vesting, unless the administrator provides otherwise, but recipients of restricted stock will not be entitled to receive dividends and other distributions with respect to shares

while such shares are unvested, unless the administrator provides otherwise. Shares of restricted stock that do not vest will be subject to our right of repurchase or forfeiture.

Restricted Stock Units. Our 2021 SIP permits the grant of RSUs. Each RSU will represent an amount equal to the fair market value of one share of our common stock. Subject to the provisions of our 2021 SIP, the administrator determines the terms and conditions of RSUs, including the vesting criteria and the form and timing of payment. The administrator has the authority to set vesting criteria based upon the achievement of company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the administrator in its discretion. The administrator, in its sole discretion, may pay earned RSUs in the form of cash, in shares, or in some combination of both. Notwithstanding the foregoing, the administrator, in its sole discretion, may reduce or waive any criteria that must be met to earn the RSUs.

Performance Awards. Our 2021 SIP permits the grant of performance awards. Performance awards are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will set objectives or vesting provisions, that, depending on the extent to which they are met, will determine the value the payout for the performance awards. The administrator may set vesting criteria based on the achievement of company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the administrator in its discretion. Each performance award's threshold, target, and maximum payout values are established by the administrator on or before the grant date. After the grant of a performance award, the administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such performance award. The administrator, in its sole discretion, may pay earned performance awards in the form of cash, in shares, or in some combination thereof.

Non-Employee Directors. Our 2021 SIP provides that all outside (non-employee) directors will be eligible to receive all types of awards (except for incentive stock options) under our 2021 SIP. In order to provide a maximum limit on the awards that can be made to our non-employee directors, our 2021 SIP provides that in any given fiscal year, a non-employee director will not be paid, issued, or granted cash retainer fees and equity awards (including awards granted under the 2021 SIP) with an aggregate value greater than \$750,000, but this limit is increased to \$1,000,000 in connection with his or her initially joining our board of directors (in each case, excluding awards granted to him or her as a consultant or employee). The value of each equity award will be determined according to GAAP. The maximum limits do not reflect the intended size of any potential grants or a commitment to make grants to our outside directors under our 2021 SIP in the future.

Non-Transferability of Awards. Unless the administrator provides otherwise or as otherwise required by applicable laws, our 2021 SIP generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime. If the administrator makes an award transferable, such award will contain such additional terms and conditions as the administrator deems appropriate.

Certain Adjustments. If any extraordinary dividend or other extraordinary distribution (whether in cash, shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares of our common stock or other of our securities, other change in our corporate structure affecting the shares, or any similar equity restructuring transaction affecting our shares occurs (including a change in control), the administrator, to prevent diminution or enlargement of the benefits or potential benefits intended to be provided under the 2021 SIP, will adjust the number and class of shares that may be delivered under the 2021 SIP or the number, class, and price of shares covered by each outstanding award, and the numerical share limits set forth in our 2021 SIP. The conversion of any of our convertible securities and ordinary course repurchases of our shares or other securities will not be treated as an event that will require adjustment under the 2021 SIP.

Dissolution or Liquidation. In the event of our proposed dissolution or liquidation, the administrator will notify each participant, at such time prior to the effective date of such proposed transaction as the administrator determines. To the extent it has not been previously exercised, awards will terminate immediately prior to the consummation of such proposed transaction.

Merger or Change in Control. Our 2021 SIP provides that in the event of a merger or change in control, as defined under our 2021 SIP, each outstanding award will be treated as the administrator determines, without a requirement to obtain a participant's consent, including, without limitation, that such award will be continued by the successor

corporation or a parent or subsidiary of the successor corporation or that the vesting of any such awards may accelerate automatically upon consummation of such transaction. An award generally will be considered continued if, following the transaction, (i) the award gives the right to purchase or receive the consideration received in the transaction by holders of our shares or (ii) the award is terminated in exchange for an amount of cash or property, if any, equal to the amount that would have been received upon the exercise or realization of the award at the closing of the transaction, which payment may be subject to any escrow applicable to holders of our common stock in connection with the transaction or subjected to the award's original vesting schedule. The administrator will not be required to treat all awards or portions thereof the vested and unvested portions of an award, or all participants similarly.

In the event that a successor corporation or its parent or subsidiary does not continue an outstanding award (or some portion of such award), then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels, and such award will become fully exercisable, if applicable, for a specified period prior to the transaction, unless specifically provided for otherwise under the applicable award agreement or other written agreement with the participant. The award will then terminate upon the expiration of the specified period of time. Unless specifically provided for otherwise under the applicable award agreement or other written agreement with the participant, if an option or stock appreciation right is not continued, the administrator will notify the participant in writing or electronically that such option or stock appreciation right will be exercisable for a period of time determined by the administrator in its sole discretion and the option or stock appreciation right will terminate upon the expiration of such period.

With respect to awards granted to an outside director, in the event of a change in control, all of his or her options and stock appreciation rights, if any, will vest fully and become immediately exercisable, all restrictions on his or her restricted stock and RSUs will lapse, and all performance goals or other vesting requirements for his or her performance awards will be deemed achieved at 100% of target levels, and all other terms and conditions met unless specifically provided otherwise under the applicable award agreement, a Company policy related to director compensation, or other written agreement with the participant, that specifically references this default rule.

Clawback. Awards granted under the 2021 SIP will be subject to recoupment under any clawback policy that we are required to adopt pursuant to the listing standards of any national securities exchange or association on which our stock is listed or as otherwise required by applicable laws, and the administrator will also be able to specify in an award agreement that the participant's rights, payments, or benefits with respect to an award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of certain specified events.

Amendment and Termination. The administrator will have the authority to amend, alter, suspend, or terminate our 2021 SIP, provided we will obtain stockholder approval of any amendment to the extent necessary or desirable to comply with applicable laws. However, no amendment, alteration, suspension or termination of our 2021 SIP or an award under it may, materially impair the existing rights of any participant without the participant's consent. Our 2021 SIP will continue in effect until it is terminated, provided that incentive stock options may not be granted after the ten year anniversary of the date our board of directors or stockholders approved the 2021 SIP, whichever was earlier, and the automatic annual share increase will end on the ten year anniversary of the date our board of directors or stockholders approved the 2021 SIP, whichever was earlier.

2021 Employee Stock Purchase Plan (ESPP)

In May 2021, our board of directors adopted, and our stockholders approved, our ESPP. Our ESPP will continue in effect for a term of twenty years, unless terminated earlier according to the provisions described below and included in our ESPP.

Authorized Shares. Subject to the adjustment provisions of our ESPP, a total of 1,050,000 shares of our common stock will be available for sale under our ESPP. In addition, subject to the adjustment provisions of our ESPP, our ESPP will also provide for annual increases in the number of shares of our common stock that will be available for sale under our ESPP on the first day of each fiscal year beginning with the fiscal year following the fiscal year in which the first enrollment date (if any) occurs, equal to the least of:

- 3,150,000 shares of our common stock;

- 1% of the outstanding shares of all classes of our common stock as of the last day of the immediately preceding fiscal year; or
- a lesser number of shares determined by the administrator.

Plan Administration. Our compensation committee is expected to administer our ESPP. The administrator will have full and exclusive discretionary authority to: construe, interpret and apply the terms of the ESPP; delegate ministerial duties to any of our employees; designate separate offerings under the ESPP; designate our subsidiaries and affiliates as participating in the ESPP; determine eligibility; adjudicate all disputed claims filed under the ESPP; and to establish such procedures that it deems necessary or advisable for the administration of the ESPP, including, but not limited to, adopting such procedures, sub-plans, and appendices to the enrollment agreement as are necessary or appropriate to permit participation in the ESPP by employees who are foreign nationals or employed outside the U.S. The administrator's findings, decisions, and determinations are final and binding on all participants to the full extent permitted by law.

Eligibility. Generally, all of our employees will be eligible to participate if they are a common law employee providing services to us, or any participating subsidiary, and are customarily employed for at least twenty hours per week and more than five months in any calendar year.

However, an employee may not be granted rights to purchase shares of our common stock under our ESPP if such employee:

- immediately after the grant would own capital stock or hold outstanding options to purchase such stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock; or
- holds rights to purchase shares of our common stock under all of our employee stock purchase plans that accrue at a rate that exceeds \$25,000 worth of shares of our common stock for each calendar year in which such option is outstanding at any time.

Offering Periods and Purchase Periods. Our ESPP will include a component that allows us to make offerings intended to qualify under Section 423 of the Code and a component that allows us to make offerings not intended to qualify under Section 423 of the Code to designated companies, as described in our ESPP. Offering periods will begin and end on such dates as may be determined by the administrator in its discretion, in each case on a uniform and nondiscriminatory basis, and may contain one or more purchase periods. No offering period may last more than 27 months.

Contributions. Our ESPP will permit participants to purchase shares of our common stock through contributions (in the form of payroll deductions or otherwise to the extent permitted by the administrator) in an amount established by the administrator in its discretion and on a uniform and nondiscriminatory basis for all options to be granted on any enrollment date. Unless otherwise determined by the Administrator during any purchase period, a participant may not increase the rate of his or her contributions and may only decrease the rate of his or her contributions one time. During any offering period, a participant may increase or decrease the rate of his or her contributions to become effective as of the beginning of the next purchase period occurring in such offering period.

Exercise of Purchase Right. Amounts contributed and accumulated by the participant will be used to automatically purchase shares of our common stock at the end of each purchase period. During each purchase period, a participant may purchase a fixed number of shares of our common stock in an amount that the administrator may establish from time to time in its discretion and on a uniform and nondiscriminatory basis for all options to be granted on any enrollment date. The purchase price of the shares will be 85% of the lower of the fair market value of our common stock on the first trading day of each offering period or on the exercise date. If the fair market value of our common stock on the exercise date is less than the fair market value on the first trading day of the offering period, participants will be withdrawn from the current offering period following their purchase of shares of our common stock on the purchase date and will be automatically re-enrolled in a new offering period. Participants may end their participation at any time during an offering period and will be paid their accrued contributions that have not yet been used to purchase shares of our common stock. Participation ends automatically upon termination of employment with us.

Non-Transferability. A participant may not transfer rights granted under our ESPP. If the compensation committee permits the transfer of rights, it may only be done by will, the laws of descent and distribution or as otherwise provided under our ESPP.

Certain Adjustments. If any dividend or other distribution (whether in cash, common stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of shares of our common stock or other of our securities, other change in our corporate structure affecting the common stock occurs (other than ordinary dividends or other ordinary distributions), the administrator, to prevent diminution or enlargement of the benefits or potential benefits intended to be provided under our ESPP, will adjust the number and class of shares that may be delivered under our ESPP, the purchase price per share, the class and the number of shares of common stock covered by each option that has not yet been exercised, and the numerical limits set out in our ESPP.

Dissolution or Liquidation. Our ESPP will provide that in the event of our proposed dissolution or liquidation, any offering period then in progress will be shortened by setting a new exercise date, and will terminate immediately prior to the consummation of such proposed dissolution or liquidation, unless otherwise provided by the administrator. The administrator will notify each participant that the exercise date has been changed and that the participant's option will be exercised automatically on the new exercise date unless prior to such date the participant has withdrawn from the offering period.

Merger or Change in Control. Our ESPP will provide that in the event of a merger or change in control, as defined under our ESPP, a successor corporation may assume or substitute each outstanding purchase right. If the successor corporation refuses to assume or substitute for the outstanding purchase right, the offering period then in progress will be shortened, and a new exercise date will be set that will be before the date of the proposed merger or change in control. The administrator will notify each participant that the exercise date has been changed and that the participant's option will be exercised automatically on the new exercise date unless prior to such date the participant has withdrawn from the offering period.

Amendment; Termination. The administrator will have the authority to amend, suspend, or terminate our ESPP, except that, subject to certain exceptions described in our ESPP, no such action may adversely affect any outstanding rights to purchase shares of our common stock under our ESPP. Our ESPP automatically will terminate in 2041, unless we terminate it sooner.

2021 Equity Incentive Plan (2021 Plan)

In March 2021, our board of directors adopted, and our stockholders approved, our 2021 Plan. Our 2021 Plan permits the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, and RSUs to our employees, directors and consultants and our parent and subsidiary corporations' employees and consultants.

Authorized Shares. Subject to the adjustment provisions contained in the 2021 Plan, the maximum aggregate number of shares of our common stock that may be subject to awards and sold under the 2021 Plan is 6,000,000 shares. Our 2021 Plan will be terminated in connection with this offering, and accordingly, no shares will be available for issuance under the 2021 Plan following the completion of this offering. Our 2021 Plan will continue to govern outstanding awards granted thereunder. As of _____, 2021, options to purchase _____ shares of our common stock remained outstanding under our 2021 Plan.

Plan Administration. Our board of directors or one or more committees appointed by our board of directors administers our 2021 Plan. Subject to the provisions of our 2021 Plan, our administrator has the power to administer the plan, including but not limited to: the power to interpret the terms of our 2021 Plan and awards granted under it; prescribe, amend, and rescind rules relating to our 2021 Plan, including creating sub-plans; and determine the terms of the awards, including the exercise price, the number of shares of our common stock subject to each such award, the exercisability of the awards and the form of consideration, if any, payable upon exercise. Our administrator also has the authority to modify or amend existing awards, including the power to extend the post-termination exercisability period of awards and to extend the maximum term of an option and to allow participants to defer the receipt of the payment of cash or the delivery of shares that otherwise would be due to such participant under an award. The administrator also has the authority to institute and determine the terms and conditions of an

exchange program under which outstanding awards may be surrendered or cancelled in exchange for awards of the same type which may have a higher or lower exercise price or different terms, awards of a different type or cash; participants would have the opportunity to transfer any outstanding awards to a financial institution or other person or entity selected by the administrator; or the exercise price of an outstanding award is reduced or increased. The administrator may make all other determinations our administrator deems necessary or advisable for administering the 2021 Plan.

Options. Stock options may be granted under our 2021 Plan. The exercise price of options granted under our 2021 Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of an option may not exceed ten years, except that with respect to incentive stock options and any participant who owns stock representing more than 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After termination of an employee, director, or consultant, he or she may exercise his or her option for the period of time as specified in the applicable option agreement. If termination is due to death or disability, the option generally will remain exercisable for at least six months. In all other cases, the option will generally remain exercisable for at least thirty days. However, in no event may an option be exercised later than the expiration of its term. Subject to the provisions of our 2021 Plan, the administrator determines the other terms of options.

Stock Appreciation Rights. Stock appreciation rights may be granted under our 2021 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Stock appreciation rights may not have a term exceeding ten years. After the termination of service of an employee, director, or consultant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her award agreement. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2021 Plan, the administrator determines the other terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares of our common stock to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock. Restricted stock may be granted under our 2021 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted to any employee, director, or consultant and, subject to the provisions of our 2021 Plan, will determine the terms and conditions of such awards. The administrator may impose whatever conditions for lapse of the restriction on the shares it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally will have voting and dividend rights with respect to such shares upon grant without regard to the restriction, unless the administrator provides otherwise. Shares of restricted stock as to which the restrictions have not lapsed are subject to our right of repurchase or forfeiture.

Restricted Stock Units. RSUs may be granted under our 2021 Plan. RSUs are bookkeeping entries representing an amount equal to the fair market value of one share of our common stock. Subject to the provisions of our 2021 Plan, the administrator will determine the terms and conditions of RSUs, including the vesting criteria (which may include achievement of company-wide, business unit, or individual goals, including continued employment or service to us) and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

Non-Transferability of Awards. Unless the administrator provides otherwise, our 2021 Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under our 2021 Plan, the administrator will adjust the number and class of shares that may be delivered under our 2021 Plan or the number, class, and price of shares covered by each outstanding award.

Dissolution or liquidation. In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable prior to the date of the proposed transaction. To the extent it has not been previously exercised, an award will terminate immediately prior to the consummation of such proposed transaction.

Merger or Change in Control. Our 2021 Plan provides that in the event of a merger or change in control, as defined under the 2021 Plan, each outstanding award will be treated as the administrator determines, including, without limitation, that (i) awards will be assumed, or substantially equivalent awards will be substituted, by the acquiring or succeeding corporation with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice, awards will be terminated upon or immediately prior to the consummation of such merger or change in control; (iii) outstanding awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an award will lapse, in whole or in part prior to or upon consummation of such merger or change in control, and, to the extent the administrator determines, terminate upon or immediately prior to the effectiveness of such merger or change in control; (iv) awards will be terminated in exchange for an amount of cash or property or awards will be replaced with other rights or property selected by the administrator in its sole discretion; or (v) any combination of the foregoing. If a successor corporation or its parent or subsidiary does not assume or substitute for the award, then the participant will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, all restrictions on restricted stock and RSUs will lapse, and, with respect to awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met. If an option or stock appreciation right is not assumed or substituted in the event of a merger or change in control, the administrator will notify the applicable participant in writing or electronically that the award will be exercisable for a period of time determined by the administrator, and the option or stock appreciation right will terminate upon the expiration of such period.

An award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if we or our successor modifies any of such performance goals without the participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-change in control corporate structure will not be deemed to invalidate an otherwise valid award assumption.

Amendment; Termination. Our board of directors has the authority to amend, alter, suspend, or terminate the 2021 Plan, provided such action will not impair the existing rights of any participant, unless mutually agreed to in writing between the participant and the administrator. As noted above, upon completion of this offering, our 2021 Plan will be terminated and no further awards will be granted thereunder. All outstanding awards will continue to be governed by their existing terms.

2019 Stock Plan (2019 Plan)

Our board of directors adopted, and our stockholders approved, our 2019 Plan in March 2019. Our 2019 Plan was terminated in connection with the adoption of our 2021 Plan. Prior to its termination, our 2019 Plan allowed for the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and our parent and subsidiary companies' employees, and for the grant of nonstatutory stock options, RSUs, and the direct award or sale of our common stock, to our employees, outside directors, and consultants and our parent and subsidiary companies' employees and consultants. Prior to its termination, only stock options were issued under the 2019 Plan.

Authorized Shares. Our 2019 Plan was terminated in connection with the adoption of our 2021 Plan, and accordingly, no shares are available for issuance under the 2019 Plan. Our 2019 Plan will continue to govern outstanding awards granted thereunder. As of _____, 2021, options to purchase _____ shares of our common stock remained outstanding under our 2019 Plan.

Plan Administration. Our board of directors or one or more committees of our board of directors, or the administrator, administers our 2019 Plan. Subject to the provisions of the 2019 Plan, the administrator has the full authority and discretion to take any actions it deems necessary or advisable for the administration of the 2019 Plan. All decisions, interpretations, and other actions of the administrator are final and binding on all participants and all persons deriving their rights from a participant in the 2019 Plan.

Options. Prior to its termination, stock options could have been granted under our 2019 Plan. Except as specifically set forth in the 2019 Plan, the exercise price per share of all options must have equaled at least 100% of the fair market value per share of our common stock on the date of grant, as determined by the administrator. The term of a stock option may not exceed ten years. With respect to any participant who owned more than 10% of the total

combined voting power of all classes of our outstanding stock as of the grant date, the term of an incentive stock option granted to such participant could not exceed five years and the exercise price per share must have equaled at least 110% of the fair market value per share of our common stock on the date of grant, as determined by the administrator. Within the limitations of the 2019 Plan, and without stockholder approval, our board of directors may modify, reprice, extend, or assume outstanding options (including increasing or reducing the exercise price) or may accept the cancellation of outstanding options (whether granted by us or another issuer) in return for the grant of new options, a different type of award for the same or a different number of shares and at the same or a different exercise price (if applicable) or cash, or may permit participants to transfer any outstanding options granted under the 2019 Plan to a financial institution or other person or entity selected by the board of directors.

After termination of an employee, director, or consultant, he or she may exercise his or her option for the period of time as specified in the applicable option agreement. If termination is due to disability, the option generally will remain exercisable for at least six months, and if the termination is due to death, the option generally will remain exercisable for at least twelve months. In all other cases, the option will generally remain exercisable for at least three months. However, an option generally may not be exercised later than the expiration of its term.

Non-Transferability of Awards. Our 2019 Plan generally does not allow for the transfer or assignment of awards. Options may be transferred only by a beneficiary designation or by will or by the laws of descent and distribution. If so provided by the administrator, nonstatutory options may be transferred to certain family members by gift or domestic relations orders.

Certain Adjustments. In the event of a subdivision of our outstanding stock, a declaration of a dividend payable in shares, a combination or consolidation of our outstanding stock into a lesser number of shares, a reclassification, or any other increase or decrease in the number of issued shares of stock effected without receipt of consideration by us, the 2019 Plan will be appropriately adjusted by the administrator as to the number and kind of securities subject to the 2019 Plan, the exercise price of each outstanding option, and the number and kind of securities subject to outstanding awards under the 2019 Plan, provided that our administrator will make any adjustments as may be required by Section 25102(o) of the California Corporations Code.

Corporate Transactions. Our 2019 Plan provides that, in the event that we are a party to a merger or consolidation, or in the event of a sale of all or substantially all of our stock or assets, all shares acquired under our 2019 Plan and all options and other awards outstanding on the effective date of the transaction will be treated in the manner described in the definitive transaction agreement (or, in the event the transaction does not entail a definitive agreement to which we are a party, in the manner determined by the administrator, with such determination having final and binding effect on all parties), which agreement or determination need not treat all options and awards (or all portions of an option or an award) in an identical manner. In the event that we are a party to a merger or consolidation, or in the event of a sale of all or substantially all of our stock or assets, and the successor corporation does not assume or substitute for an award (or portion thereof), the participant holding such award will fully vest in and have the right to exercise his or her option (or portion thereof) that is not assumed or substituted for, all restrictions on any award of shares and RSUs (or portions thereof) not assumed or substituted for will lapse, and with respect to awards with performance-based vesting (or portions thereof) not assumed or substituted for, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, in each case, unless specifically provided otherwise under an award agreement or other written agreement. In addition, if an option (or portion thereof) is not assumed or substituted for in connection with a merger or consolidation, or in the event of a sale of all or substantially all of our stock or assets, each participant holding an option will be notified in writing or electronically that such option (or applicable portion) will be exercisable for period of time determined in our sole discretion and will terminate upon the expiration of such period.

Amendment; Termination. As noted above, the 2019 Plan was terminated in connection with the adoption of the 2021 Plan and no further awards will be granted thereunder. All outstanding awards will continue to be governed by their existing terms.

Executive Incentive Compensation Plan

In May 2021, our board of directors adopted an Executive Incentive Compensation Plan (the Bonus Plan), effective on the date adopted by our board of directors. The Bonus Plan will be administered by our board of directors or a committee appointed by our board of directors. Unless and until our board of directors determines otherwise, our compensation committee will be the administrator of the Bonus Plan. The Bonus Plan allows our compensation

committee to provide incentive awards to selected employees, including our named executive officers, determined by our compensation committee, which may be based upon performance goals established by our compensation committee. Our compensation committee, in its sole discretion, may establish a target award for each participant under the Bonus Plan, which may be expressed as a percentage of the participant's average annual base salary for the applicable performance period or a fixed dollar amount or such other amount or based on such other formula or factors as the compensation committee determines.

Under the Bonus Plan, our compensation committee will determine the performance goals, if any, applicable to awards, which goals may include, without limitation: attainment of research and development milestones; bookings; business divestitures and acquisitions; capital raising; cash flow; cash position; contract awards or backlog; corporate transactions; customer renewals; customer retention rates from an acquired company, subsidiary, business unit or division; earnings (which may include any calculation of earnings, including but not limited to earnings before interest and taxes, earnings before taxes, earnings before interest, taxes, depreciation and amortization and net taxes); earnings per share; expenses; financial milestones; license or research collaboration arrangements; market share; net income; net profit; net sales; new product or business development; new product invention or innovation; number of customers; operating cash flow; operating expenses; operating income; operating margin; overhead or other expense reduction; patents; procurement; product defect measures; product release timelines; productivity; profit; regulatory milestones or regulatory-related goals; retained earnings; return on assets; return on capital; return on equity; return on investment; return on sales; revenue; revenue growth; sales bookings; sales results; sales growth; savings; stock price; time to market; total stockholder return; working capital; unadjusted or adjusted actual contract value; unadjusted or adjusted total contract value; and individual objectives such as peer reviews or other subjective or objective criteria. As determined by our compensation committee, the performance goals may be based on GAAP or non-GAAP results and any actual results may be adjusted by our compensation committee for one-time items or unbudgeted or unexpected items and/or payment of actual awards when determining whether the performance goals have been met. The performance goals may be based on any factors our compensation committee determines relevant, including, without limitation, on an individual, divisional, portfolio, project, business unit, segment or company-wide basis. Any criteria used may be measured on such basis as our compensation committee determines. The performance goals may differ from participant to participant and from award to award.

Our compensation committee, at any time prior to payment of an actual award, may increase, reduce or eliminate a participant's actual award, or increase, reduce or eliminate the amount allocated to the bonus pool. The actual award may be below, at or above a participant's target award, in our compensation committee's discretion. Our compensation committee may determine the amount of any increase, reduction or elimination based on such factors as it deems relevant, and it will not be required to establish any allocation or weighting with respect to the factors it considers.

Actual awards generally will be paid in cash (or its equivalent) in a single lump sum. The compensation committee reserves the right to settle an actual award with a grant of an equity award with such terms and conditions, including any vesting requirements, as determined by the compensation committee. Unless otherwise determined by our compensation committee, to earn an actual award, a participant must be employed by us (or an affiliate of us, as applicable) on the date the bonus is paid. Payment of bonuses occurs as soon as practicable after the end of the applicable performance period, but no later than the dates set forth in the Bonus Plan. All awards under the Bonus Plan will be subject to reduction, cancellation, forfeiture, or recoupment in accordance with any clawback policy that we are required to adopt pursuant to any rule, regulation or law. Our compensation committee may also impose such other clawback, recovery or recoupment provisions with respect to an award under the Bonus Plan as it may determine is necessary or appropriate.

Our board of directors or its compensation committee will have the authority to amend or terminate the Bonus Plan provided such action does not alter or impair the existing rights of any participant with respect to any earned bonus without the participant's consent. The Bonus Plan will remain in effect until terminated in accordance with the terms of the Bonus Plan.

401(k) plan

We maintain a 401(k) retirement savings plan for the benefit of our employees, including our named executive officers who remain employed with us, and who satisfy certain eligibility requirements. Under the 401(k) plan,

eligible employees may elect to defer a portion of their compensation, within the limits prescribed by the Code, on a pre-tax or after-tax (Roth) basis, through contributions to the 401(k) plan. The 401(k) plan authorizes employer matching and discretionary contributions. The 401(k) plan is intended to qualify under Sections 401(a) and 501(a) of the Code. As a tax-qualified retirement plan, pre-tax contributions to the 401(k) plan and earnings on those pre-tax contributions are not taxable to the employees until distributed from the 401(k) plan, and earnings on Roth contributions are not taxable when distributed from the 401(k) plan.

Limitation of Liability and Indemnification

Our amended and restated certificate of incorporation and amended and restated bylaws, each to be effective upon the completion of this offering, will provide that we will indemnify our directors and officers, and may indemnify our employees and other agents, to the fullest extent permitted by Delaware law. Delaware law prohibits our amended and restated certificate of incorporation from limiting the liability of our directors for the following:

- any breach of the director's duty of loyalty to us or to our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or unlawful stock repurchases or redemptions; and
- any transaction from which the director derived an improper personal benefit.

If Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law, as so amended. Our amended and restated certificate of incorporation does not eliminate a director's duty of care and, in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, remain available under Delaware law. This provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Under our amended and restated bylaws, we will also be empowered to purchase insurance on behalf of any person whom we are required or permitted to indemnify.

In addition to the indemnification required in our amended and restated certificate of incorporation and amended and restated bylaws, we intend to enter into an indemnification agreement with each member of our board of directors and each of our officers prior to the completion of the offering. These agreements provide for the indemnification of our directors and officers for certain expenses and liabilities incurred in connection with any action, suit, proceeding or alternative dispute resolution mechanism or hearing, inquiry or investigation that may lead to the foregoing, to which they are a party, or are threatened to be made a party, by reason of the fact that they are or were a director, officer, employee, agent or fiduciary of our company, or any of our subsidiaries, by reason of any action or inaction by them while serving as an officer, director, agent or fiduciary, or by reason of the fact that they were serving at our request as a director, officer, employee, agent or fiduciary of another entity. In the case of an action or proceeding by or in the right of our company or any of our subsidiaries, no indemnification will be provided for any claim where a court determines that the indemnified party is prohibited from receiving indemnification. For certain directors, serving on the board at the direction of another entity who may also provide the director certain indemnification rights, we have agreed to be primarily responsible for amounts required to be indemnified. We believe that these charter and bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. Moreover, a stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Insofar as indemnification for liabilities arising under the Securities Act, may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements, including employment, termination of employment and change in control arrangements, with our directors and executive officers, including those discussed in the sections titled "Management" and "Executive Compensation," and the registration rights described in the section titled "Description of Capital Stock—Registration Rights," the following is a description of each transaction since January 1, 2019 and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeded or exceeds \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest.

Sales of Securities

Acquisition of SGI-DNA, Inc. by GATTACA Mining, LLC

In March 2019, GATTACA Mining, LLC (GATTACA), an entity owned and controlled by Todd R. Nelson, our President and Chief Executive Officer, purchased 100% of the issued and outstanding shares of SGI-DNA, Inc. (which subsequently changed its name to Codex DNA, Inc.) from SGI for (i) \$10.0 million in cash, paid through the issuance of a secured promissory note by GATTACA, (ii) a participation right equal to the proceeds a holder of 6% of our fully diluted ownership would receive upon a change of control of the company, and (iii) the issuance of a warrant to purchase common stock equal to 6% of our fully diluted ownership. At the time of this transaction, the aggregate consideration was valued at approximately \$9.0 million (see Note 3 of our Consolidated Financial Statements). In connection with our Series A convertible preferred stock financing, both the participation right and warrant were amended (x) to replace the 6% participation right with (i) a participation right upon a change in control of the company equal to the value of net proceeds the holder of 3,245,235 shares of common stock of the company (which was equal to 6% of our fully diluted ownership at the time of the Series A convertible preferred stock financing) would receive in such transaction, and (ii) the right to receive future warrants equal to 3% of the amount of equity securities of the company sold in any future equity financing primarily for capital raising purposes (subject to certain exceptions), and with the exercise price equal to the lowest purchase price paid in such equity round, and (y) to change the terms of the existing warrant such that the warrant would automatically net exercise upon an initial public offering to purchase (a) 3,245,235 shares of common stock of the company less (b) such number of shares equal to the aggregate exercise price of \$1.00 divided by the per share offering price in an initial public offering.

Assumption and Cancellation of certain Secured Promissory Notes

In August 2019, the Company assumed certain secured promissory notes, in the aggregate principal amount of \$1.5 million, issued to BroadOak Fund IV, LLC, a holder of more than 5% of our capital stock, and Dr. Nelson, by GATTACA (the Secured Promissory Notes). GATTACA used the proceeds of these secured promissory notes to make unsecured working capital advances to Codex DNA, Inc. The principal and interest of the Secured Promissory Notes, totaling approximately \$1.6 million and \$261 thousand for BroadOak Fund IV, LLC and Dr. Nelson, respectively, were cancelled in connection with the issuance of 1,625,033 and 272,243 shares of Series A convertible preferred stock to BroadOak Fund IV, LLC and Dr. Nelson, respectively, at a conversion price of \$0.9588 per share, which was the same price as that paid by cash investors for Series A convertible preferred stock.

Convertible Preferred Stock Issuances

In December 2019, we issued and sold an aggregate of 14,940,170 shares of our Series A-1 convertible preferred stock at a purchase price of \$1.20177 per share for an aggregate purchase price of \$18.0 million. These shares of Series A-1 convertible preferred stock will convert into an aggregate of _____ shares of common stock immediately prior to the completion of this offering.

The table below sets forth the number of shares of Series A-1 convertible preferred stock sold to our directors, executive officers and holders of more than 5% of our capital stock:

Investor	Shares of Series A-1 Preferred Stock		Total Purchase Price
BroadOak Fund IV, LLC	832,105	\$	999,998.83
DH Life Science LLC	1,626,476	\$	1,954,650.07
Northpond Ventures, LP	12,481,589	\$	14,999,999.22

In August 2019, we issued and sold an aggregate of 22,797,830 shares of our Series A convertible preferred stock at a purchase price of \$0.9588 per share for an aggregate purchase price of \$21.9 million. These shares of Series A convertible preferred stock will convert into an aggregate of _____ shares of common stock upon the completion of this offering.

The table below sets forth the number of shares of Series A convertible preferred stock sold to our directors, executive officers and holders of more than 5% of our capital stock:

Investor	Shares of Series A Preferred Stock		Total Purchase Price
BroadOak Fund IV, LLC	1,625,033	\$	1,558,082.20
DH Life Science LLC	5,255,999	\$	5,039,452.06
Northpond Ventures, LP	15,644,555	\$	14,999,999.34
Todd R. Nelson	272,243	\$	261,027.40

Warrants to Purchase Convertible Preferred Stock

In connection with the Company's Series A-1 convertible preferred stock financing in December 2019, we issued a warrant to purchase up to 462,067 shares of Series A-1 Preferred Stock (the A-1 Warrants) to SGI, our former parent and holder of more than 5% of our capital stock, at an exercise price of \$1.20177 per share, which was the cash purchase price paid by investors in the Series A-1 convertible preferred stock financing.

Investors' Rights Agreement

We are party to an Amended and Restated Investors' Rights Agreement with certain holders of our capital stock, including BroadOak Fund IV LLC, DH Life Science LLC, Northpond Ventures, LP, GATTACA, and Dr. Nelson. Under our investors' rights agreement, certain holders of our capital stock have the right to demand that we file a registration statement or request that their shares of our capital stock be covered by a registration statement that we are otherwise filing. See the section titled "Description of Capital Stock—Registration Rights" for additional information regarding these registration rights.

Voting Agreement

We are party to an Amended and Restated Voting Agreement with certain holders of our capital stock, including BroadOak Fund IV LLC, DH Life Science LLC, Northpond Ventures LP, GATTACA, and Dr. Nelson. Upon the consummation of this offering, the obligations of the parties to the voting agreement to vote their shares so as to elect certain nominees, as well as the other rights and obligations under the agreement, will terminate and none of our stockholders will have any special rights regarding the nomination, election or designation of members of our board of directors. Our existing certificate of incorporation contains provisions regarding election of members of the board of directors that correspond to the voting agreement; however, such provisions will be removed in the amended and restated certificate of incorporation that will be effective at the closing of this offering.

Indemnification Agreements

We have entered into separate indemnification agreements with each of our directors and executive officers, in addition to the indemnification provided for in our amended and restated certificate of incorporation and bylaws. The indemnification agreements and our amended restated certificate of incorporation and bylaws that will be in effect upon the closing of this offering require us to indemnify our directors, executive officers and certain controlling

persons to the fullest extent permitted by Delaware law. See the section titled "Executive Compensation—Limitation of Liability and Indemnification" for additional information.

Equity Grants to Executive Officers and Directors

We have granted options to our named executive officers and certain of our non-employee directors as more fully described in the sections titled "Director Compensation" and "Executive Compensation."

Synthetic Genomics

As of December 31, 2020, we had incurred fees from SGI of approximately \$227,000 for services relating to intellectual property matters, including patent filings and patent prosecution.

Related Party Transaction Policy

Our audit committee will have the primary responsibility for reviewing and approving or disapproving "related party transactions," which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed \$120,000 and in which a related person has or will have a direct or indirect material interest. The charter of our audit committee will provide that our audit committee shall review and approve or ratify any related party transaction.

Prior to the effectiveness of the registration statement of which this prospectus forms a part, we intend to adopt a formal written policy providing that we are not permitted to enter into any transaction that exceeds \$120,000 and in which any related person has a direct or indirect material interest without the consent of our audit committee. In approving or rejecting any such transaction, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to our audit committee, including whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person's interest in the transaction.

PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership of our common stock as of March 31, 2021 by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of the named executive officers;
- each of our directors; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable. The information does not necessarily indicate beneficial ownership for any other purpose, including for purposes of Sections 13(d) and 13(g) of the Exchange Act.

We have based our calculation of the percentage of beneficial ownership prior to this offering on 64,686,862 shares of our common stock outstanding as of March 31, 2021, after giving pro forma effect to the automatic conversion of all of our outstanding convertible preferred stock and the automatic exercise of all of our outstanding warrants issued to SGI into an aggregate of 48,945,302 shares of common stock immediately prior to the completion of this offering. We have based our calculation of the percentage of beneficial ownership after this offering on _____ shares of our common stock outstanding immediately after the completion of this offering, assuming no exercise by the underwriters of their option to purchase additional shares. We have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of March 31, 2021, to be outstanding and to be beneficially owned by the person holding the stock option for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Codex DNA, Inc., 9535 Waples Street, Suite 100, San Diego, CA 92121-2993.

Name of Beneficial Owner	Shares Beneficially Owned Prior to this Offering		Shares Beneficially Owned After this Offering	
	Shares	Percentage	Shares	Percentage
5% and Greater Stockholders:				
Northpond Ventures, LP ⁽¹⁾	28,126,144	43.5 %	28,126,144	
GATTACA Mining LLC ⁽²⁾	18,000,000	27.8 %	18,000,000	
BroadOak Fund IV, LLC ⁽³⁾	6,957,138	10.8 %	6,957,138	
DH Life Sciences LLC ⁽⁴⁾	6,882,475	10.6 %	6,882,475	
Synthetic Genomics, Inc. ⁽⁵⁾	3,707,302	5.7 %	3,707,302	
Named Executive Officers and Directors:				
Todd R. Nelson ⁽⁶⁾	18,272,243	28.3 %	18,272,243	
Daniel G. Gibson ⁽⁷⁾	263,815	0.4 %	233,375	
Timothy E. Cloutier	—	— %	—	
Andrea L. Jackson ⁽⁸⁾	—	— %	—	
Sharon Kedar ⁽⁹⁾	—	— %	—	
Jami D. Nachtsheim ⁽¹⁰⁾	—	— %	—	
William F. Snider ⁽¹¹⁾	6,957,138	10.8 %	6,957,138	
Christine A. Tsingos ⁽¹²⁾	—	— %	—	
Franklin R. Witney	—	— %	—	
All executive officers and directors as a group (10 persons) ⁽¹³⁾	25,493,196	39.4 %	25,462,756	

- (1) Consists of 28,126,144 shares held of record by Northpond Ventures, LP. Northpond Ventures, LP is managed by Northpond Ventures GP, LLC (Northpond GP LLC) and Michael Rubin is the managing member of Northpond GP LLC. Each of Northpond GP LLC and Mr. Rubin may also be deemed to beneficially own the shares held by Northpond Ventures, LP. Andrea L. Jackson, a member of our board of directors, is a Director of Northpond Ventures, LLC, an investment firm affiliated with Northpond Ventures, LP and Northpond GP LLC. Ms. Jackson disclaims beneficial ownership of such shares except to the extent of her pecuniary interest therein, if any. The address of Northpond Ventures, LP is 7500 Old Georgetown Rd, Suite 850, Bethesda, MD 20814.
- (2) Consists of 18,000,000 shares held of record by GATTACA. Todd R. Nelson is the managing member of GATTACA and may be deemed to have voting and dispositive power over the shares held by GATTACA. The address of GATTACA is P.O. Box 676273, Rancho Santa Fe, CA 92067.
- (3) Consists of 6,957,138 shares held of record by BroadOak Fund IV, LLC. BroadOak Asset Management, LLC is the manager and general partner of BroadOak Fund IV, LLC, and BroadOak Capital Partners, LLC is the managing member of BroadOak Asset Management, LLC. William F. Snider is a partner and manager of BroadOak Capital Partners, LLC. Each of Mr. Snider and BroadOak Capital Partners, LLC may be deemed to have voting and dispositive power over the shares held by BroadOak Fund IV, LLC, and each disclaims

beneficial ownership of such shares except to the extent of his/its indirect pecuniary interest therein, if any. The address for BroadOak Fund IV, LLC is 4800 Montgomery Lane Suite 230, Bethesda, MD 20814.

- (4) Consists of 6,882,475 shares held of record by DH Life Sciences LLC. DH Life Sciences LLC is an indirect, wholly owned subsidiary of Danaher Corporation. The address of DH Life Sciences LLC is 2200 Pennsylvania Avenue, N.W., Suite 800W, Washington, DC 20037.
- (5) Consists of 3,707,302 shares subject to outstanding warrants which are exercisable within 60 days of December 30, 2020 held by Synthetic Genomics, Inc. The address for Synthetic Genomics, Inc. is 11149 North Torrey Pines Road, La Jolla, CA 92037.
- (6) Consists of 272,243 shares held of record by Todd R. Nelson and the shares referenced in footnote 2.
- (7) Consists of 243,523 shares held of record by Daniel G. Gibson and 20,292 shares issuable pursuant to stock options exercisable with 60 days of March 31, 2021.
- (8) Ms. Jackson joined the board of directors in May 2021.
- (9) Ms. Kedar disclaims beneficial ownership of the shares referenced in footnote 1, except to the extent of her pecuniary interest therein, if any. Ms. Kedar resigned from our board of directors in May 2021.
- (10) Ms. Nachtsheim has agreed to join our board of directors in June 2021.
- (11) Consists of the shares referenced in footnote 3. Mr. Snider disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein, if any.
- (12) Ms. Tsingos joined the board of directors in May 2021.
- (13) Consists of (i) 53,355,525 shares beneficially owned by our current executive officers and directors, and (ii) 233,375 shares issuable pursuant to stock options held by such directors and officers and exercisable within 60 days of March 31, 2021.

DESCRIPTION OF CAPITAL STOCK

The following descriptions of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws that will be in effect upon completion of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of the common stock and preferred stock reflect changes to our capital structure that will occur upon the completion of this offering.

Immediately prior to the completion of this offering and the filing of our amended and restated certificate of incorporation to be effective upon completion of this offering, our authorized capital stock will consist of 100,000,000 shares of common stock, par value \$0.0001 per share, and 5,000,000 shares of preferred stock, par value \$0.0001 per share.

Immediately prior to the completion of this offering, all the outstanding shares of our convertible preferred stock will automatically convert into an aggregate of _____ shares of our common stock.

Unless previously exercised, immediately prior to the completion of this offering, that certain Warrant to Purchase Common Stock, dated March 8, 2019, issued to SGI will automatically net exercise into _____ shares of our common stock and that certain Warrant to Purchase Stock of the Company, dated December 19, 2019, issued to SGI, will automatically net exercise into _____ shares of our common stock.

In connection with the 2021 Loan Agreement, the Company issued to SVB a warrant to purchase a number of shares of preferred stock (the Preferred Warrant). Unless previously exercised, following this offering, the Preferred Warrant will be exercisable for _____ shares of common stock. If the Company chooses to draw any more funds under the Loan Agreement, the number of shares into which the Preferred Warrant is exercisable shall be increased by a number of shares equal to 1.5% of such draw divided by \$ _____. Unless previously exercised, the Preferred Warrant will expire on March 4, 2031.

Based on shares of common stock outstanding as of March 31, 2021, and after giving pro forma effect to the automatic conversion of all of our outstanding convertible preferred stock and the automatic exercise of all of our outstanding warrants issued to SGI into an aggregate of 48,945,302 shares of common stock immediately prior to the completion of this offering and the issuance of _____ shares of common stock in this offering, there will be _____ shares of common stock outstanding upon the completion of this offering. As of March 31, 2021, we had 28 stockholders of record.

Common Stock

Voting Rights

Each holder of common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws to be in effect upon the completion of this offering do not provide for cumulative voting rights. Because of this, the holders of a plurality of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose. With respect to matters other than the election of directors, at any meeting of the stockholders at which a quorum is present or represented, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at such meeting and entitled to vote on the subject matter shall be the act of the stockholders, except as otherwise required by law. The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering, upon payment and delivery in accordance with the underwriting agreement, will be fully paid and nonassessable.

Preferred Stock

Upon the completion of this offering, our board of directors will have the authority, without further action by the stockholders, to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in our control or other corporate action. Upon the completion of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

Common Stock Options

As of March 31, 2021, we had outstanding options to purchase an aggregate of 1,453,980 shares of our common stock, with a weighted-average exercise price of \$0.20 per share, under our 2019 Plan.

As of March 31, 2021, we had outstanding options to purchase an aggregate of 1,986,394 shares of our common stock, with an exercise price of \$1.46 per share, under our 2021 Plan.

Registration Rights

After the completion of this offering, under our investors' rights agreement, as amended, certain holders of shares of common stock or their transferees, will have the right to require us to register the offer and sale of their shares, or to include their shares in any registration statement we file, in each case as described below.

Demand Registration Rights

After the completion of this offering, certain holders of our common stock will be entitled to certain demand registration rights. Prior to the earlier of December 19, 2024 and 180 days following the date of effectiveness of the registration statement of which this prospectus forms a part, the holders of at least a majority of the shares having registration rights then outstanding can request that we file a registration statement to register the offer and sale of their shares. We are only obligated to effect up to two such registrations. Each such request for registration must cover securities the anticipated aggregate gross proceeds of which, before deducting underwriting discounts and expenses, is at least \$10 million. These demand registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances. If we determine that it would be materially detrimental to us and our stockholders to effect such a demand registration, we have the right to defer such registration, not more than once in any twelve month period, for a period of up to 90 days.

Form S-3 Registration Rights

After the completion of this offering, the holders of up to _____ shares of our common stock will be entitled to certain Form S-3 registration rights. At any time after the completion of this offering when we are eligible to file a registration statement on Form S-3, the holders of the shares having these rights then outstanding can request that we register the offer and sale of their shares of our common stock on a registration statement on Form S-3 so long as the request covers securities the anticipated aggregate public offering price of which is at least \$3 million. These stockholders may make an unlimited number of requests for registration on a registration statement on Form S-3. However, we will not be required to effect a registration on Form S-3 if we have effected two such registrations within the twelve month period preceding the date of the request. These Form S-3 registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances. Additionally, if we determine that it would be seriously detrimental to us and our stockholders to effect such a demand registration, we have the right to defer such registration, not more than once in any 12 month period, for a period of up to 90 days.

Piggyback Registration Rights

After the completion of this offering, the holders of up to _____ shares of our common stock will be entitled to certain "piggyback" registration rights. If we propose to register the offer and sale of shares of our common stock or the common stock of certain other holders under the Securities Act, the holders of these shares can request that we include their shares in such registration, subject to certain marketing and other limitations, including the right of the underwriters to limit the number of shares included in any such registration statement under certain circumstances. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to (i) a registration relating solely to employee benefit plans, (ii) a registration relating to common stock issuable upon conversion of debt securities that are also being registered, (iii) a registration relating to a corporate reorganization or other transaction covered by Rule 145 promulgated under the Securities Act, (iv) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale the registrable securities or (v) a registration pursuant to the demand or Form S-3 registration rights described in the preceding two paragraphs above, the holders of these shares are entitled to notice of the registration and have the right, subject to certain limitations, to include their shares in the registration.

Expenses of Registration

We will pay all expenses relating to any demand registrations, Form S-3 registrations and piggyback registrations, subject to specified exceptions.

Termination

The registration rights terminate upon the earliest of (i) the date that is five years after the closing of this offering, (ii) immediately prior to the closing of certain liquidation events and (iii) as to a given holder of registration rights, the date after the closing of this offering when such holder of registration rights can sell all of such holder's registrable securities during any 90-day period pursuant to Rule 144 promulgated under the Securities Act.

Anti-takeover Effects of Certain Provisions of Delaware Law, Our Amended and Restated Certificate of Incorporation and Our Amended and Restated Bylaws

Certain provisions of Delaware law and certain provisions that will be included in our amended and restated certificate of incorporation and amended and restated bylaws summarized below may be deemed to have an anti-takeover effect and may delay, deter or prevent a tender offer or takeover attempt that a stockholder might consider to be in its best interests, including attempts that might result in a premium being paid over the market price for the shares held by stockholders.

Preferred Stock

Our amended and restated certificate of incorporation will contain provisions that permit our board of directors to issue, without any further vote or action by the stockholders, shares of preferred stock in one or more series and, with respect to each such series, to fix the number of shares constituting the series and the designation of the series, the voting rights (if any) of the shares of the series and the powers, preferences or relative, participation, optional and other special rights, if any, and any qualifications, limitations or restrictions, of the shares of such series.

Classified Board

Our amended and restated certificate of incorporation will provide that our board of directors is divided into three classes, designated Class I, Class II and Class III. Each class will be an equal number of directors, as nearly as possible, consisting of one third of the total number of directors constituting the entire board of directors. The term of initial Class I directors shall terminate on the date of the 2022 annual meeting, the term of the initial Class II directors shall terminate on the date of the 2023 annual meeting, and the term of the initial Class III directors shall terminate on the date of the 2024 annual meeting. At each annual meeting of stockholders beginning in 2022, the class of directors whose term expires at that annual meeting will be subject to reelection for a three-year term.

Removal of Directors

Our amended and restated certificate of incorporation will provide that stockholders may only remove a director for cause by a vote of no less than a majority of the voting power of the issued and outstanding capital stock of the Company entitled to vote in the election of directors.

Director Vacancies

Our amended and restated certificate of incorporation will authorize only our board of directors to fill vacant directorships.

No Cumulative Voting

Our amended and restated certificate of incorporation will provide that stockholders do not have the right to cumulate votes in the election of directors.

Special Meetings of Stockholders

Our amended and restated certificate of incorporation and amended and restated bylaws will provide that, except as otherwise required by law, special meetings of the stockholders may be called only by the chair of our board of directors, by our chief executive officer or president, or by the board of directors acting pursuant to a resolution adopted by a majority of the board.

Advance Notice Procedures for Director Nominations

Our amended and restated bylaws will provide that stockholders seeking to nominate candidates for election as directors at an annual or special meeting of stockholders must provide timely notice thereof in writing. To be timely, a stockholder's notice generally will have to be delivered to and received at our principal executive offices before notice of the meeting is issued by the secretary of the Company, with such notice being served not less than 90 nor more than 120 days before the meeting. Although the amended and restated bylaws will not give the board of directors the power to approve or disapprove stockholder nominations of candidates to be elected at an annual meeting, the amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the company. The stockholder's notice must also include items described in our amended and restated bylaws. Any stockholder nominee must also provide the information and make the representations as required by our amended and restated bylaws.

Action by Written Consent

Our amended and restated certificate of incorporation and amended and restated bylaws will provide that any action to be taken by the stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by written consent.

Amending our Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation may be amended or altered in any manner provided by the Delaware General Corporation Law (DGCL). Certain amendments to our amended and restated certificate of incorporation will require the approval of a majority of our board of directors and stockholders holding two-thirds of the voting power of our then outstanding capital stock. Our amended and restated bylaws may be adopted, amended, altered or repealed by stockholders only upon approval of at least majority of the voting power of all the then outstanding shares of the common stock, except for any amendment of the above provisions and others, which would require the approval of a two-thirds majority of our then outstanding common stock. Additionally, our

amended and restated certificate of incorporation will provide that our bylaws may be amended, altered or repealed by the affirmative vote of the majority of our board of directors.

Authorized but Unissued Shares

Our authorized but unissued shares of common stock and preferred stock will be available for future issuances without stockholder approval, except as required by the listing standards of Nasdaq, and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could render more difficult or discourage an attempt to obtain control of the company by means of a proxy contest, tender offer, merger or otherwise.

Exclusive Jurisdiction

Our amended and restated bylaws will provide that, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of fiduciary duty, any action asserting a claim arising pursuant to the DGCL, any action regarding our amended and restated certificate of incorporation or amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine. This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction. Our amended and restated bylaws further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to these provisions. Although we believe these provisions benefit us by providing increased consistency in the application of law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. We also note that stockholders cannot waive compliance (or consent to noncompliance) with the federal securities laws and the rules and regulations thereunder. See the section titled "Risk Factors - Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, and also provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, each of which could limit our stockholders' ability to choose the judicial forum for disputes with us or our directors, officers, stockholders, or employees."

Business Combinations with Interested Stockholders

We are governed by Section 203 of the DGCL. Subject to certain exceptions, Section 203 of the DGCL prohibits a public Delaware corporation from engaging in a business combination (as defined in such section) with an "interested stockholder" (defined generally as any person who beneficially owns 15% or more of the outstanding voting stock of such corporation or any person affiliated with such person) for a period of three years following the time that such stockholder became an interested stockholder, unless (i) prior to such time the board of directors of such corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of such corporation at the time the transaction commenced (excluding for purposes of determining the voting stock of such corporation outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (a) by persons who are directors and also officers of such corporation and (b) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer); or (iii) at or subsequent to such time the business combination is approved by the board of directors of such corporation and authorized at a meeting of stockholders (and not by written consent) by the affirmative vote of at least 66 2/3% of the outstanding voting stock of such corporation not owned by the interested stockholder.

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide that we must indemnify our directors and officers to the fullest extent authorized by the DGCL. We are expressly authorized to, and do, carry directors' and officers' insurance providing coverage for our directors, officers and certain

employees for some liabilities. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and executive officers.

The limitation on liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Listing

We have applied to list our common stock on the Nasdaq Global Market under the symbol "DNAY."

Transfer Agent and Registrar

Upon completion of this offering, the transfer agent and registrar for our common stock will be American Stock Transfer & Trust Co. LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, New York 11219.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and although we expect that our common stock will be approved for listing on the Nasdaq Global Market, we cannot assure investors that there will be an active public market for our common stock following this offering. We cannot predict what effect, if any, sales of our shares in the public market or the availability of shares for sale will have on the market price of our common stock. Future sales of substantial amounts of common stock in the public market, including shares issued upon exercise of outstanding options, or the perception that such sales may occur, however, could adversely affect the market price of our common stock and also could adversely affect our future ability to raise capital through the sale of our common stock or other equity-related securities of ours at times and prices we believe appropriate.

Upon completion of this offering, based on our shares outstanding as of March 31, 2021 and after giving effect to the conversion of all outstanding shares of our convertible preferred stock, _____ shares of our common stock will be outstanding, or _____ shares of common stock if the underwriters exercise their option to purchase additional shares in full. All of the shares of common stock expected to be sold in this offering will be freely tradable without restriction or further registration under the Securities Act unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining outstanding shares of our common stock will be deemed "restricted securities" as that term is defined under Rule 144. Restricted securities may be sold in the public market only if their offer and sale is registered under the Securities Act or if the offer and sale of those securities qualify for an exemption from registration, including exemptions provided by Rules 144 and 701 under the Securities Act, which are summarized below.

As a result of the lock-up agreements and market stand-off provisions described below and the provisions of Rules 144 or 701, the shares of our common stock that will be deemed "restricted securities" will be available for sale in the public market following the completion of this offering as follows:

- _____ shares will be eligible for sale on the date of this prospectus; and
- _____ shares will be eligible for sale upon expiration of the lock-up agreements and market stand-off provisions described below, following the date that is 180 days after the date of this prospectus.

Lock-up Agreements and Market Stand-Off Agreements

Our officers, directors and the holders of substantially all of our capital stock and options have entered into market stand-off agreements with us and have entered into or will enter into lock-up agreements with the underwriters, subject to certain exceptions, not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior consent of Jefferies LLC and Cowen and Company, LLC. See the section titled "Underwriting" for additional information.

Rule 144

Rule 144, as currently in effect, generally provides that, once we have been subject to the public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, a stockholder who is not deemed to have been one of our affiliates at any time during the preceding 90 days and who has beneficially owned the shares of our capital stock proposed to be sold for at least six months is entitled to sell such shares in reliance upon Rule 144 without complying with the volume limitation, manner of sale or notice conditions of Rule 144. If such stockholder has beneficially owned the shares of our capital stock proposed to be sold for at least one year, then such person is entitled to sell such shares in reliance upon Rule 144 without complying with any of the other conditions of Rule 144.

Rule 144 also provides that a stockholder who is deemed to have been one of our affiliates at any time during the preceding 90 days and who has beneficially owned the shares of our common stock proposed to be sold for at least

six months is entitled to sell such shares in reliance upon Rule 144 within any three month period beginning 90 days after the date of this prospectus a number of such shares that does not exceed the greater of the following:

- 1% of the number of shares of our capital stock then outstanding, which will equal _____ shares immediately after the completion of this offering, assuming no exercise by the underwriters of their option to purchase additional shares; or
- the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales of our capital stock made in reliance upon Rule 144 by a stockholder who is deemed to have been one of our affiliates at any time during the preceding 90 days are also subject to the current public information, manner of sale and notice conditions of Rule 144.

Rule 701

Rule 701 generally provides that, once we have been subject to the public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, a stockholder who purchased shares of our common stock pursuant to a written compensatory benefit plan or contract and who is not deemed to have been one of our affiliates at any time during the preceding 90 days may sell such shares in reliance upon Rule 144 without complying with the current public information or holding period conditions of Rule 144. Rule 701 also provides that a stockholder who purchased shares of our common stock pursuant to a written compensatory benefit plan or contract and who is deemed to have been one of our affiliates during the preceding 90 days may sell such shares under Rule 144 without complying with the holding period condition of Rule 144. However, all stockholders who purchased shares of our common stock pursuant to a written compensatory benefit plan or contract are required to wait until 90 days after the date of this prospectus before selling such shares pursuant to Rule 701.

Registration Rights

After the completion of this offering, the holders of up to _____ shares of our common stock will be entitled to certain rights with respect to the registration of such shares under the Securities Act. The registration of these shares of our common stock under the Securities Act would result in these shares becoming eligible for sale in the public market without restriction under the Securities Act immediately upon the effectiveness of such registration. See the section titled "Description of Capital Stock—Registration Rights" for a description of these registration rights.

Registration Statement

After the completion of this offering, we intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares of our common stock subject to equity awards outstanding or reserved for issuance under our equity compensation plans. The shares of our common stock covered by such registration statement will be eligible for sale in the public market without restriction under the Securities Act immediately upon the effectiveness of such registration statement, subject to vesting restrictions, the conditions of Rule 144 applicable to affiliates, and any applicable market stand-off agreements and lock-up agreements. See the section titled "Executive Compensation—Employee Benefit and Stock Plans" for a description of our equity compensation plans.

**MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS
FOR NON-U.S. HOLDERS OF OUR COMMON STOCK**

The following is a summary of the material U.S. federal income tax considerations of the ownership and disposition of our common stock acquired in this offering by a "non-U.S. holder" (as defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the Code), Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought, and do not intend to seek, any ruling from the Internal Revenue Service (the IRS), with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any non-U.S., state or local jurisdiction, under U.S. federal gift and estate tax rules or under any applicable tax treaty. In addition, this discussion does not address any tax considerations applicable to an investor's particular circumstances or investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies, regulated investment companies, real estate investment trusts or other financial institutions;
- tax-exempt organizations or accounts;
- pension plans and tax-qualified retirement plans;
- controlled foreign corporations and passive foreign investment companies and their stockholders, and corporations that accumulate earnings to avoid U.S. federal income tax;
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below);
- U.S. expatriates and certain other former citizens or long-term residents of the United States;
- partnerships (or entities or arrangements classified as such for U.S. federal income tax purposes), other pass-through entities and investors therein;
- persons subject to the alternative minimum tax;
- persons who hold our common stock as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction;
- persons who hold or receive our common stock pursuant to the exercise of any option or otherwise as compensation;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment); or
- persons deemed to sell our common stock under the constructive sale provisions of the Code.

In addition, if a partnership, entity or arrangement classified as a partnership or flow-through entity for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership or other entity. A partner in a partnership or other such entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock through a partnership or other such entity, as applicable.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under the U.S. federal gift or estate tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, you are a "non-U.S. holder" if you are a beneficial owner of our common stock that, for U.S. federal income tax purposes, is not

- a partnership (including any entity or arrangement treated as a partnership and the equity holders therein);
- an individual who is a citizen or resident of the United States;
- a domestic corporation for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (i) whose administration is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (ii) that has made a valid election under applicable Treasury Regulations to be treated as a U.S. person.

Distributions

As described in the section titled "Dividend Policy," we have never declared or paid cash dividends on our capital stock, and we do not anticipate paying any cash dividends following the completion of this offering. However, if we do make distributions on our common stock, those payments will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, the excess will, first, constitute a return of capital and reduce your basis in our common stock (determined separately with respect to each share of our common stock), but not below zero, and thereafter will be treated as gain from the sale of stock.

Subject to the discussions below on effectively connected income and in the sections titled "Backup Withholding and Information Reporting" and "Foreign Account Tax Compliance Act (FATCA)," any dividend paid to you generally will be subject to U.S. federal withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. In order to qualify for a reduced treaty rate, you must provide us with a properly executed IRS Form W-8BEN or W-8BEN-E or other appropriate version of IRS Form W-8 certifying that you are eligible for the applicable treaty benefits. If you are eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty, you may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If you hold our common stock through a financial institution or other agent acting on the non-U.S. holder's behalf, you will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Dividends received by you that are treated as effectively connected with your conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed base maintained by you in the United States) are generally exempt from U.S. federal withholding tax, subject to the discussion below in the sections titled "Backup Withholding and Information Reporting" and "Foreign Account Tax Compliance Act (FATCA)." In order to obtain this exemption, you must provide us with a properly executed IRS Form W-8ECI or other appropriate form properly certifying such exemption. Such effectively connected dividends, although not subject to U.S. federal withholding tax, are taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits, subject to an applicable income tax treaty providing otherwise. In addition, if you are a corporate non-U.S. holder, dividends you receive that are effectively connected with your conduct of a U.S. trade or business (and, if an income tax treaty applies, are attributable to a permanent establishment or fixed base maintained by you in the United States) may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty between the United States and your country of residence. You should consult your tax advisor regarding the tax consequences of the ownership and disposition of our common stock, including any applicable tax treaties that may provide for different rules.

Gain on Disposition of Common Stock

Subject to the discussion in the section titled "Backup Withholding and Information Reporting," you generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with your conduct of a U.S. trade or business (and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by you in the United States);
- you are an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met; or
- our common stock constitutes a United States real property interest by reason of our status as a "United States real property holding corporation," (or USRPHC), for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock, unless our common stock is regularly traded on an established securities market and you hold no more than 5% of our outstanding common stock, directly, indirectly and constructively, at all times, during the shorter of the five-year period ending on the date of the taxable disposition or your holding period for our common stock.

We believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of our U.S. and worldwide real property plus our other business assets, there can be no assurance that we will not become a USRPHC in the future. If we are USRPHC and either our common stock is not regularly traded on an established securities market or you hold, or are treated as holding, more than 5% of our outstanding common stock, directly or indirectly, during the applicable testing period, you will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. If we are a USRPHC and our common stock is not regularly traded on an established securities market, your proceeds received on the disposition of shares will also generally be subject to withholding at a rate of 15%. You are encouraged to consult your own tax advisors regarding the possible consequences to you if we are, or were to become, a USRPHC.

If you are a non-U.S. holder described in the first bullet above, you will be required to pay tax on the gain derived from the sale (net of certain deductions and credits) under regular U.S. federal income tax rates, and a corporate non-U.S. holder described in the first bullet above also may be subject to the branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty. If you are an individual non-U.S. holder described in the second bullet above, you will be subject to tax on such gain at 30% (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S. source capital losses for the year, provided you have timely filed U.S. federal income tax returns with respect to such losses. You should consult your tax advisor regarding any applicable income tax or other treaties that may provide for different rules.

Backup Withholding and Information Reporting

Generally, we must report annually to the IRS the amount of dividends paid to you, your name and address and the amount of tax withheld, if any. A similar report will be sent to you. Pursuant to applicable income tax treaties or other agreements, the IRS may make these reports available to tax authorities in your country of residence.

Payments of dividends on or of proceeds from the disposition of our common stock made to you may also be subject to backup withholding at a current rate of 24% unless you establish an exemption, for example, by properly certifying your non-U.S. status on a properly completed IRS Form W-8BEN or W-8BEN-E or another appropriate version of IRS Form W-8. Notwithstanding the foregoing, backup withholding may apply if either we or our paying agent has actual knowledge, or reason to know, that you are a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a

refund or credit may generally be obtained from the IRS, if you provide the required information to the IRS in a timely manner.

Foreign Account Tax Compliance Act (FATCA)

The Foreign Account Tax Compliance Act, Treasury Regulations issued thereunder and official IRS guidance (collectively FATCA), generally impose a U.S. federal withholding tax of 30% on dividends on, and, subject to the discussion of certain proposed Treasury Regulations below, the gross proceeds from a sale or other disposition of our common stock, paid to a "foreign financial institution" (as specially defined under these rules), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding the U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise establishes an exemption. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on and, subject to the discussion of certain proposed Treasury Regulations below, the gross proceeds from a sale or other disposition of our common stock paid to a "non-financial foreign entity" (as specially defined under these rules) unless such entity provides the withholding agent with a certification identifying the substantial direct and indirect U.S. owners of the entity, certifies that it does not have any substantial U.S. owners, or otherwise establishes an exemption. The withholding tax will apply regardless of whether the payment otherwise would be exempt from U.S. nonresident and backup withholding tax, including under the other exemptions described above. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Prospective investors should consult with their own tax advisors regarding the application of FATCA withholding to their investment in, and ownership and disposition of, our common stock.

The Treasury Secretary has issued proposed Treasury Regulations, which, if finalized in their present form, would eliminate withholding under FATCA with respect to payment of gross proceeds from a sale or other disposition of our common stock. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed Treasury Regulations until final regulations are issued.

The preceding discussion of U.S. federal tax considerations is for general information only. It is not tax advice to investors in their particular circumstances. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed change in applicable laws.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, 2021, among us and Jefferies LLC and Cowen and Company, LLC, as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

Underwriter	Number of Shares
Jefferies LLC	
Cowen and Company, LLC	
KeyBanc Capital Markets Inc.	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part. In addition, the underwriters have advised us that they do not intend to confirm sales to any account over which they exercise discretionary authority expect sales to accounts over which they have discretionary authority to exceed _____ % of the common stock being offered.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of \$ _____ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Per Share		Total	
	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares	Without Option to Purchase Additional Shares	With Option to Purchase Additional Shares
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$. We also have agreed to reimburse the underwriters for up to \$ for their Financial Industry Regulatory Authority (FINRA) counsel fee. In accordance with FINRA Rule 5110, these reimbursed fees and expenses are deemed underwriting compensation for this offering.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

Listing

We have applied to have our common stock listed on the Nasdaq Global Market under the trading symbol "DNAY".

Stamp Taxes

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and holders of all or substantially all our outstanding common stock or of securities convertible into or exchangeable or exercisable for shares of our common stock have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-1(h) under the Exchange Act, or
- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of Jefferies LLC and Cowen and Company, LLC.

This restriction terminates after the close of trading of the common stock on and including the 180th day after the date of this prospectus.

Jefferies LLC and Cowen and Company, LLC may, in their sole discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Exchange Act, and certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

"Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

"Naked" short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on the Nasdaq Global Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the

prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

Canada

Resale Restrictions

The distribution of the securities in Canada is being made only in the provinces of Ontario, Quebec, Alberta, British Columbia, Manitoba, New Brunswick and Nova Scotia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the securities in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

Representations of Canadian Purchasers By purchasing the securities in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the securities without the benefit of a prospectus qualified under those securities laws as it is an "accredited investor" as defined under National Instrument 45-106 – Prospectus Exemptions or Section 73.3(1) of the Securities Act (Ontario), as applicable,
- the purchaser is a "permitted client" as defined in National Instrument 31-103 - Registration Requirements, Exemptions and Ongoing Registrant Obligations,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

Conflicts of Interest

Canadian purchasers are hereby notified that certain of the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 – Underwriting Conflicts from having to provide certain conflict of interest disclosure in this document.

Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of the securities should consult their own legal and tax advisors with respect to the tax consequences of an investment in the securities in their particular circumstances and about the eligibility of the securities for investment by the purchaser under relevant Canadian legislation.

Australia

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia (Corporations Act), has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

You confirm and warrant that you are either:

- a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act;
- a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- a person associated with the company under Section 708(12) of the Corporations Act; or
- a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

European Economic Area

In relation to each Member State of the European Economic Area (Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which have been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares may be offered to the public in that Relevant State at any time:

- (a) to any legal entity which is a "qualified investor" as defined under Article 2 of the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of representatives for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the shares shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation. For the purposes of this provision, the expression "offer to the public" in relation to the shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

MiFID II Product Governance

Any distributor subject to MiFID II that is offering, selling or recommending the shares is responsible for undertaking its own target market assessment in respect of the shares and determining its own distribution channels for the purposes of the MiFID product governance rules under Commission Delegated Directive (EU) 2017/593 (Delegated Directive). Neither we nor the underwriters make any representations or warranties as to a distributor's compliance with the Delegated Directive.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (SFO) and any rules made under that Ordinance; or in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong (CO) or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968 (the Israeli Securities Law), and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum (the Addendum), to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended (FIEL), and the underwriters will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except

pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the securities may not be circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the securities pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- where no consideration is or will be given for the transfer;
- where the transfer is by operation of law;
- as specified in Section 276(7) of the SFA; or
- as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, the company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Section 86 of the Financial Services and Markets Act 2000 (FSMA),

provided that no such offer of the shares shall require us or any of the representatives to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

LEGAL MATTERS

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, San Diego, California. Covington & Burling LLP, New York, New York is counsel for the underwriters in connection with this offering.

EXPERTS

OUM & Co. LLP, our independent registered public accounting firm, has audited our consolidated financial statements at December 31, 2019 and 2020, and for the periods from March 8, 2019 (inception) to December 31, 2019 and from January 1, 2020 to December 31, 2020, as set forth in their report. We have included our consolidated financial statements in the prospectus and elsewhere in the registration statement in reliance on OUM & Co. LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC also maintains an Internet website that contains the registration statement of which this prospectus forms a part, as well as the exhibits thereto. These documents, along with future reports, proxy statements and other information about us, are available at the SEC's website, www.sec.gov.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act, and, in accordance with this law, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above. We also maintain a website at www.codexdna.com where these materials are available. Upon the completion of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on, or that can be accessible through, our website is not a part of this prospectus and the inclusion of our website address in this prospectus is an inactive textual reference only.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and Board of Directors

Codex DNA, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Codex DNA, Inc. (the Company) as of December 31, 2019 and 2020, and the related consolidated statement of operations and comprehensive loss, convertible preferred stock and stockholders' equity (deficit), and cash flows for the period from March 8, 2019 (inception) to December 31, 2019 and the year ended December 31, 2020, and the related notes to the consolidated financial statements (collectively referred to as the consolidated "financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2020, and the results of its operations and its cash flows for the period from March 8, 2019 (inception) to December 31, 2019 and the year ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Going Concern Uncertainty

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1, the Company has had recurring losses and negative operating cash flows since inception, an accumulated deficit at December 31, 2020, and insufficient cash and loan proceeds at December 31, 2020 to fund operations for twelve months from the date of issuance. All of these matters raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ OUM & CO. LLP

San Francisco, California

March 16, 2021

We have served as the Company's auditor since 2020.

Codex DNA, Inc.
Consolidated Balance Sheet
(In thousands, except share and per share data)

	December 31,	
	2019	2020
Assets		
Current assets:		
Cash	\$ 29,144	\$ 13,463
Accounts receivable, net of allowance for bad debts of \$105 at December 31, 2019 and 2020	1,492	2,266
Inventory, net	712	601
Prepaid expenses and other current assets	86	851
Total current assets	31,434	17,181
Property and equipment, net	888	689
Right-of-use assets	—	3,090
Long-term deposits	81	81
Goodwill	3,497	3,497
Other intangible assets, net	2,861	2,325
Total Assets	\$ 38,761	\$ 26,863
Liabilities, convertible preferred stock and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	\$ 614	\$ 1,191
Accrued employee expenses	758	1,470
Finance lease liability, current portion	111	90
Operating lease liability, current portion	—	693
Deferred revenue, current portion	112	606
Other accrued liabilities	127	220
Notes payable, current portion	—	1,333
Other current liabilities	—	22
Total current liabilities	1,722	5,625
Finance lease liability, net of current portion	185	81
Operating lease liability, net of current portion	—	2,776
Notes payable, net of discount and current portion	4,472	3,353
Deferred rent	284	—
Derivative liabilities	654	1,533
Deferred revenue, net of current portion	33	40
Total liabilities	\$ 7,350	\$ 13,408
Commitments and contingencies (Note 14)		
Convertible preferred stock		
Series Z Preferred stock, \$.0001 par value; 7,500,000 shares authorized, issued, and outstanding at December 31, 2019 and 2020	1	1
Series A Preferred stock, \$.0001 par value; 22,797,830 shares authorized, issued, and outstanding at December 31, 2019 and 2020	20,992	20,992
Series A1 Preferred stock, \$.0001 par value; 15,402,237 shares authorized at December 31, 2019 and 2020; 14,940,170 shares issued and outstanding at December 31, 2019 and 2020	17,921	17,921
Stockholders' equity (deficit)		
Common stock, \$.0001 par value; 72,000,000 shares authorized at December 31, 2019 and 2020; 15,000,000 and 15,071,978 shares issued and outstanding at December 31, 2019 and 2020, respectively	2	2
Additional paid-in capital	797	851
Accumulated deficit	(8,302)	(26,312)
Total stockholders' equity (deficit)	(7,503)	(25,459)
Total liabilities, convertible preferred stock and stockholders' equity (deficit)	\$ 38,761	\$ 26,863

The accompanying notes are an integral part of these consolidated financial statements.

Codex DNA, Inc.
Consolidated Statement of Operations and Comprehensive Loss
(in thousands, except share and per share data)

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Revenue:		
Product sales	\$ 3,555	\$ 5,131
Royalties	1,250	1,445
Total revenue	4,805	6,576
Cost of revenue	2,677	2,951
Gross profit	2,128	3,625
Operating expenses:		
Research and development	3,318	8,925
Sales and marketing	1,878	6,931
General and administrative	3,908	4,130
Total operating expenses	9,104	19,986
Loss from operations	(6,976)	(16,361)
Other income (expense):		
Interest expense	(1,490)	(690)
Change in fair value of derivative liabilities	62	(880)
Other income (expense), net	102	(74)
Total other income (expense), net	(1,326)	(1,644)
Loss before provision for income taxes	(8,302)	(18,005)
Provision for income taxes	—	(5)
Net loss and comprehensive loss	\$ (8,302)	\$ (18,010)
Net loss attributable to common stockholders	\$ (8,302)	\$ (18,010)
Net loss per share attributable to common stockholders—basic and diluted	\$ (0.55)	\$ (1.20)
Weighted average common stock outstanding—basic and diluted	15,000,000	15,004,616

The accompanying notes are an integral part of these consolidated financial statements.

Codex DNA, Inc.
Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)
(in thousands, except share data)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balance at March 8, 2019 (Inception)	7,500,000	\$ 1	15,000,000	\$ 2	\$ —	—	\$ 2
Conversion of debt to Series A	7,153,275	6,859	—	—	—	—	—
Issuance of Series A	15,644,555	14,999	—	—	—	—	—
Issuance of Series A-1	14,940,170	17,955	—	—	—	—	—
Equity financing costs	—	(900)	—	—	—	—	—
Warrant on common shares	—	—	—	—	786	—	786
Stock-based compensation expense	—	—	—	—	11	—	11
Net loss	—	—	—	—	—	(8,302)	(8,302)
Balances at December 31, 2019	45,238,000	38,914	15,000,000	2	797	(8,302)	(7,503)
Issuance of Common Stock upon exercise of stock options	—	—	71,978	—	11	—	11
Stock-based compensation expense	—	—	—	—	43	—	43
Net loss	—	—	—	—	—	(18,010)	(18,010)
Balances at December 31, 2020	45,238,000	38,914	15,071,978	2	851	(26,312)	(25,459)

The accompanying notes are an integral part of these consolidated financial statements.

Codex DNA, Inc.
Consolidated Statements of Cash Flows
(in thousands)

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Cash Flows From Operating Activities:		
Net loss	\$ (8,302)	\$ (18,010)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	448	403
Amortization of intangible assets	409	463
Amortization of debt discount	54	214
Loss on disposal of assets	194	—
Impairment of intangible asset	—	73
Stock-based compensation	11	43
Amortization of lease right-of-use assets	—	591
Change in fair value of warrant liability	169	425
Change in fair value of put option liability	(20)	(55)
Change in fair value of participation right liability	(42)	420
Change in fair value of success fee liability	379	89
Non-cash interest on convertible notes	109	—
Non-cash interest on finance leases	(24)	(17)
Changes in assets and liabilities:		
Accounts receivable	(859)	(774)
Inventories	723	111
Deposits, prepaid expenses and other current assets	(49)	(765)
Accounts payable, accrued payroll and accrued liabilities	232	1,404
Deferred revenue	(15)	501
Operating lease liabilities	—	(497)
Deferred rent	193	—
Net cash used in operating activities	(6,390)	(15,381)
Cash Flows From Investing Activities:		
Purchase of property and equipment	(79)	(204)
Net cash used in investing activities	(79)	(204)
Cash Flows From Financing Activities:		
Borrowings on term loan	5,000	—
Repayment of promissory note	(8,926)	—
Borrowings on convertible notes	5,000	—
Borrowings under promissory notes	1,750	—
Finance lease liability	(103)	(107)
Equity financing costs	(113)	—
Debt financing costs	(456)	—
Series A preferred stock	14,999	—
Series A-1 preferred stock	17,955	—
Proceeds from the exercise of common stock options	—	11
Net cash provided by (used in) financing activities	35,106	(96)
Net Increase (Decrease) in Cash And Restricted Cash	28,637	(15,681)
Cash and restricted cash at beginning of period/year	507	29,144
Cash and restricted cash at end of period/year	\$ 29,144	\$ 13,463
Supplemental Disclosure Of Cash Flow Information:		
Cash paid for income taxes	\$ —	\$ —
Cash paid for interest	\$ 1,329	\$ 464
Notes payable converted to Series A Preferred shares	\$ 6,859	\$ —
Issuance of common warrant for offering costs	\$ 785	\$ —

The accompanying notes are an integral part of these consolidated financial statements.

Codex DNA, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE PERIOD FROM MARCH 8, 2019 (INCEPTION) TO DECEMBER 2019
AND FOR THE YEAR ENDED ON DECEMBER 31, 2020

1. ORGANIZATION AND OPERATIONS

Business

Codex, DNA, Inc. (the Company) was incorporated in the state of Delaware in March 2011, as Synthetic Genomics Solution, Inc., a wholly owned subsidiary of Synthetic Genomics, Inc. (SGI). The Company changed its name to SGI-DNA, Inc. (SGI-DNA) in February 2013, and then to Codex DNA, Inc. in March 2020. SGI-DNA Limited, a United Kingdom company focused on sales and marketing activities, is a wholly owned subsidiary of Codex DNA, Inc. The Company manufactures and sells laboratory equipment, specifically synthetic biology instruments, reagents and associated products and related services, primarily to pharmaceutical and academic laboratories worldwide.

On March 8, 2019, SGI sold SGI-DNA to GATTACA Mining, LLC (Purchaser or GATTACA) by entering into a stock purchase agreement to sell all of the Company's outstanding common and preferred stock in exchange for a \$10 million non-recourse promissory note (see Note 3). Both the Company and Purchaser are co-borrowers of the promissory note. As this transaction was a change in control transaction in accordance with generally accepted accounting principles in the United States (US GAAP), the Company elected to apply push-down accounting and recognized a step up in the basis of the assets acquired and liabilities assumed in the acquisition (see Note 3 for further discussion of the stock purchase transaction).

Since its inception, the Company has devoted substantially all of its efforts to raising capital, commercializing its current products, and developing new product offerings. The Company is subject to a number of risks similar to those of other companies conducting high-risk, early-stage research and development of products. Principal among these risks are a dependence on key individuals and intellectual property, competition from other products and companies, and the technical risks associated with the successful research, development and manufacturing of its products. The Company's success is dependent upon its ability to continue to raise additional capital in order to fund ongoing research and development, commercialize its products, generate revenue, meet its obligations, and, ultimately, become profitable.

Products currently under development will require significant additional research and development efforts. These efforts require significant amounts of additional capital, adequate personnel and infrastructure.

Going Concern

The Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the consolidated financial statements are issued.

Since inception, the Company has incurred cumulative operating losses and negative cash flows from operations. These operating losses and negative cash flows have been financed principally from the issuance of equity securities and debt. The Company's ability to continue as a going concern is dependent upon the ability to raise additional debt or equity capital. There can be no assurance that such capital will be available in sufficient amounts or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern. Risks to which the Company is exposed include uncertainties related to the ability to achieve revenue-generating products; current and potential competitors with greater financial, technological, production, and marketing resources; dependence on key management personnel; and raising additional capital, as needed. Based upon the Company's current plans, management believes there currently is insufficient financial resources to fund the Company's operations for at least twelve months from the issuance date of the 2020 consolidated financial statements.

To address the Company's capital needs, the Company must continue to actively pursue additional equity or debt financing. The Company has been in ongoing discussions with different sources of capital, including financial institutions with respect to such financing. Adequate financing opportunities might not be available to the Company, when and if needed, on acceptable terms or at all. If the Company is unable to obtain additional financing in

sufficient amounts or on acceptable terms under such circumstances, the Company's operating results and prospects will be adversely affected.

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

Impact of COVID-19

In December 2019, a novel strain of coronavirus, which causes the disease known as COVID-19, was reported to have surfaced in Wuhan, China. Since then, COVID-19 coronavirus has spread globally. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The ongoing COVID-19 global and national health emergency has caused significant disruption in the international and United States economies and financial markets. The spread of COVID-19 has caused illness, quarantines, cancellation of events and travel, business and school shutdowns, reduction in business activity and financial transactions, labor shortages, supply chain interruptions and overall economic and financial market instability.

In response to public health directives and orders and to help minimize the risk of the virus to employees, the Company has taken precautionary measures, including implementing work-from home policies for certain employees. The COVID-19 pandemic has the potential to significantly impact the Company's manufacturing supply chain, distribution or logistics and other services. Additionally, the Company's service providers and their operations may be disrupted, temporarily closed or experience worker or supply shortages, which could result in additional disruptions or delays in shipments of laboratory equipment or the advancement of the scientific research. To date, the Company is not aware of any such disruptions. Furthermore, to date, the Company has not experienced the pandemic's adverse impacts in any material respect. The Company is not able to estimate the duration of the pandemic or potential impact on the business if disruptions or delays in shipments of product occur. In addition, a severe prolonged economic downturn could result in a variety of risks to the business, including weakened demand for product and a decreased ability to raise additional capital when needed on acceptable terms, if at all. As the situation continues to evolve, the Company will continue to closely monitor market conditions and respond accordingly.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Principles of Consolidation

The Company has prepared the accompanying consolidated financial statements in accordance with US GAAP and included the accounts of the Company and its wholly owned subsidiary after the elimination of all significant intercompany accounts and transactions.

Use of Estimates

The preparation of consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting periods presented. Key estimates in the consolidated financial statements include the Company's ability to continue as a going concern, revenue recognition, impairment assessment for goodwill and intangible assets, allowance for doubtful accounts, estimated useful lives of property and equipment, valuation of inventory, accrued expenses, valuation of deferred income tax assets, valuation of derivative liabilities, share-based compensation and accrued warranty are subject to significant estimation. Actual results could differ from those estimates.

Concentrations of Credit Risk and Significant Customers

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash and accounts receivable.

The Company's accounts receivable are derived from revenue earned from customers. The Company does not require collateral on accounts receivable. The Company maintains reserves for estimated potential credit losses. For the period from March 8, 2019 (inception) to December 31, 2019, two customers accounted for 32% and 20% of

the Company's accounts receivable, respectively. For the year ended December 31, 2020, one customer accounted for 23% of the Company's accounts receivable balance. For the year ended December 31, 2019, one customer accounted for 21% of the Company's revenue.

The Company maintains its cash with financial institutions. Deposits held with banks may exceed the amount of insurance provided on such deposits.

Cash

As of December 31, 2019 and 2020, cash consisted of cash deposited with banks.

Accounts Receivable

Accounts receivable is comprised of amounts due from third-party payors recorded at the invoice amount and does not bear interest. The Company reports accounts receivable net of estimated contractual adjustments and any allowance for doubtful accounts. The Company reviews accounts receivable on an ongoing basis to determine collectability. The Company maintains an allowance for doubtful accounts based on its assessment of the collectability of the amounts owed to the Company by its customers. The Company considers the following in determining the level of allowance required: its customer's payment history, the age of the receivable, the credit quality of its customers, the general financial condition of its customer base and other factors that may affect the customers' ability to pay. The Company writes off accounts against the allowance for doubtful accounts when they are deemed to be uncollectible. The Company's allowance for doubtful accounts at the end of both December 31, 2019 and 2020 was \$0.1 million.

Inventory

Inventory, which primarily consists of raw materials, labor and overhead related to work in process and sub-assemblies are stated at the lower of cost or net realizable value. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis. Net realizable value is evaluated by considering obsolescence, excessive levels of inventory, deterioration and other factors. Adjustments to reduce the cost of inventory to its net realizable value, if required, are made for estimated excess, obsolescence or impaired inventory. Excess and obsolete inventory is charged to cost of revenue and a new, lower-cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration of amounts previously written off.

Property and Equipment

Property and equipment are recorded at cost, net of accumulated depreciation and amortization. The Company depreciates property and equipment using the straight-line method over estimated useful lives ranging from three to five years. Leasehold improvements and equipment held under capital leases are amortized on a straight-line basis over the shorter of the lease term or the estimated life of the asset.

Upon the sale or retirement of assets, the cost and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in other income (expense) in the consolidated statement of operations and comprehensive loss. Maintenance and repairs are charged to the general and administrative expenses in the consolidated statement of operations and comprehensive loss as incurred.

Intangible Assets

The Company has intangible assets and goodwill recorded in connection with its acquisition in March 2019 (see Note 3). Intangible assets are recognized apart from goodwill if they arise from contractual or other legal rights or if they are separable. An asset is considered separable if (a) it is capable of being separated from the acquired entity and sold, transferred, licensed, rented or exchanged, or (b) it can be conveyed in combination with a related asset or liability. Those assets that do not meet either criterion are included in goodwill for financial reporting purposes. The following assets were recognized as part of the acquisition:

- Purchased technology: valued by management using an income approach.
- Trade name: valued by management using an income approach. The amount allocated to trade name was deemed impaired as the Company changed its name to Codex DNA, Inc. in 2020 (see Note 1 and 7).

Intangible assets are amortized over their estimated useful lives based upon the estimated economic value derived from the related intangible asset. Intangible assets are reviewed for impairment whenever events or changes in

circumstances, such as service discontinuance, technological obsolescence, or significant decreases in the Company's market capitalization indicate that the carrying amount of the asset may not be recoverable. When such events occur, the Company compares the carrying amount of the asset to the undiscounted expected future cash flows related to the asset. If this comparison indicates that an impairment is present, the amount of the impairment is calculated as the difference between the carrying amount and the fair value of the asset. There was no impairment recorded for the period from March 8 (inception) to December 31, 2019. For the year ended December 31, 2020, the Company recorded impairment of \$0.1 million on its trademark (see Note 1 and 7).

Goodwill

The Company recognizes the excess of the purchase price over the fair value of identifiable net assets acquired as goodwill. Goodwill is not amortized but is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying amount of the goodwill may not be recoverable. The Company's goodwill impairment tests are performed at the enterprise level given the Company's single reporting unit.

The Company's goodwill impairment analysis first assesses qualitative factors to determine whether events or circumstances existed that would lead the Company to conclude it is more likely than not that the fair value of the reporting unit is below its carrying amount. If the Company determines that it is more likely than not that the fair value of the reporting unit is below the carrying amount, a quantitative goodwill assessment is required. In the quantitative evaluation, the fair value of the reporting unit is determined and compared to the carrying value. If the fair value is greater than the carrying value, then the carrying value is deemed to be recoverable and no further action is required. If the fair value estimate is less than the carrying value, goodwill is considered impaired for the amount by which the carrying value exceeds the reporting unit's fair value and a charge would be recognized as impairment of goodwill in the consolidated statement of operations and comprehensive loss.

Accounting for Long-Lived Assets

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of an asset to be held and used is measured by a comparison of the carrying amount of an asset or asset group to the future undiscounted cash flows expected to be generated by the asset or asset group. No such impairments have been identified for the period ended December 31, 2019 and for the year ended December 31, 2020.

Deferred Offering Costs

The Company capitalizes within other assets certain legal, consulting and other third-party fees that are directly related to the Company's in-process equity financings, including the planned initial public offering, until such financings are consummated. After consummation of the equity financing, these costs are recorded as a reduction of the proceeds received as a result of the offering. Should a planned equity financing be abandoned, terminated, or significantly delayed, the deferred offering costs are immediately written off to operating expenses. There were no deferred offering costs capitalized during the period ended December 31, 2019 and for the year ended December 31, 2020.

Deferred Financing Costs

The Company capitalizes certain legal and other third-party fees that are directly associated with obtaining access to capital under credit facilities. Deferred financing costs incurred in connection with obtaining access to capital under credit facilities are recorded as a reduction to the carrying amount of the debt and amortized to interest expense using the effective interest method over the repayment term.

Income Taxes

The Company is a C Corporation for federal income tax purposes. The Company was not profitable during 2019 and 2020. Accordingly, no provision for federal income taxes has been presented in the accompanying consolidated statement of operations and comprehensive loss.

The Company accounts for income taxes under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributed to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases, including operating losses and tax credit carryforwards, if applicable. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which the differences are expected to be recovered or

settled. The effect on deferred tax assets and liabilities of a change in the tax rates is recognized in income in the period that includes the enactment date.

A valuation allowance may be established for carryforwards and other deferred tax assets when it is more likely than not that such deferred tax assets will not be realized. Based on its facts, the Company considered all available evidence, both positive and negative, including historical levels of taxable income, expectations, and risks associated with estimates of future taxable income, and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance. The Company recorded a valuation allowance against the deferred tax asset as the Company believes it is more likely than not that the deferred asset will not be utilized.

The Company recognizes the effect of income tax positions only if those positions are more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes. A tax position that meets the more likely than not recognition threshold is measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement with a taxing authority. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. The Company records interest related to unrecognized tax benefits in interest and penalties in general and administrative expenses. The Company has determined that it has an uncertain tax position as it relates to its state research and development credits for the period ended December 31, 2019 and for the year ended December 31, 2020 (see Note 13).

Share-Based Compensation

For share-based awards granted to employees and directors, the Company estimates the grant-date fair value using the Black-Scholes option-pricing model. Compensation expense for these awards is recognized net of the estimated forfeiture rate, over the requisite service period, which is generally the vesting period of the respective award.

For share-based awards granted to non-employees, the Company adopted Accounting Standards Update No. (ASU) 2018-07, Compensation—Stock Compensation (Topic 718) (ASU 2018-07) at inception, as discussed below, in which the measurement date for non-employee awards is the date of grant. The compensation expense for non-employees is recognized in the same manner as if the Company had paid cash in exchange for the goods or services, which is generally the vesting period of the award. The Company applies an estimated forfeiture rate to share-based compensation.

The Company classifies share-based compensation expense in its consolidated statement of operations and comprehensive loss in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

Revenue Recognition

The Company recognizes revenues in accordance with Financial Accounting Standards Board (FASB) ASU 2014-09, Revenue from Contracts with Customers (Topic 606) (ASC 606). To date, revenues have consisted primarily of payments received related to product sales and royalty agreements. Under ASC 606, the Company recognizes revenue when customers obtain control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services.

Revenue for product sales is recognized upon delivery to the customer. Revenue related to services and product warranty arrangements is deferred and recognized over time, as services are delivered. To determine the appropriate amount of revenue to be recognized for arrangements determined to be within the scope of ASC 606, the Company performs the following five steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the assessment of the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when, or as the Company satisfies each performance obligation. As part of the accounting for arrangements under ASC 606, management must use its significant judgment to determine: (a) the performance obligations based on the determination under step (ii) above; (b) the transaction price under step (iii) above; and (c) the standalone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above. Management also uses its judgment to determine whether milestones or other variable consideration, except for royalties and sales-based milestones, should be included in the transaction price as described below. The transaction price is allocated to each performance obligation based on the relative stand-alone selling price of each

performance obligation in the contract, and revenue is recognized based on those amounts when, or as, the performance obligations under the contract are satisfied.

The standalone selling price is the price at which an entity would sell a promised good or service separately to a customer. Management estimates the standalone selling price of each of the identified performance obligations in customer contracts, maximizing the use of observable inputs. Because the Company has not sold the same goods or services in the contracts separately to any customers on a standalone basis and there are no similar observable transactions in the marketplace, the Company estimates the standalone selling price of each performance obligation in customer arrangements based on estimated costs to be incurred to fulfil obligations associated with the performance, plus a reasonable margin.

Amounts received prior to revenue recognition are recorded as deferred revenue in the consolidated balance sheet. Amounts expected to be recognized as revenue within the twelve months following the balance sheet date are classified as deferred revenue, current portion in the consolidated balance sheet. Amounts not expected to be recognized as revenue within the twelve months following the balance sheet date are classified as other long-term liabilities in the consolidated balance sheet. Amounts are recorded as accounts receivable when the right to consideration is unconditional.

Product Revenue, Net

The Company recognizes revenue on product sales when the customer obtains control of the product, which occurs upon delivery to the customer. The Company recognizes revenue on installation and training when the service has been rendered and recognizes warranty revenue over the warranty term. Product revenues are recorded net of variable consideration, including discounts. In the event of sales to parties other than customers, the Company records the amount as a reduction in cost of revenue.

Product Returns

The Company does not generally offer customers the ability to return product and has received an immaterial amount of returns to date.

Royalty Revenue

The Company enters into licensing arrangements that are within the scope of ASC 606, under which the Company will provide non-exclusive sales of licensing rights of its patents to customers. The terms of these arrangements include royalty payments to the Company of a fixed tiered percentage of sales based on the Company's technology that has been licensed. Customers submit their usage and payments on a quarterly or semiannual basis.

Warranties

The Company provides warranty coverage on its systems. Warranty coverage includes providing labor and parts necessary to repair the systems during the warranty period. The standard warranty coverage is twelve months for system sales. In addition, customers may pay for enhanced warranty service or to extend the warranty period to 24 months. Warranty revenue is deferred and recognized over the warranty period as a part of product sales in the consolidated statement of operations and comprehensive loss. The Company charges warranty expenses to cost of revenue in the period the expense is incurred. The changes in deferred revenue for warranties during the period ended December 31, 2019 and for the year ended December 31, 2020 are summarized as follows (in thousands):

Balance at March 8, 2019 (inception)	\$	171
Warranty revenue deferred		146
Warranty revenue recognized		<u>(172)</u>
Balance at December 31, 2019		145
Warranty revenue deferred		404
Warranty revenue recognized		<u>(292)</u>
Balance at December 31, 2020	\$	<u>257</u>

The deferred revenue for warranties at December 31, 2019 and 2020 are summarized as follows (in thousands):

	December 31,	
	2019	2020
Deferred warranty revenue, current portion	\$ 112	\$ 217
Deferred warranty revenue, net of current portion	33	40
Total deferred warranty revenue	\$ 145	\$ 257

Shipping and Handling Costs

Shipping and handling costs are included as a component of cost of revenue in the consolidated statement of operations and comprehensive loss.

Fair Value of Assets and Liabilities

In accordance with ASC 820, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining fair value, the Company considers the principal or most advantageous market in which the Company would transact, and considers assumptions that market participants would use when pricing the asset or liability. The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs).

The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy as described below:

Level 1—Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2—Directly or indirectly observable inputs as of the reporting date through correlation with market data, including quoted prices for similar assets and liabilities in active markets and quoted prices in markets that are not active. Level 2 also includes assets and liabilities that are valued using models or other pricing methodologies that do not require significant judgment since the input assumption used in the models, such as interest rates and volatility factors, are corroborated by readily observable data from actively quoted markets substantially the full term of the financial instrument.

Level 3—Unobservable inputs that are supported by little or no market data and require the use of significant management judgment. These values are generally determined using pricing models for which the assumptions utilize management's estimates of market participant assumptions.

The Company's participation right liability, warrant liability, contingent put liability, and success fee contingent liability are carried at fair value, determined according to Level 3 inputs in the fair value hierarchy described above (see Note 4). The carrying value of financial instruments included in current assets and liabilities approximate their fair value principally because of the short-term maturities of these instruments.

Research and Development

Research and development costs, including direct and allocated expenses, are expensed in the period incurred. Research and development costs include payroll and personnel expense; consulting costs; external contract research and development costs; raw materials and allocated overhead such as depreciation and amortization, rent and utilities. Advance payments for goods and services to be used in future research and development activities are recorded as prepaid expenses and are expensed over the service period as the services are provided or when the goods are consumed.

Advertising

The Company expenses the cost of advertising, including promotional expenses, as incurred. Advertising and promotional expenses for the period ended December 31, 2019 and for the year ended on December 31, 2020 were \$0.1 million and \$0.8 million, respectively.

Comprehensive Loss

Comprehensive loss includes net loss as well as other changes in stockholders' equity (deficit) that result from transactions and economic events other than those with stockholders. There was no difference between net loss and comprehensive loss for each of the period ended December 31, 2019 and the year ended December 31, 2020 as presented in the accompanying consolidated financial statements.

Classification of Convertible Preferred Stock

The Company's convertible preferred stock is classified outside of stockholders' equity (deficit) because the holders of such shares have liquidation rights in the event of a deemed liquidation that, in certain situations, are not solely within the control of the Company.

Net Loss per Share

The Company follows the two-class method when computing net loss per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net loss per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net loss per share attributable to common stockholders is computed by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted net loss per share attributable to common stockholders is computed by adjusting net loss attributable to common stockholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net loss per share attributable to common stockholders is computed by dividing the diluted net loss attributable to common stockholders by the weighted-average number of common shares outstanding for the period, including potential dilutive common shares assuming the dilutive effect of common stock equivalents. For purposes of this calculation, outstanding stock options, unvested restricted common stock, and convertible preferred stock are considered potential dilutive common stock and are excluded from the computation of diluted net loss per share attributable to common stockholders if their effect is anti-dilutive.

The Company's convertible preferred stock contractually entitles the holders of such shares to participate in dividends but do not contractually require the holders of such shares to participate in losses of the Company. Accordingly, in periods in which the Company reports a net loss, such losses are not allocated to such participating securities. In periods in which the Company reports a net loss attributable to common stockholders, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. The Company reported a net loss attributable to common stockholders for the period ended December 31, 2019 and the year ended December 31, 2020.

Segments Information

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the chief operating decision maker (CODM), in deciding how to allocate resources to an individual segment and in assessing performance. The Company's CODM is its chief executive officer. The Company has determined it operates in one segment.

Recent Accounting Pronouncements Adopted

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) (ASC 842), as subsequently amended, which sets out the principles for the recognition, measurement, presentation, and disclosure of leases for both parties to a contract (i.e., lessees and lessors), and replaces the existing guidance in ASC 840, Leases. The FASB subsequently issued amendments to ASC 842, which have the same effective date of January 1, 2019: (i) ASU 2018-10, Codification Improvements to Topic 842, Leases, which amends certain narrow aspects of the guidance issued in ASU 2016-02; and (ii) ASU 2018-11, Leases (Topic 842): Targeted Improvements, which allows for a transition approach to initially apply ASU 2016-02 at the adoption date and not restate prior periods presented. ASC 842 requires lessees to classify leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine the recognition pattern of lease expense over the term of the lease. The Company recognizes the lease expense for its operating leases on a

straight-line basis. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases under ASC 840.

The Company early adopted ASC 842 effective January 1, 2020 using the required modified retrospective approach and utilizing the effective date as its date of initial application. As a result, prior periods are presented in accordance with the previous guidance in ASC 840. ASC 842 provides a number of optional practical expedients in transition. The Company applied the package of practical expedients to leases that commenced prior to the effective date whereby the following are not required to be reassessed: (i) whether any expired or existing contracts are or contain leases; (ii) the lease classification for any expired or existing leases; and (iii) the treatment of initial direct costs for existing leases. The Company elected the short-term lease expedient for all leases that qualified based on a lease term of 12 months or less, and consequently a right-of-use asset or lease liability was not recognized for short term leases.

The adoption of ASC 842 resulted in the recognition of operating lease liabilities of \$4.0 million and right-of-use assets of \$3.7 million and the de-recognition of deferred rent liabilities of \$0.3 million on the Company's consolidated balance sheet as of January 1, 2020. The impact of adoption relates to the Company's existing operating lease for operating and laboratory space. The adoption of ASC 842 did not have a material impact on the Company's consolidated statement of operations and comprehensive loss or consolidated statements of cash flows.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820), Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement, (ASU 2018-13). This update removed the following disclosure requirements: (1) the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy; (2) the policy for timing of transfers between levels; and (3) the valuation processes for Level 3 fair value measurements. Additionally, this update added the following disclosure requirements: (1) the changes in unrealized gains and losses for the period included in other comprehensive income and loss for recurring Level 3 fair value measurements held at the end of the reporting period; (2) the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements. ASU 2018-13 was effective for fiscal years beginning after December 15, 2019 with early adoption permitted. The Company has adopted this update and there was no material effect on the consolidated financial statements and related disclosures.

Recent Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, Financial Instruments-Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326) (ASU 2016-13). ASU 2016-13 requires measurement and recognition of expected credit losses for financial assets. In April 2019, the FASB issued clarification to ASU 2016-13 within ASU No. 2019-04, Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments. This update is effective for entities other than public business entities, including emerging growth companies that elected to defer compliance with new or revised financial accounting standards until a company that is not an issuer is required to comply with such standards, for annual reporting periods beginning after December 15, 2021. The Company is currently evaluating the impact that ASU 2016-13 will have on the consolidated financial statements and related disclosures.

In December 2019, the FASB issued ASU 2019-12, Simplifying the Accounting for Income Taxes (ASU 2019-12). ASU 2019-12 eliminates certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. This update is effective for entities other than public business entities, including emerging growth companies that elected to defer compliance with new or revised financial accounting standards until a company that is not an issuer is required to comply with such standards, for annual reporting periods beginning after December 15, 2021, and interim periods within annual periods beginning after December 15, 2022. The Company is currently evaluating the impact that ASU 2019-12 will have on its consolidated financial statements and related disclosures.

In August 2020, the FASB issued ASU 2020-06, Debt – Debt with Conversion and Other (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40). This update simplifies the accounting for convertible debt instruments by removing certain accounting separation models as well as the accounting for debt instruments with embedded conversion features that are not required to be accounted for as derivative instruments. The update also updates and improves the consistency of earnings per share calculations for convertible instruments. The amendments in this ASU are effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The Company is currently evaluating the impact that the implementation of this standard will have on the Company's consolidated financial statements and related disclosures.

3. PURCHASE PRICE ALLOCATION

On March 8, 2019, GATTACA acquired 100% of the outstanding preferred and common stock of SGI-DNA from SGI in exchange for consideration comprising a \$10.0 million non-recourse promissory note (the Purchase Note), and a participation right. The Purchase Note was subject to a working capital adjustment and was subsequently reduced to \$9.8 million. The Purchase Note bore interest at 6% per annum with the principal and interest due and payable on September 8, 2019. The participation right enabled SGI to receive property with a value equal to the net proceeds a person would receive as a holder of 6% of the common stock of the Company in a change of control transaction. SGI was also awarded a warrant to purchase common stock, equal to 6% of the shares of common stock issued and outstanding as of the time of exercise, which will automatically be net exercised immediately prior to the consummation of an initial public offering. This warrant and participation right were later amended on August 27, 2019 to provide a warrant for 3,245,235 shares of common stock, a participation right to receive property with a value equal to the net proceeds a person would receive as a holder of 3,245,235 shares in a change of control transaction, and additional warrants equal to 3% of the shares sold in future equity financings prior to an initial public offering or certain change of control transactions.

The Purchase Note and warrant were determined to have a fair value of \$9.0 million, which was determined to be the purchase price of the Company and was allocated as follows (in thousands):

Cash	\$	508
Net working capital		841
Fixed assets and other long-term assets		1,451
Technology		3,150
Trade name		120
Goodwill		3,497
Total acquired assets		9,567
Long-term liabilities		(599)
Net assets acquired	\$	8,968

4. FAIR VALUE MEASUREMENT

The following table summarizes the fair values of the Company's derivative liabilities on the consolidated balance sheet which comprise the participation right liability, warrant liability, contingent put liability, and success fee contingent liability which are all deemed Level 3 liabilities (in thousands):

Liabilities	Fair value measurements as of December 31, 2019			
	Level 1	Level 2	Level 3	Total
Warrant liability	\$ —	\$ —	\$ 169	\$ 169
Contingent put option liability	—	—	106	106
Success fee contingent liability	—	—	379	379
Total	\$ —	\$ —	\$ 654	\$ 654

	Fair value measurements as of December 31, 2020			
	Level 1	Level 2	Level 3	Total
Liabilities				
Participation right liability	\$ —	\$ —	\$ 420	\$ 420
Warrant liability	—	—	594	594
Contingent put option liability	—	—	51	51
Success fee contingent liability	—	—	468	468
Total	\$ —	\$ —	\$ 1,533	\$ 1,533

During the period from March 8, 2019 (inception) to December 31, 2019 and year ended December 31, 2020, there were no transfers between Level 1, Level 2 and Level 3.

Participation Right Liability

The participation right liability consists of the fair value of 3% of the securities sold in a future equity financing round and was originated from the participation right that was given to SGI in conjunction with the Company acquisition (see Note 1 and 3). The fair value of the participation right liability was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the participation right liability utilized the estimated capital raised from the next financing round and the probability of success to obtain such capital. The Company reassesses these assumptions and estimates at least annually as additional information impacting the assumptions are obtained. Changes in the fair value of the participation right liability is recognized as part of the change in fair value of derivative liabilities in other income (expense) in the consolidated statement of operations and comprehensive loss.

The quantitative elements associated with the Company's Level 3 inputs impacting the fair value measurement of the participation right liability include management's expectation of amounts to be raised and the probability of success in obtaining the funds. The Company determines the estimated capital raised from the financing round to be \$20.0 million with a probability of success of 70%. The fair value was determined by multiplying the amount expected to be raised versus the probability of success and the percentage right (3%). As of December 31, 2019, the participation right liability was determined not to be material; however, for December 31, 2020, the fair value of the participation right was valued at \$0.4 million.

Preferred Stock Warrants

The preferred stock warrant liability consists of the fair value of warrants to purchase Series A-1 Preferred Stock in conjunction with the Series A-1 financing in December 2019 with SGI (see Note 10) and was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the preferred stock warrants utilized the Black-Scholes option-pricing model, which incorporates assumptions and estimates that are subjective. The Company assesses these assumptions and estimates at least annually as additional information impacting the assumptions are obtained. Changes in the fair value of the preferred stock warrants are recognized in other income (expense) as part of the change in fair value of derivative liabilities in the consolidated statement of operations and comprehensive loss.

The quantitative elements associated with the Company's Level 3 inputs impacting the fair value measurement of the preferred stock warrant liability include the fair value per share of the underlying Series A-1 convertible preferred stock, the remaining contractual term of the warrants, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. The most significant assumption in the Black-Scholes option-pricing model impacting the fair value of the preferred stock warrants is the fair value of the Company's convertible preferred stock as of each remeasurement date. The Company determines the fair value per share of the underlying preferred stock by taking into consideration its most recent sales of convertible preferred stock as well as additional factors that the Company deems relevant. As of December 31, 2019 and 2020, the fair value of the Series A-1 convertible preferred stock warrant was \$0.37 and \$1.29 per share, respectively. The Company is currently a private company and lacks company-specific historical and implied volatility information of its stock. Therefore, it estimates its expected stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the remaining contractual term of the warrants. The risk-free interest rate is determined by reference to the U.S.

Treasury yield curve for time periods approximately equal to the remaining contractual term of the warrants. The Company has estimated a 0% dividend yield based on the expected dividend yield and the fact that the Company has never paid or declared dividends.

The following reflects the significant quantitative inputs used in the valuation of the preferred stock warrant liability:

	December 31,	
	2019	2020
Risk-free interest rate	1.7 %	0.1 %
Expected term	4.0 years	2.0 years
Expected volatility	65.0 %	83.6 %
Expected dividend yield	0.0 %	0.0 %

Contingent Put Option Liability

The contingent put option liability consists of the fair value of the contingent interest feature and acceleration clause (contingent put option) under the 2019 Loan Agreement (see Note 9). The fair value of the contingent put option liability was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the contingent put option liability utilized a risk-neutral valuation model wherein the fair value of the underlying debt facility is estimated, both with and without the presence of the default provisions, holding all other assumptions constant. The Company assesses these assumptions and estimates at least annually as additional information impacting the assumptions are obtained. Changes in the fair value of the contingent put option liability is recognized in other income (expense) as part of the change in fair value of derivative liabilities in the consolidated statement of operations and comprehensive loss.

Success Fee Contingent Liability

The success fee contingent liability consists of the fair value of contingent obligation to pay the lender a success fee of \$0.8 million upon a Liquidity Event under the 2019 Loan Agreement (see Note 9). The fair value of the success fee contingent liability was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the success fee contingent liability utilized a liquidity event scenario analysis discounted at the Company's cost of capital. This analysis consists of both the probability adjusted value of the success fee based on liquidity scenarios, and the risk adjusted present value of the success fee discounted at the Company's cost of capital on the valuation date, to take into account the risk of achieving the liquidity scenarios. The Company assesses these assumptions and estimates at least annually as additional information impacting the assumptions are obtained. Changes in the fair value of the success fee contingent liability is recognized in other income (expense) as part of the change in fair value of derivative liabilities in the consolidated statement of operations and comprehensive loss.

The following table provides a roll-forward of the aggregate fair value of the Company's derivative liabilities for which fair value is determined using Level 3 inputs (in thousands):

	Participation right liability	Warrant liability	Contingent put liability	Success fee contingent liability
Fair value at March 8, 2019 (inception)	\$ 42	\$ —	\$ —	\$ —
Issuance of derivative liabilities	—	169	126	379
Change in fair value	(42)	—	(20)	—
Fair value at December 31, 2019	\$ —	\$ 169	\$ 106	\$ 379
Change in fair value	420	425	(55)	89
Fair value at December 31, 2020	\$ 420	\$ 594	\$ 51	\$ 468

For the period from March 8, 2019 (inception) to December 31, 2019 and year ended December 31, 2020, the Company recorded a change in fair value of derivative liabilities included in other income (expense) of \$0.1 million and \$(0.9) million, respectively.

5. INVENTORY

Inventories include material, labor and overhead and are stated at the lower of cost (first-in and first-out method) or net realizable value. The components of inventory are as follows as of December 31, 2019 and 2020 (in thousands):

	December 31,			
	2019		2020	
Raw materials	\$	612	\$	299
Work in process and sub-assemblies		167		201
Finished goods		13		101
Reserves		(80)		—
Total	\$	712	\$	601

6. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following on December 31, 2019 and 2020 (in thousands):

	December 31,			
	2019		2020	
Machinery and equipment	\$	1,244	\$	1,315
Computer hardware and software		6		6
Leasehold improvements		—		32
Construction in progress		—		102
Total		1,250		1,455
Less: Accumulated depreciation and amortization		(362)		(766)
Total property and equipment, net	\$	888	\$	689

Depreciation expense for the period from March 8, 2019 (inception) to December 31, 2019 and the year ended December 31, 2020 was \$0.4 million and is included in operating expenses.

During the period from March 8, 2019 (inception) to December 31, 2019 the Company retired assets no longer in service resulting in a loss on disposal of \$0.2 million.

7. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

As part of the March 8, 2019 transaction (see Note 1), the Company acquired its intangible assets with resulting goodwill. The resulting goodwill carries a value of approximately \$3.5 million. Due to the recent decline in global economic and labor market conditions caused by the global outbreak of the COVID-19 pandemic, the Company considered the effects on its goodwill and determined that there was no material significant impact that would cause a change in its analysis. There were no other events or circumstances that have changed since the last annual assessment that could reduce the fair value of the Company's reporting segments below its carrying values.

For the period ended December 31, 2019 and for the year ended December 31, 2020, the Company has not recorded any impairment of goodwill.

Other Intangible Assets

Other intangible assets include the rights to technology and the SGI-DNA trade name. The Company engaged an independent consultant to value the intangible assets and to determine the useful lives. The technology was valued

at approximately \$3.2 million with a seven year useful life and the SGI-DNA trade name at approximately \$0.1 million with a three year useful life.

Amortization expense related to the intangible assets for the period from March 8, 2019 (inception) to December 31, 2019 and the year ended on December 31, 2020 was approximately \$0.4 million and \$0.5 million, respectively.

The following table summarizes the estimated future amortization expense of the intangible assets (in thousands):

Years ending December 31:	
2021	\$ 450
2022	450
2023	450
2024	450
2025	450
Thereafter	75
Total	<u>\$ 2,325</u>

8. LEASES

As of December 31, 2020, the Company had four outstanding leases for office and scientific manufacturing equipment. The leases have terms between 25 and 60 months.

Corporate Headquarters

In April of 2019, the Company entered into an operating lease agreement for its corporate headquarters located at 9535 Waples Street, San Diego, California. The term of the lease commenced in 2019 and is scheduled to expire in January 2025. Under the terms of the lease, the Company provided a security deposit of \$0.1 million, which is included in long-term deposits in the accompanying consolidated balance sheet. The lease provides for annual rent escalations. The Company is required to pay a portion of the operating costs, including insurance and maintenance under the agreement that are treated as variable costs and excluded from the measurement of the lease. The Company is entitled to one option to extend the lease term for an additional five years. The option to extend the lease term was not included in the right-of-use asset and lease liability as it was not reasonably certain of being exercised.

Equipment

The Company entered into finance lease agreements for equipment in November 2017 (the 2017 Equipment Lease), January 2018 (the 2018 Equipment Lease), and in March 2019 (the 2019 Equipment Lease). The terms of the leases commenced when the equipment was delivered which happened in the same months and years as above, respectively, and accordingly the related right-of-use assets and lease liabilities were recognized on the consolidated balance sheet at their respective commencement dates. The November 2017 Equipment Lease is scheduled to expire on October 1, 2022, the 2018 Equipment Lease on December 31, 2022, and the March 2019 Equipment Lease on April 25, 2021.

Summary of Lease Cost

The components of lease cost under ASC 842 are as follows (in thousands):

	December 31, 2020
Lease costs	
Finance lease cost:	
Payment of finance lease liability	\$ 107
Interest on lease liabilities	17
Amortization of right-of-use asset	591
Variable lease cost	350
Total lease cost	\$ 1,065

Supplemental disclosure of cash flow information related to leases are as follows (in thousands):

	December 31, 2020
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 826
Operating cash flows from finance leases	\$ 17
Financing cash flows from finance leases	\$ 107

The weighted-average remaining lease term and discount rate were as follows:

	December 31, 2020
Weighted-average remaining lease term	
Finance leases	1.8 years
Operating leases	4.1 years
Weighted-average discount rate	
Finance leases	7.9 %
Operating leases	8.9 %

The following table summarizes the minimum lease payments of the Company's operating and finance lease liabilities as of December 31, 2020 (in thousands):

Year Ending December 31,	Operating	Finance
2021	\$ 967	\$ 99
2022	997	85
2023	1,026	—
2024	1,057	—
2025	89	—
Thereafter	—	—
Total future minimum lease payments	4,136	184
Less: imputed interest	(667)	(13)
Present value of operating lease liability	\$ 3,469	\$ 171
Less: current portion of lease liability	(693)	(90)
Non-current portion of lease liability	2,776	81

Disclosures under ASC 840

The following table summarizes the future minimum lease payments due under the Company's operating and finance leases as of December 31, 2019, presented in accordance with ASC 840, the relevant accounting standard at that time (in thousands):

Finance Leases	
Years ending December 31:	
2020	144
2021	99
2022	85
Total minimum payments	328
Less: Amount representing interest and taxes	(32)
Present value of future minimum payments	296
Less: Current portion	(111)
Long-term portion of finance lease liability	185

Operating Leases	
Years ending December 31:	
2020	826
2021	967
2022	997
2023	1,026
2024	1,057
2025	89
Total	4,962

Rent expense under the operating lease was approximately \$0.5 million in 2019.

9. NOTES PAYABLE

Non-Recourse Secured Promissory Notes

In March of 2019, GATTACA and the Company jointly issued a Non-Recourse Secured Promissory Note (see Note 1) to SGI. The Purchase Note matured in September 2019, bore interest at 6% per annum, and was secured by all of the Company's assets. This note had a principal value of \$10.0 million subject to a working capital adjustment. The principal was adjusted to approximately \$9.8 million. In March of 2019, the fair value of this liability was \$8.9 million based on the purchase price allocation (see Note 2). The note and accumulated interest were paid in full in August of 2019.

In March of 2019, GATTACA executed a Secured Note Purchase Agreement with an investor in the Company. The agreement was entered into in connection with GATTACA's purchase of the Company (see Note 1). Under the agreement, GATTACA borrowed \$1.5 million in a series of transactions between March 2019 and August 2019. The notes issued under this agreement matured on the earlier of an acquisition event or June 30, 2022 and bore annual interest of 10% to be paid to the holder of such note on a monthly basis beginning on the earlier of a qualifying financing or July 2020. The proceeds of the note were used for working capital advances made to the Company. In connection with the Company's Series A convertible preferred stock financing in August 2019, the outstanding debt balance of \$1.5 million of principal and approximately \$0.1 million of accrued interest were converted into 1,625,033 shares of Series A convertible preferred stock.

In March of 2019, GATTACA executed a Secured Note Purchase Agreement with the Chief Executive Officer of the Company. Under the agreement, the Company borrowed \$0.3 million to fund operations prior to selling preferred stock. Company (see Note 1). The note issued under this agreement matured on the earlier of an acquisition event or June 30, 2022 and bore annual interest of 10%, to be paid to the holder of such note on a monthly basis beginning on the earlier of a qualifying financing or July 2020. In connection with the Company's Series A convertible preferred stock financing in August 2019, the entire \$0.3 million of principal and approximately \$11,000 of accrued interest were converted into 272,243 shares of Series A convertible preferred stock.

Convertible Note

In July of 2019, the Company issued a convertible promissory note in the amount of \$5.0 million. The note would have matured in July of 2022 and bore annual interest of 6% with the first payment due July 2022. In August of 2019, the Company completed the Series A convertible preferred stock financing and, under the terms of the note, the entire \$5.0 million in principal and approximately \$39,000 in accrued interest automatically converted into 5,255,999 shares of Series A convertible preferred stock.

Loan and Security Agreement

As of December 31, 2019 and 2020, the loans payable on the consolidated balance sheet pertains to the Loan and Security Agreement with Oxford and consists of the following (in thousands):

	December 31,			
	2019		2020	
Principal amount of loans payable	\$	5,000	\$	5,000
Less: Current portion of loans payable		—		(1,333)
Loans payable, net of current portion		5,000		3,667
Accrued Interest		18		90
Final debt payment liability		287		287
Debt discount and financing costs, net of accretion		(833)		(691)
Loans payable, net of discount and current portion	\$	4,472	\$	3,353

In September 2019, the Company entered into a Loan and Security Agreement (the 2019 Loan Agreement) with Oxford. Under the agreement, the Company borrowed a total of \$5.0 million in secured loans. The loans accrued interest at 8.79% per annum, had a tenor of 48 months and were secured by all of the Company's assets, other than its intellectual property, which is subject to a negative pledge. In addition, the Company has a contingent obligation to pay Oxford a success fee of \$0.8 million upon a Liquidity Event (as defined in the success fee letter). On

December 31, 2019, the fair value of this contingent success fee liability was estimated at \$0.4 million and was recorded as a derivative liability with the corresponding discount applied against the loans. Issuance costs related to the loans, inclusive of the success fee contingent liability, were \$0.5 million. For the period from March 8, 2019 (inception) to December 31, 2019 and the year ended on December 31, 2020, the effective interest rate on outstanding borrowings was approximately 11.9%.

The interest rate was calculated at a rate equal to the greater of (i) 8.79% and (ii) the sum of (a) the 30-day U.S. LIBOR rate reported in The Wall Street Journal on the last business day of the month that immediately precedes the month in which the interest will accrue and (b) 6.38%. If LIBOR is no longer reported, the collateral agent could have selected a substantially similar replacement rate. Payments on the loans were interest-only until May 1, 2021, followed by equal monthly principal payments and accrued interest through the scheduled maturity date of October 1, 2023; provided, the interest-only period may have been extended to November 1, 2021 if, prior to April 30, 2021, the Company had achieved six consecutive months of trailing consolidated revenues of at least \$10.5 million. A final payment (the Final Payment) equal to \$287,500 (which was 5.75% of the aggregate original principal amounts of the loans) was due at the earlier of the maturity date, acceleration of the loans, or a voluntary or mandatory prepayment of the loans.

The Company may have prepaid the loans at any time. If the loans were prepaid prior to the maturity date, the Company was required to pay the lender a prepayment fee, equal to 3.0% of the then outstanding principal balance if the prepayment occurred on or before September 5, 2020, 2.0% of the then outstanding principal balance if the prepayment occurs after September 5, 2020 but on or before September 5, 2021, or 1.0% of the then outstanding principal balance if the prepayment occurs after September 5, 2021, but on or before September 5, 2022. No prepayment fee is applicable after September 5, 2022. Upon a voluntary or mandatory prepayment of the loans, in addition to such prepayment fee, the Company was also required to pay the lender's expenses and all accrued but unpaid interest through the prepayment date.

The 2019 Loan Agreement included customary representations and covenants that, subject to exceptions and qualifications, restricted our ability to do the following things: declare dividends or redeem or repurchase equity interests; incur additional liens; make loans and investments; incur additional indebtedness; engage in mergers, acquisitions, and asset sales; transact with affiliates; undergo a change in control; add or change business locations; and engage in businesses that are not related to its existing business. In addition, the 2019 Loan Agreement contained customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, reporting requirements and compliance with applicable laws and regulations.

The 2019 Loan Agreement also included standard events of default, including payment defaults, breaches of covenants following any applicable cure period, material misrepresentations, a failure of the lender's security interest in the collateral to be perfected or to have the priority as required under the 2019 Loan Agreement, a material adverse change as defined in the 2019 Loan Agreement (including without limitation as a result of a government approval having been revoked, rescinded, suspended, modified or not renewed), certain material judgments and attachments, and events relating to bankruptcy or insolvency of the Company. The 2019 Loan Agreement also contained a cross default provision under which, if a third party (under any agreement) has a right to accelerate indebtedness greater than \$250,000, the Company would be in default of the 2019 Loan Agreement. During the continuance of an event of default, the lender could apply a default interest rate of an additional 5.0% to the outstanding loan balances, and the lender could declare all outstanding obligations immediately due and payable and could exercise other rights and remedies as set forth in the 2019 Loan Agreement and related loan documents. Acceleration would result in the payment of any applicable prepayment fees, the Final Payment and any default interest charged by the lender.

As of December 31, 2020, the estimated future principal payments due were as follows:

Estimated future principal payments due		
2021	\$	1,333
2022		2,000
2023		1,667
Total	\$	5,000

The Company bifurcated a compound derivative liability related to the contingent interest feature and acceleration clause (contingent put option) under the 2019 Loan Agreement. The contingent put option liability was valued and separately accounted for in the Company's consolidated financial statements. The contingent put option liability is classified as a component of derivative liabilities on the consolidated balance sheet. As of December 31, 2019 and 2020, the estimated fair value of the contingent put option liability was \$0.1 million, which was determined by using a risk-neutral valuation model wherein the fair value of the underlying debt facility is estimated, both with and without the presence of the default provisions, holding all other assumptions constant (see Note 4).

10. PREFERRED STOCK

The Company's Amended and Restated Certificate of Incorporation (the Amended and Restated Certificate), as filed in December of 2019 with the state of Delaware, authorizes the Company to issue 72,000,000 shares of common stock and 45,700,067 shares of preferred stock, all of which have a par value per share of \$0.0001. Holders of preferred stock have rights to an 8% dividend when and if declared by the Board of Directors. 15,402,237 shares of preferred stock are designated "Series A-1 Preferred Stock", 22,797,830 shares of preferred stock are designated "Series A Preferred Stock", and 7,500,000 shares of preferred stock are designated "Series Z Preferred Stock" (collectively, the Series Preferred).

Preferred Stock

In December of 2019, the Company issued 14,940,170 shares of Series A-1 Preferred Stock for approximately \$18.0 million. In the event of a deemed liquidation event, holders of Series A-1 Preferred Stock have rights to preferential payments approximately equal to \$2.94 per share or \$44.0 million in the aggregate. Issuance costs related to the Series A-1 financing were \$33,000.

In August of 2019, the Company issued 22,797,830 shares of Series A Preferred Stock for approximately \$21.9 million, including debt that was converted as part of the transaction. In the event of a deemed liquidation event, the holders of Series A Preferred Stock have rights to preferential payments approximately equal to \$1.92 per share or \$43.7 million in the aggregate. Issuance costs related to the Series A financing were \$0.9 million.

Prior to March of 2019, the Company issued 7,500,000 shares of Series Z Preferred Stock at par value. In the event of a deemed liquidation event, holders of the Series Z Preferred Stock have rights to preferential payments approximately equal to \$1.00 per share or \$7.5 million in the aggregate.

Additional rights, preferences, privileges and restrictions relating to Series A Preferred Stock, Series A-1 Preferred Stock, and Series Z Preferred Stock (together the Series Preferred) at December 31, 2019 and 2020 are as set forth below (in thousands, except share amounts):

	Total shares authorized	Total shares issued and outstanding	Carrying value	Liquidation preference	Common shares issuable upon conversion
Series Z Preferred Stock	7,500,000	7,500,000	\$ 1	\$ 7,500	7,500,000
Series A Preferred Stock	22,797,830	22,797,830	20,992	43,717	22,797,830
Series A-1 Preferred Stock	15,402,237	14,940,170	17,921	43,989	14,940,170
Total	45,700,067	45,238,000	\$ 38,914	\$ 95,206	45,238,000

Dividends

The holders of the Series Preferred are entitled to receive non-cumulative dividends, when and if declared by the Board of Directors, prior to and in preference to any declaration or payment of dividends on the common stock. In the event dividends are paid on any share of common stock, the Company will also pay a dividend on all outstanding shares of preferred stock in a per share amount equal to the amount paid or set aside for each share of common stock, on an as-if-converted to common stock basis. No dividends have been declared or paid as of December 31, 2019 and 2020.

Voting

The holders of the Series Preferred are entitled to voting rights equal to the number of shares of common stock into which each share of preferred stock could be converted. The holders of Series A Preferred Stock, voting as a separate class, are entitled to elect one members of the Board of Directors. The holders of Common Stock, voting as a separate class, are entitled to elect one members of the Board of Directors. The remaining members of the Board of Directors will be elected by the holders of the common stock and preferred stock, voting together as a single class and on an as-converted basis.

Liquidation

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holders of preferred shares are entitled to preferential payments based on the original per share issue price or the amount they would be paid as common shareholders had they converted immediately prior to the liquidation event. The original per share issue price is equal to \$1.20177 for Series A-1 Preferred Stock, \$0.9588 for Series A Preferred Stock and \$1.00 for Series Z Preferred Stock.

The Series A Preferred Stock and Series A-1 Preferred Stock are entitled to be paid, out of the available funds and assets, prior and in preference to any payment or distribution of any such funds on any shares of common stock or Series Z Preferred Stock, an amount per share equal to the greater of (a) twice the original issue price for the Series Preferred, plus all accrued and declared but unpaid dividends, and (b) the amount per share as would have been payable had all shares of Series A Preferred Stock and Series A-1 Preferred Stock converted to common stock. In addition, and prior to any further payments to holders of other classes of shares, the holders of Series A-1 Preferred Stock are entitled to a second payment of amount per share equal to 45% of the original issue price of Series A-1 Preferred Stock. Then, the holders of the Series Z Preferred Stock are entitled to be paid, out of the then available funds and assets, prior and in preference to any payment or distribution of any such funds on any shares of common stock, an amount per share equal to the greater of (a) the original issue price for the Series Preferred, plus all accrued and declared but unpaid dividends and (b) the amount per share as would have been payable had all shares of Series Z Preferred Stock been converted to common stock.

If assets are insufficient to permit such payments, payment will be distributed ratably among the holders of outstanding preferred stock in proportion to the amount owned by each holder. After the liquidation preference of the holders of the Series Preferred has been satisfied, the remaining assets of the Company will be distributed ratably among the holders of outstanding common stock in proportion to the amount owned by each holder.

Conversion

Each share of Series Preferred is convertible into shares of common stock, at the option of the holder, at any time after the date of issuance. Each share of Series Preferred automatically converts into the number of shares of common stock determined in accordance with the conversion rate upon the earlier of (i) the date specified by election of the holders of a majority of the shares of Series Preferred, or (ii) the closing of a public offering of common stock resulting in aggregate gross proceeds of at least \$40.0 million and having a price per share to the public of at least \$2.40 adjusted for splits, recapitalizations and the like. At December 31, 2019 and 2020, the conversion price for each share was equal to \$1.20177 for Series A-1, \$0.9588 for Series A Preferred Stock and \$1.00 for Series Z Preferred Stock.

Redemption

The Series Preferred are not redeemable at the option of the holder.

Protection Provisions

The holders of Series Preferred have certain protective provisions. As long as at least 7,574,458 shares of Series A Preferred Stock and Series A-1 Preferred Stock remain outstanding, the Company cannot, without the approval of a majority in interest of Series Preferred holders, take any action that: (i) consummates a liquidation, dissolution or winding up of the Company; (ii) amends or repeals any provision of either the certificate of incorporation or the bylaws the Company; (iii) changes the rights, preferences or privileges of Series Preferred; (iv) creates or authorizes the creation of any capital stock having the rights, preferences or privileges senior or on a parity with preferred stock; (v) increases or decreases the authorized number of shares of preferred stock or common stock; (vi) results in redemption, repurchase, payment or declaration of dividends or other distributions with respect to shares of preferred stock or common stock other than permitted repurchases and dividends; (vii) permits a) the Company to

create or hold capital stock in a subsidiary that is not wholly owned, b) a subsidiary to issue, sell or transfer capital stock and c) a subsidiary to sell, lease, transfer, exclusively license or dispose of substantially of its assets; (viii) increases or decreases the authorized members of the Board of Directors; (ix) increases the number of shares under any employee stock option plan or create a new stock plan; (x) effect any transactions with related parties except as permitted or (xi) effect a material change in the activity or industry of the Company.

Preferred Stock Warrants

In connection with the Company's Series A-1 convertible preferred stock financing in December 2019, the Company issued a warrant to purchase up to 462,067 shares of Series A-1 Preferred Stock (the A-1 Warrants) to SGI at an exercise price of \$1.20177 per share, which was the exercise price stated in the financing agreement entered into with the Series A-1 investors at that time. The A-1 Warrants were recorded as a liability at their fair value, which was \$0.2 million at both the issuance date and at December 31, 2019 and \$0.6 million at December 31, 2020. The warrant liability is included in derivative liabilities on the Company's accompanying consolidated balance sheet. The A-1 Warrants were valued using the Black-Scholes option-pricing model, the inputs for which included the exercise price of the warrants, the fair value of the underlying preferred shares, the expected term, volatility based on a group of the Company's peers and the risk-free interest rate corresponding to the expected term of the warrants.

Participation Right and Common Stock Warrant

Prior to March 2019, the Company was a wholly owned subsidiary of SGI. As part of its divestiture of the Company in March of 2019, SGI retained a right to participate in a future merger, acquisition or initial public offering of the Company under certain conditions. This participation right was modified in August of 2019 to provide SGI with (i) a warrant exercisable into 3,245,235 shares of common stock of the Company, with an aggregate exercise price of \$1 and (ii) a right to additional warrants exercisable into 3% of shares of common stock of the Company sold in future financings, if any, under certain conditions. The participation right was valued at \$42,000 at the time of divestiture and was deemed to be of de minimis value as of December 31, 2019 due to warrants issued during the year and management's expectations of future financings. The value of the participation right was \$0.4 million at December 31, 2020. As of December 31, 2019, the common stock warrants were valued at \$0.8 million and recorded as financing costs of the Series A convertible preferred stock financing.

11. COMMON STOCK

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to receive dividends, as may be declared by the board of directors, if any, subject to the preferential dividend rights of the convertible preferred stock. As of December 31, 2019 and 2020, no dividends had been declared or paid.

12. STOCK-BASED COMPENSATION

For the period from March 8, 2019 (inception) to December 31, 2019 and the year ended on December 31, 2020, the Company recorded stock-based compensation expense of approximately \$11,000 and \$43,000, respectively. No income tax benefit was recognized in the accompanying consolidated statement of operations and comprehensive loss for the Company's equity incentive plan.

The Company's Board of Directors approved the adoption of the SGI-DNA, Inc. 2019 Stock Plan (the 2019 Plan) in March of 2019. The Stock Plan permits the Company to grant up to 5,544,187 shares for options and restricted stock units of the Company's common stock.

The Stock Plan provides for the grant of incentive and nonstatutory stock options to employees, nonemployee directors and consultants of the Company. Options granted under the 2019 Plan generally become exercisable over a 4-year period following the date service begins and expire 10 years from the date of grant. The exercise price of incentive stock options granted under the 2019 Plan must be at least equal to 100% of the fair value of the Company's common stock at the date of the grant, except for greater than 10% stockholders for which the exercise price of incentive stock options granted under the 2019 Plan must be at least equal to 110% of the fair value of the Company's common stock at the date of the grant, as determined by the Board of Directors. The exercise price of nonstatutory options granted under the 2019 Plan must be at least equal to 100% of the fair value of the Company's common stock at the date of grant, as determined by the Board of Directors. The 2019 Plan grants the Company a right of first refusal to repurchase shares issued under the plan at a price set by the optionee. As of December 31, 2019 and 2020, there were no outstanding shares subject to these repurchase rights.

Stock option activity under the 2019 Plan for the period from March 8, 2019 (inception) to December 31, 2019 and year ended on December 31, 2020 are as follows:

	Number of options	Weighted average exercise price	Weighted average remaining contractual term (in years)	Aggregate intrinsic value (in thousands)
Balances at March 8, 2019 (Inception)	—	\$ —	—	\$ —
Options granted	2,296,596	0.18	9.5	—
Options cancelled	(179,883)	0.13	9.2	—
Balances at December 31, 2019	<u>2,116,713</u>	\$ 0.18	9.5	\$ 117
Options granted	914,517	0.24	9.3	—
Options exercised	(71,878)	0.16	8.5	93
Options cancelled	(673,509)	0.21	8.9	—
Balances at December 31, 2020	<u>2,285,843</u>	\$ 0.20	8.7	\$ 2,884
Vested and expected to vest at December 31, 2019	2,116,713	\$ 0.18	9.5	\$ 117
Vested and expected to vest at December 31, 2020	2,285,843	\$ 0.20	8.7	\$ 2,884
Exercisable at December 31, 2019	—	\$ —	—	\$ —
Exercisable at December 31, 2020	774,995	\$ 0.19	8.5	\$ 988

No options were exercised during the period from March 8, 2019 (inception) to December 31, 2019.

There were 2,296,596 and 914,517 options granted during the period from March 8, 2019 (inception) to December 31, 2019 and the year ended December 31, 2020, respectively. The weighted average grant date calculated fair value of options granted during the period from March 8, 2019 (inception) to December 31, 2019 and for the year ended on December 31, 2020 was \$0.06 and \$0.09 per share, respectively.

The calculated value of option grants during the period from March 8, 2019 (inception) to December 31, 2019 and for the year ended on December 31, 2020 were estimated using the Black-Scholes option pricing model with the following weighted average assumptions:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Risk free interest rate	2.0 %	1.1 %
Expected dividend yield	— %	— %
Expected term (in years)	6.1 years	6.1 years
Expected volatility	32.9 %	36.4 %

Stock-based compensation expense related to stock options was classified in the consolidated statement of operations and comprehensive loss as follows (in thousands):

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Research and development	\$ 4	\$ 13
Sales and marketing	1	5
General and administrative	6	25
Total	<u>\$ 11</u>	<u>\$ 43</u>

As of December 31, 2020, total unrecognized stock-based compensation expense related to unvested stock-based awards was \$0.1 million, which is expected to be recognized over a weighted average period of 2.6 years.

13. INCOME TAXES

The domestic and foreign components of pre-tax loss for the period from March 8, 2019 (inception) to December 31, 2019 and the year ended December 31, 2020 were as follows (in thousands):

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Domestic	\$ (8,302)	\$ (18,011)
Foreign	—	1
Total	<u>\$ (8,302)</u>	<u>\$ (18,010)</u>

The Company had no current or deferred federal and state income tax expense or benefit for the period from March 8, 2019 (inception) to December 31, 2019 or the year ended December 31, 2020 because the Company generated net operating losses, and currently management does not believe it is more likely than not that the net operating losses will be realized. The Company's non-U.S. tax obligation is primarily for business activities conducted through the United Kingdom subsidiary for which taxes were determined to be immaterial and accordingly, such amounts were excluded from the following tables.

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Federal statutory income (benefit) tax rate	(21.0)%	(21.0)%
State income taxes, net of federal benefit	(5.9)	(4.9)
Change in valuation allowance	27.6	27.2
Permanent items	0.7	1.2
Tax credits	(1.4)	(2.5)
Effective income tax rate	<u>— %</u>	<u>— %</u>

The components of our deferred tax assets and liabilities on December 31, 2019 and 2020 consisted of (in thousands):

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Deferred tax assets:		
Net operating loss carryforwards	\$ 3,040	\$ 7,045
Research and development tax credit carryforwards	199	865
Accruals and other	311	303
	<u>3,550</u>	<u>8,213</u>
Valuation Allowance	(2,664)	(7,554)
Total deferred tax assets	<u>886</u>	<u>659</u>
Deferred tax liabilities:		
Fixed assets	(156)	(80)
Intangibles	(730)	(579)
Total deferred tax liabilities	<u>(886)</u>	<u>(659)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The Company has evaluated the positive and negative evidence bearing upon its ability to realize its deferred tax assets, which are composed principally of net operating loss carryforwards. Management has considered the Company's history of cumulative net losses incurred since inception and has concluded that it is more likely than not that the Company will not realize the benefits of its federal and state net deferred tax assets. Accordingly, a full valuation allowance has been established against the net deferred tax assets as of December 31, 2019 and 2020. The Company reevaluates the positive and negative evidence at each reporting period.

The changes in the valuation allowance for deferred tax assets during the period from March 8, 2019 (inception) to December 31, 2019, and the year ended December 31, 2020, related primarily to the increases in net operating loss carryforwards, research and development tax credits generated and accruals.

The valuation allowance increased by \$2.3 million and \$4.9 million during the year ended December 31, 2019 and 2020, respectively.

On March 27, 2020, the U.S. enacted the Coronavirus Aid, Relief, and Economic Security Act (the CARES Act). On December 21, 2020, the U.S. Congress passed the Consolidation Appropriations Act, 2021 (the CAA Act). The tax provisions under the CARES Act and CAA Act, do not have a material impact on the financial statements for the year ended December 31, 2019 and December 31, 2020 given the existence of the full valuation allowance.

On June 29, 2020 California Assembly Bill 85 (AB 85) was signed into law, which suspends the use of California net operating losses and limits the use of California research tax credits for tax years beginning in 2020 and before 2023. The Company does not expect the suspension of net operating losses and the restriction of research tax credits to have a significant impact on the financial statements.

As of December 31, 2019 and 2020, the Company had U.S. federal net operating loss carryforwards of \$12.2 million and \$28.4 million, respectively. The federal net operating loss carryforwards of \$1.3 million, generated before January 1, 2018, will begin to expire in 2034 and the other \$27.0 million will carryforward indefinitely but are subject to an 80 percent taxable income limitation. The Company also had federal research and development tax credit carryforwards of approximately \$0.7 million which will begin to expire in 2039, if not utilized.

As of December 31, 2019 and 2020, the Company had state net operating loss carryforwards of \$6.7 million and \$15.9 million, respectively. The state net operating loss carryforwards of \$15.9 million will begin to expire in 2036.

The Company also had California research and development tax credit carryforwards of approximately \$0.5 million which do not expire.

The utilization of net operating losses and tax credit carryforwards may be subject to an annual limitation as a result of ownership changes that have occurred previously or may occur in the future. Under Sections 382 and 383 of the Internal Revenue Code (the Code), a corporation that undergoes an ownership change may be subject to limitations on its ability to utilize its pre-change net operating losses and other tax attributes otherwise available to offset future taxable income or tax liability. An ownership change is defined as a cumulative change of 50% or more in the ownership positions of certain stockholders during a rolling three-year period. The Company has not completed a formal study to determine if any ownership changes within the meaning of Code Section 382 and 383 have occurred. If such ownership change has occurred, the Company's ability to use its net operating losses or tax credit carryforwards may be restricted, which could require the Company to pay federal or state income taxes earlier than would be required if such limitations were not in effect.

The Company recognizes the financial statements benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement with the relevant tax authority. The Company's policy is to record interest and penalties associated with uncertain tax positions as a component of income tax expense.

The following table shows the changes in the gross amount of unrecognized tax benefits as of December 31, 2019 and 2020 (in thousands):

Balance as of December 31, 2019	\$	74
Increase of unrecognized tax benefits taken in prior years		—
Increase of unrecognized tax benefits taken in current year		242
Balance as of December 31, 2020	\$	316

If the Company is able to recognize these uncertain tax positions, the unrecognized tax benefits would not impact the effective tax rate if the Company applies a full valuation allowance against the deferred tax assets, as provided in the Company's current policy.

The Company had not incurred any material tax interest or penalties as of December 31, 2020. The Company does not anticipate any significant change within 12 months of this reporting date of its uncertain tax positions. The Company is subject to taxation in the United States and various state jurisdictions, and the United Kingdom. There are no ongoing examinations by taxing authorities at this time. The Company's tax years 2014 through 2020 will remain open for examination by the federal and state authorities for three and four years, respectively, from the date of utilization of any net operating loss credits. The Company's 2020 tax year will remain open for examination by the United Kingdom tax authority for one year from the filing deadline.

14. COMMITMENTS AND CONTINGENCIES

Litigation

The Company may become involved in various claims, suits, and legal proceedings from time to time in the ordinary course of its business. The Company accrues a liability when it believes that it is both probable and the amount of loss can be reasonably estimated. While the outcome of such claims, lawsuits or other proceedings cannot be predicted with certainty, management expects that any liability, to the extent not provided for by insurance or otherwise, will not have a material adverse effect on the Company's consolidated financial position or results of operations.

Contingencies

As described in the above in Note 9, the Company has a success fee contingent liability to a creditor that may require a payment of \$0.8 million. This contingent liability was recorded at its fair value of \$0.5 million at December 31, 2020. The contingent liability is recorded as a component of derivative liabilities on the consolidated balance sheet and recorded as an offset against the notes payable as a debt financing cost in the accompanying consolidated balance sheet.

As described in Note 4, our former parent company has a participation right which requires the issuance of warrants equal to 3% of the shares raised in all future equity financings prior to an initial public offering or certain change of control transactions. As of December 31, 2020, the participation right liability was recorded at its fair value of \$0.4 million as a component of derivative liabilities on the consolidated balance sheet.

Leases

The Company's non-cancelable lease commitments are described in Note 8.

15. NET LOSS PER SHARE

Net loss per share

Basic and diluted net loss per share attributable to common stockholders was calculated as follows (in thousands, except share and per share amounts):

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Numerator:		
Net loss	\$ (8,302)	\$ (18,010)
Net loss attributable to common stockholders	\$ (8,302)	\$ (18,010)
Denominator:		
Weighted average common stock outstanding - basic and diluted	15,000,000	15,004,616
Net loss per share attributable to common stockholders - basic and diluted	\$ (0.55)	\$ (1.20)

The Company's potential dilutive securities have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares from the computation of diluted net loss per share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	Period from March 8, 2019 (Inception) to December 31, 2019	Year Ended December 31, 2020
Series Z convertible preferred stock (as converted to common stock)	7,500,000	7,500,000
Series A convertible preferred stock (as converted to common stock)	22,797,830	22,797,830
Series A-1 convertible preferred stock (as converted to common stock)	14,940,170	14,940,170
Warrants to purchase common stock	3,245,235	3,245,235
Warrants to purchase Series A-1 convertible preferred stock (as converted to common stock)	462,067	462,067
Stock options to purchase common stock	2,116,713	2,285,843
Total	51,062,015	51,231,145

16. RETIREMENT PLAN

The Company has a retirement saving plan (the 401(k) Plan) that allows participating employees to defer a portion of their annual compensation on a pretax basis. The Company made no contributions to the 401(k) Plan for the period from March 8, 2019 (inception) to December 31, 2019 and for the year ended on December 31, 2020.

17. RELATED PARTY TRANSACTIONS

As discussed in Note 9, GATTACA obtained \$1.5 million in notes from investors owning greater than 5% of the Company's outstanding stock and \$0.3 million in notes from the Company's Chief Executive Officer in order to fund operations of the Company. These notes and approximately \$0.1 million of accrued interest were assigned to the Company and converted into shares of Series A convertible preferred stock as part of the Series A financing.

During the year ended December 31, 2020, the Company made payments to SGI of approximately \$0.2 million for services relating to intellectual property matters, including patent filings and patent prosecution.

18. SUBSEQUENT EVENTS

The Company has evaluated subsequent events through March 16, 2021, the date these consolidated financial statements were issued.

Long-Term Loan

In March 2021, the Company entered into a term loan facility with Silicon Valley Bank (SVB) pursuant to a Loan and Security Agreement with SVB as the lender (the 2021 Loan Agreement). Effective as of March 5, 2020, the Company repaid in full its borrowings under the 2019 Loan Agreement using part of the proceeds from a \$15.0 million loan borrowed under the 2021 Loan Agreement. Under the 2021 Loan Agreement, the lender may elect to make a second term loan to the Company in a principal amount up to but not exceeding \$5.0 million, as SVB may determine in its sole discretion. The loans bear interest at a per annum rate equal to the greater of (a) 4.0% above the prime rate and (b) 7.25%. The loans mature on January 1, 2024; provided, the loan maturity date will be extended by one year to January 1, 2025, if SVB is satisfied that the Company has achieved at least \$4.0 million in trailing three-month instruments and reagents revenue for any three-month period occurring after March 4, 2021 but ending on or before December 31, 2021, subject to confirmatory lender calls. Payments on the term loans are interest-only until February 1, 2022, followed by equal principal payments and monthly accrued interest payments through the scheduled maturity date; provided, the interest-only period may be extended to August 1, 2022 if SVB is satisfied that the Company has achieved at least \$4.0 million in trailing three-month instruments and reagents revenue for any three-month period occurring after March 4, 2021, but ending on or before December 31, 2021, subject to confirmatory lender calls.

In connection with the 2021 Loan Agreement, the Company issued to SVB a warrant to purchase a number of shares of preferred stock (the Preferred Warrant). The Preferred Warrant is exercisable into the number of preferred shares equal to \$225,000 divided by the applicable warrant price. The Preferred Warrant also provides for the grant of additional shares upon the disbursement of an advance under the loan. Such additional shares will be equal to 1.5% of principal amount of the advances divided by the then applicable warrant price, as defined in the 2021 Loan Agreement. The Preferred Warrant is exercisable at either the original purchase price of the Series A-1 convertible preferred stock or the next convertible preferred stock financing if such round is closed on or before August 1, 2021. If the class of preferred which the warrant would be exercisable into is converted into common stock, the warrant holder would have the right to exercise the warrant for such number of common shares into which the preferred shares would have converted into had they been exercised prior to the conversion. Unless previously exercised, the Preferred Warrant will expire on March 4, 2031. The Preferred Warrant may be exercised at any time, in whole or in part. No portion of the Preferred Warrant has been exercised.

Amendment to Certificate of Incorporation

On March 3, 2021, the Company amended its Amended and Restated Certificate of Incorporation to increase the authorized number of shares of preferred stock and Series A-1 convertible preferred stock by 249,632 shares each, resulting in 45,949,693 and authorized number of shares of Series A-1 convertible preferred stock to 15,651,863.

2021 Equity Incentive Plan

On March 3, 2021, the Company's board of directors and stockholders approved the termination of the 2019 Plan and the adoption of the 2021 Plan. 4,300,000 common shares were initially reserved for issuance under the 2021 Plan.

On March 3, 2021, the Board of Directors of the Company authorized the issuance of an aggregate of 1,986,394 stock options to employees, at an exercise price of \$1.46 per share under the 2021 Plan.

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Codex DNA, Inc.
Condensed Consolidated Balance Sheet
(In thousands, except share and per share data)
(Unaudited)

	December 31, 2020	March 31, 2021
Assets		
Current assets:		
Cash	\$ 13,463	\$ 17,834
Accounts receivable, net of allowance for bad debts of \$105 and \$0 at December 31, 2020 and March 31, 2021, respectively	2,266	1,716
Inventory, net	601	723
Prepaid expenses and other current assets	851	1,623
Total current assets	17,181	21,896
Property and equipment, net	689	698
Right-of-use assets	3,090	2,934
Long-term deposits	81	81
Goodwill	3,497	3,497
Other intangible assets, net	2,325	2,212
Total Assets	\$ 26,863	\$ 31,318
Liabilities, convertible preferred stock and stockholders' deficit		
Current liabilities:		
Accounts payable	\$ 1,191	\$ 1,206
Accrued employee expenses	1,470	1,798
Finance lease liability, current portion	90	81
Operating lease liability, current portion	693	716
Deferred revenue, current portion	606	553
Other accrued liabilities	220	1,123
Notes payable, current portion.....	1,333	—
Other current liabilities	22	106
Total current liabilities	5,625	5,583
Finance lease liability, net of current portion	81	60
Operating lease liability, net of current portion	2,776	2,590
Notes payable, net of discount and current portion	3,353	14,372
Derivative liabilities	1,533	2,403
Deferred revenue, net of current portion	40	97
Total liabilities	\$ 13,408	\$ 25,105
Commitments and contingencies (Note 13)		
Convertible preferred stock		
Series Z Preferred stock, \$.0001 par value; 7,500,000 shares authorized, issued, and outstanding at December 31, 2020 and March 31, 2021	1	1
Series A Preferred stock, \$.0001 par value; 22,797,830 shares authorized, issued, and outstanding at December 31, 2020 and March 31, 2021	20,992	20,992
Series A1 Preferred stock, \$.0001 par value; 15,402,237 shares authorized at December 31, 2019 and 2020; 14,940,170 shares issued and outstanding at December 31, 2019 and March 31, 2021	17,921	17,921
Stockholders' deficit		
Common stock, \$.0001 par value; 72,000,000 shares authorized at December 31, 2020 and March 31, 2021; 15,071,978 and 15,741,560 shares issued and outstanding at December 31, 2020 and March 31, 2021, respectively	2	2
Additional paid-in capital	851	1051
Accumulated deficit	(26,312)	(33,754)
Total stockholders' deficit	(25,459)	(32,701)
Total liabilities, convertible preferred stock and stockholders' deficit	\$ 26,863	\$ 31,318

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Codex DNA, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)
(Unaudited)

	Three Months Ended March 31,	
	2020	2021
Revenue:		
Product sales	\$ 1,048	\$ 1,799
Royalties	339	528
Total revenue	1,387	2,327
Cost of revenue	574	1,025
Gross profit	813	1,302
Operating expenses:		
Research and development	1,963	2,878
Sales and marketing	1,299	2,275
General and administrative	1,146	2,413
Total operating expenses	4,408	7,566
Loss from operations	(3,595)	(6,264)
Other income (expense):		
Interest expense, net	(192)	(241)
Change in fair value of derivative liabilities	(93)	(296)
Loss on extinguishment of debt	—	(618)
Other expense, net	—	(19)
Total other expense, net	(285)	(1,174)
Loss before provision for income taxes	(3,880)	(7,438)
Provision for income taxes	—	(4)
Net loss and comprehensive loss	\$ (3,880)	\$ (7,442)
Net loss attributable to common stockholders	\$ (3,880)	\$ (7,442)
Net loss per share attributable to common stockholders—basic and diluted	\$ (0.26)	\$ (0.48)
Weighted average common stock outstanding—basic and diluted	15,000,000	15,579,423

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Codex DNA, Inc.
Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit
(in thousands, except share data)
(Unaudited)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance at December 31, 2019	45,238,000	\$ 38,914	15,000,000	\$ 2	\$ 797	(8,302)	\$ (7,503)
Stock-based compensation expense	—	—	—	—	15	—	15
Net loss	—	—	—	—	—	(3,880)	(3,880)
Balances at March 31, 2020	<u>45,238,000</u>	<u>\$ 38,914</u>	<u>15,000,000</u>	<u>\$ 2</u>	<u>\$ 812</u>	<u>\$ (12,182)</u>	<u>\$ (11,368)</u>
Balances at December 31, 2020	45,238,000	\$ 38,914	15,071,978	\$ 2	\$ 851	(26,312)	(25,459)
Issuance of Common Stock upon exercise of stock options	—	—	669,582	—	133	—	133
Stock-based compensation expense	—	—	—	—	67	—	67
Net loss	—	—	—	—	—	(7,442)	(7,442)
Balances at March 31, 2021	<u>45,238,000</u>	<u>\$ 38,914</u>	<u>15,741,560</u>	<u>\$ 2</u>	<u>\$ 1,051</u>	<u>\$ (33,754)</u>	<u>\$ (32,701)</u>

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Codex DNA, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(Unaudited)

	Three Months Ended March 31,	
	2020	2021
Cash Flows From Operating Activities:		
Net loss	\$ (3,880)	\$ (7,442)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	105	90
Amortization of intangible assets	122	113
Amortization of debt discount	53	161
Loss on debt extinguishment	—	618
Stock-based compensation	15	67
Amortization of lease right-of-use assets	144	156
Change in fair value of derivative liabilities	94	296
Non-cash interest on finance leases	(5)	(3)
Changes in assets and liabilities:		
Accounts receivable	10	550
Inventories	331	(122)
Deposits, prepaid expenses and other current assets	(510)	(772)
Accounts payable, accrued payroll and accrued liabilities	105	1,330
Deferred revenue	126	4
Operating lease liabilities	(103)	(163)
Net cash used in operating activities	(3,393)	(5,117)
Cash Flows From Investing Activities:		
Purchase of property and equipment	(10)	(99)
Net cash used in investing activities	(10)	(99)
Cash Flows From Financing Activities:		
Borrowings on term loan	—	14,872
Repayment of term loan	—	(5,000)
Debt extinguishment costs	—	(391)
Finance lease liability	(27)	(27)
Proceeds from the exercise of common stock options	—	133
Net cash (used in) provided by financing activities	(27)	9,587
Net (Decrease) Increase In Cash	(3,430)	4,371
Cash at beginning of period	29,144	13,463
Cash at end of period	\$ 25,714	\$ 17,834
Supplemental Disclosure Of Cash Flow Information:		
Cash paid for interest	\$ 116	\$ 163
Purchases of property and equipment included in accounts payable	\$ —	\$ 23
Issuance of preferred stock warrant in connection with term loan	\$ —	\$ 322
Extinguishment of put option derivative liability in connection with term loan	\$ —	\$ (51)
Issuance of put option derivative liability in connection with term loan	\$ —	\$ 303

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

Codex DNA, Inc.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. ORGANIZATION AND OPERATIONS

Business

Codex, DNA, Inc. (the Company) was incorporated in the state of Delaware in March 2011, as Synthetic Genomics Solution, Inc., a wholly owned subsidiary of Synthetic Genomics, Inc. (SGI). The Company changed its name to SGI-DNA, Inc. (SGI-DNA) in February 2013, and then to Codex DNA, Inc. in March 2020. SGI-DNA Limited, a United Kingdom company focused on sales and marketing activities, is a wholly owned subsidiary of Codex DNA, Inc. The Company manufactures and sells laboratory equipment, specifically synthetic biology instruments, reagents and associated products and related services, primarily to pharmaceutical and academic laboratories worldwide.

On March 8, 2019, SGI sold SGI-DNA to GATTACA Mining, LLC (Purchaser or GATTACA) by entering into a stock purchase agreement to sell all of the Company's outstanding common and preferred stock in exchange for a \$10 million non-recourse promissory note. Both the Company and Purchaser are co-borrowers of the promissory note. As this transaction was a change in control transaction in accordance with generally accepted accounting principles in the United States (US GAAP), the Company elected to apply push-down accounting and recognized a step up in the basis of the assets acquired and liabilities assumed in the acquisition.

Since its inception, the Company has devoted substantially all of its efforts to raising capital, commercializing its current products, and developing new product offerings. The Company is subject to a number of risks similar to those of other companies conducting high-risk, early-stage research and development of products. Principal among these risks are a dependence on key individuals and intellectual property, competition from other products and companies, and the technical risks associated with the successful research, development and manufacturing of its products. The Company's success is dependent upon its ability to continue to raise additional capital in order to fund ongoing research and development, commercialize its products, generate revenue, meet its obligations, and, ultimately, become profitable.

Products currently under development will require significant additional research and development efforts. These efforts require significant amounts of additional capital, adequate personnel and infrastructure.

Going Concern

The Company has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the unaudited condensed consolidated financial statements are issued.

Since inception, the Company has incurred cumulative operating losses and negative cash flows from operations. These operating losses and negative cash flows have been financed principally from the issuance of equity securities and debt. The Company's ability to continue as a going concern is dependent upon the ability to raise additional debt or equity capital. There can be no assurance that such capital will be available in sufficient amounts or on terms acceptable to the Company. These factors raise substantial doubt about the Company's ability to continue as a going concern. Risks to which the Company is exposed include uncertainties related to the ability to achieve revenue-generating products; current and potential competitors with greater financial, technological, production, and marketing resources; dependence on key management personnel; and raising additional capital, as needed. Based upon the Company's current plans, management believes there currently is insufficient financial resources to fund the Company's operations for at least twelve months from the issuance date of the accompanying condensed consolidated financial statements.

To address the Company's capital needs, the Company must continue to actively pursue additional equity or debt financing. The Company has been in ongoing discussions with different sources of capital, including financial institutions with respect to such financing. Adequate financing opportunities might not be available to the Company, when and if needed, on acceptable terms or at all. If the Company is unable to obtain additional financing in sufficient amounts or on acceptable terms under such circumstances, the Company's operating results and prospects will be adversely affected.

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

Impact of COVID-19

In December 2019, a novel strain of coronavirus, which causes the disease known as COVID-19, was reported to have surfaced in Wuhan, China. Since then, COVID-19 coronavirus has spread globally. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic. The ongoing COVID-19 global and national health emergency has caused significant disruption in the international and United States economies and financial markets. The spread of COVID-19 has caused illness, quarantines, cancellation of events and travel, business and school shutdowns, reduction in business activity and financial transactions, labor shortages, supply chain interruptions and overall economic and financial market instability.

In response to public health directives and orders and to help minimize the risk of the virus to employees, the Company has taken precautionary measures, including implementing work-from-home policies for certain employees. The COVID-19 pandemic has the potential to significantly impact the Company's manufacturing supply chain, distribution or logistics and other services. Additionally, the Company's service providers and their operations may be disrupted, temporarily closed or experience worker or supply shortages, which could result in additional disruptions or delays in shipments of laboratory equipment or the advancement of the scientific research. To date, the Company is not aware of any such disruptions. Furthermore, to date, the Company has not experienced the pandemic's adverse impacts in any material respect. The Company is not able to estimate the duration of the pandemic or potential impact on the business if disruptions or delays in shipments of product occur. In addition, a severe prolonged economic downturn could result in a variety of risks to the business, including weakened demand for product and a decreased ability to raise additional capital when needed on acceptable terms, if at all. As the situation continues to evolve, the Company will continue to closely monitor market conditions and respond accordingly.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant Accounting Policies

The Company's significant accounting policies are disclosed in the audited consolidated financial statements for the year ended December 31, 2020, included elsewhere in this prospectus. Since the date of those financial statements, there have been no changes to its significant accounting policies except as noted below.

Basis of Presentation and Principles of Consolidation

The Company has prepared the accompanying condensed consolidated financial statements in accordance with U.S. GAAP and included the accounts of the Company and its wholly owned subsidiary after the elimination of all significant intercompany accounts and transactions. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been omitted pursuant to instructions, rules, and regulations prescribed by the United States Securities and Exchange Commission. Management believes that the disclosures provided herein are adequate to make the information presented not misleading when these unaudited condensed consolidated financial statements are read in conjunction with the audited consolidated financial statements and notes thereto as of and for the year ended December 31, 2020.

Unaudited interim financial information

The accompanying condensed consolidated balance sheet as of March 31, 2021, the condensed consolidated statements of operations and comprehensive loss, condensed consolidated statements of convertible preferred stock and stockholders' equity (deficit) and the condensed consolidated statements of cash flows for the three months ended March 31, 2020 and 2021 are unaudited. The unaudited interim consolidated financial statements have been prepared on the same basis as the audited consolidated annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of March 31, 2021 and the results of its operations and its cash flows for the three months ended March 31, 2020 and 2021. The financial data and other information disclosed in these notes related to the three months ended March 31, 2020 and 2021 are also unaudited. The results for the

three months ended March 31, 2021 are not necessarily indicative of results to be expected for the year ending December 31, 2021, any other interim periods, or any future year or period.

3. FAIR VALUE MEASUREMENT

The following table summarizes the fair values of the Company's derivative liabilities on the condensed consolidated balance sheets which comprise the participation right liability, warrant liability, contingent put liability, and success fee contingent liability which are all deemed Level 3 liabilities (in thousands):

	Fair value measurements as of December 31, 2020			
	Level 1	Level 2	Level 3	Total
Liabilities				
Participation right liability	\$ —	\$ —	\$ 420	\$ 420
Warrant liability	—	—	594	594
Contingent put option liability	—	—	51	51
Success fee contingent liability	—	—	468	468
Total	\$ —	\$ —	\$ 1,533	\$ 1,533

	Fair value measurements as of March 31, 2021			
	Level 1	Level 2	Level 3	Total
Liabilities				
Participation right liability	\$ —	\$ —	\$ 390	\$ 390
Warrant liability	—	—	1,114	1,114
Contingent put option liability	—	—	303	303
Success fee contingent liability	—	—	596	596
Total	\$ —	\$ —	\$ 2,403	\$ 2,403

During the year ended December 31, 2020 and the three months ended March 31, 2021, there were no transfers between Level 1, Level 2 and Level 3.

The quantitative elements associated with the Company's Level 3 inputs impacting the fair value measurement of the participation right liability include management's expectation of amounts to be raised and the probability of success in obtaining the funds. The Company determines the estimated capital raised from the financing round to be \$20.0 million with a probability of success of 70%. The fair value was determined by multiplying the amount expected to be raised versus the probability of success and the percentage right (3%). As of December 31, 2020 and March 31, 2021, the fair value of the participation right was valued at \$0.4 million.

Preferred Stock Warrants

The preferred stock warrant liability consists of the fair value of warrants to purchase Series A-1 Preferred Stock issued in conjunction with the Series A-1 financing in December 2019 with SGI (see Note 9) and the 2021 Loan Agreement (See Note 8) and was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. As of December 31, 2020 and March 31, 2021, the fair value of the Series A-1 convertible preferred stock warrant was \$1.29 and \$1.72 per share, respectively.

The following reflects the significant quantitative inputs used in the valuation of the preferred stock warrant liability:

	December 31, 2020	March 31, 2021
Risk-free interest rate	0.1 %	0.2 %
Expected term	2.0 years	2.0 years
Expected volatility	83.6 %	85.0 %
Expected dividend yield	0.0 %	0.0 %

Contingent Put Option Liability

The contingent put option liability consists of the fair value of the contingent interest feature and acceleration clause (contingent put option) under the 2019 Loan Agreement and 2021 Loan Agreement (see Note 8). The fair value of the contingent put option liability was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the contingent put option liability utilized a risk-neutral valuation model wherein the fair value of the underlying debt facility is estimated, both with and without the presence of the default provisions, holding all other assumptions constant. The Company assesses these assumptions and estimates at least annually as additional information impacting the assumptions are obtained. Changes in the fair value of the contingent put option liability are recognized in other income (expense) as part of the change in fair value of derivative liabilities in the condensed consolidated statement of operations and comprehensive loss.

Success Fee Contingent Liability

The success fee contingent liability consists of the fair value of contingent obligation to pay the lender a success fee of \$0.8 million upon a Liquidity Event under the 2019 Loan Agreement (see Note 8). The fair value of the success fee contingent liability was based on significant inputs not observable in the market, which represent a Level 3 measurement within the fair value hierarchy. The Company's valuation of the success fee contingent liability utilized a liquidity event scenario analysis discounted at the Company's cost of capital. This analysis consists of both the probability adjusted value of the success fee based on liquidity scenarios, and the risk adjusted present value of the success fee discounted at the Company's cost of capital on the valuation date, to take into account the risk of achieving the liquidity scenarios. The Company assesses these assumptions and estimates at least annually as additional information impacting the assumptions are obtained. Changes in the fair value of the success fee contingent liability are recognized in other income (expense) as part of the change in fair value of derivative liabilities in the condensed consolidated statement of operations and comprehensive loss.

The following table provides a roll-forward of the aggregate fair value of the Company's derivative liabilities for which fair value is determined using Level 3 inputs (in thousands):

	Participation right liability	Warrant liability	Contingent put liability	Success fee contingent liability
Fair value at December 31, 2019	\$ —	\$ 169	\$ 106	\$ 379
Change in fair value	—	20	61	13
Fair value at March 31, 2020	\$ —	\$ 189	\$ 167	\$ 392

	Participation right liability	Warrant liability	Contingent put liability	Success fee contingent liability
Fair value at December 31, 2020	—	189	167	392
Extinguishment of liability	—	—	(51)	—
Issuance of liability	—	322	303	—
Change in fair value	(30)	198	—	128
Fair value at March 31, 2021	\$ (30)	\$ 709	\$ 419	\$ 520

For the three months ended March 31, 2020 and 2021, the Company recorded a change in fair value of derivative liabilities included in other income (expense) of \$0.1 million and \$0.3 million, respectively.

4. INVENTORY

Inventories include material, labor and overhead and are stated at the lower of cost (first-in and first-out method) or net realizable value. The components of inventory are as follows as of December 31, 2020 and March 31, 2021 (in thousands):

	December 31, 2020	March 31, 2021
Raw materials	\$ 299	\$ 263
Work in process and sub-assemblies	201	235
Finished goods	101	225
Total	\$ 601	\$ 723

5. PROPERTY AND EQUIPMENT

Property and equipment consisted of the following on December 31, 2020 and March 31, 2021 (in thousands):

	December 31, 2020	March 31, 2021
Machinery and equipment	\$ 1,315	\$ 1,396
Computer hardware and software	6	6
Leasehold improvements	32	39
Construction in progress	102	113
Total	1,455	1,554
Less: Accumulated depreciation and amortization	(766)	(856)
Total property and equipment, net	\$ 689	\$ 698

Depreciation expense for the each of the three months ended March 31, 2020 and 2021 was \$0.1 million, and is included in operating expenses.

6. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

As part of the March 8, 2019 transaction (see Note 1), the Company acquired its intangible assets with resulting goodwill. The resulting goodwill carries a value of approximately \$3.5 million. Due to the recent decline in global economic and labor market conditions caused by the global outbreak of the COVID-19 pandemic, the Company considered the effects on its goodwill and determined that there was no material significant impact that would cause a change in its analysis. There were no other events or circumstances that have changed since the last annual assessment that could reduce the fair value of the Company's reporting segments below its carrying values.

For the three months ended March 31, 2020 and 2021, the Company did not record any impairment of goodwill.

Other Intangible Assets

Other intangible assets include the rights to technology and the SGI-DNA trade name. The Company engaged an independent consultant to value the intangible assets and to determine the useful lives. The technology was valued at approximately \$3.2 million with a seven year useful life and the SGI-DNA trade name at approximately \$0.1 million with a three year useful life. During 2020, the Company changed its name to Codex DNA, Inc. (See Note 1), the amount allocated to the trade name of \$0.1 was deemed impaired and written off in April 2020.

Amortization expense for each of the three months ended March 31, 2020 and 2021 was approximately \$0.1 million.

The following table summarizes the estimated future amortization expense of the intangible assets (in thousands):

Years ending December 31:	
2021	\$ 450
2022	450
2023	450
2024	450
2025	450
Thereafter	75
Total	\$ 2,325

7. LEASES

As of March 31, 2021, the Company had four outstanding leases for office and scientific manufacturing equipment. The leases have terms between 25 and 60 months.

The components of lease cost under ASC 842 are as follows (in thousands):

	March 31, 2020	March 31, 2021
Lease costs		
Finance lease cost:		
Payment of finance lease liability	\$ 27	\$ 27
Interest on lease liabilities	5	3
Amortization of right-of-use asset	144	156
Variable lease cost	76	112
Total lease cost	\$ 252	\$ 298

Supplemental disclosure of cash flow information related to leases are as follows (in thousands):

	March 31, 2020	March 31, 2021
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 189	\$ 238
Operating cash flows from finance leases	\$ 5	\$ 3
Financing cash flows from finance leases	\$ 27	\$ 27

The weighted-average remaining lease term and discount rate were as follows:

	March 31, 2020	March 31, 2021
Weighted-average remaining lease term		
Finance leases	2.4 years	1.7 years
Operating leases	4.8 years	3.8 years
Weighted-average discount rate		
Finance leases	8.0 %	7.7 %
Operating leases	8.9 %	8.9 %

The following table summarizes the minimum lease payments of the Company's operating and finance lease liabilities as of March 31, 2021 (in thousands):

Year Ending December 31,	Operating	Finance
2021	\$ 730	\$ 67
2022	997	85
2023	1,026	—
2024	1,057	—
2025	89	—
Thereafter	—	—
Total future minimum lease payments	3,899	152
Less: imputed interest	(593)	(11)
Present value of operating lease liability	\$ 3,306	\$ 141
Less: current portion of lease liability	(716)	(81)
Non-current portion of lease liability	2,590	60

8. NOTES PAYABLE

Loan and Security Agreement

As of December 31, 2020 and March 31, 2021, the loans payable on the condensed consolidated balance sheets pertains to the Loan and Security Agreement with Oxford and the Loan and Security Agreement with Silicon Valley Bank, respectively, and consists of the following (in thousands):

	December 31, 2020	March 31, 2021
Principal amount of loans payable	\$ 5,000	\$ 15,000
Less: Current portion of loans payable	(1,333)	—
Loans payable, net of current portion	3,667	15,000
Accrued Interest	90	78
Final debt payment liability	287	400
Debt discount and financing costs, net of accretion	(691)	(1,106)
Loans payable, net of discount and current portion	\$ 3,353	\$ 14,372

2021 Loan Agreement

On March 4, 2021, the Company entered into a Loan and Security Agreement with Silicon Valley Bank (SVB) as the lender (the 2021 Loan Agreement). Under the 2021 Loan Agreement, the Company borrowed a \$15.0 million senior secured term loan, the proceeds of which were used to repay all existing obligations under the 2019 Loan Agreement, with the remaining proceeds available for working capital and general corporate purposes. Under the 2021 Loan Agreement, SVB may elect to make a second term loan to the Company in a principal amount up to but not exceeding \$5.0 million, as SVB may determine in its sole discretion.

In connection with the 2021 Loan Agreement, the Company issued to SVB a warrant to purchase a number of shares of preferred stock (the Preferred Warrant). The Preferred Warrant is exercisable into the number of preferred shares equal to approximately \$0.2 million divided by the applicable warrant price. The Preferred Warrant also provides for the grant of additional shares upon the disbursement of an advance under the 2021 Loan Agreement. Such additional shares will be equal to 1.5% of the principal amount of the advance divided by the warrant price. The Preferred Warrant is exercisable at either the original purchase price of the Series A-1 convertible preferred stock or the next convertible preferred stock financing if such round is closed on or before August 1, 2021. If the class of convertible preferred stock in which the warrant would be exercisable into is converted into common stock, the warrant holder would have the right to exercise the warrant for such number of common shares into which the preferred shares would have converted into had they been exercised prior to the conversion. Unless previously exercised, the Preferred Warrant will expire on March 4, 2031. The Preferred Warrant may be exercised at any time, in whole or in part. No portion of the Preferred Warrant has been exercised. The Preferred Warrant was valued at \$0.3 million and separately accounted for in the Company's condensed consolidated financial statements as a component of derivative liabilities on the condensed consolidated balance sheets.

The term loan bears interest at a per annum rate equal to the greater of (a) 4.0% above the prime rate and (b) 7.25%. The interest rate as of March 5, 2021 was 7.25% per annum. The loans are secured by substantially all of the Company's assets, other than intellectual property. The Company has agreed not to encumber our intellectual property assets, except as permitted by the 2021 Loan Agreement. For the three months ended March 31, 2021, the effective interest rate on outstanding borrowings was approximately 10.40%.

The term loans mature on January 1, 2024; provided, the loan maturity date will be extended by one year to January 1, 2025, if SVB is satisfied that we have achieved at least \$4.0 million in trailing three-month instruments and reagents revenue for any three-month period occurring after March 4, 2021 but ending on or before December 31, 2021, subject to confirmatory lender calls.

Payments on the term loans are interest-only until February 1, 2022, followed by equal principal payments and monthly accrued interest payments through the scheduled maturity date; provided, the interest-only period may be extended to August 1, 2022 if SVB is satisfied that we have achieved at least \$4.0 million in trailing three-month

product revenue for any three-month period occurring after March 4, 2021, but ending on or before December 31, 2021, subject to confirmatory lender calls.

The Company may elect to prepay the term loans, in whole but not in part, at any time. If the Company elects to voluntarily prepay the term loans before the scheduled maturity date, the Company is required to pay the lender a prepayment fee, equal to 3.0% of the then outstanding principal balance if the prepayment occurs on or before March 4, 2022, 2.0% of the outstanding principal balance if the prepayment occurs after March 4, 2022, but on or before March 4, 2023, or 1.0% of the outstanding principal balance if the prepayment occurs after March 4, 2023, but on or before the scheduled maturity date. No prepayment fee is applicable to a mandatory prepayment of the loans upon an acceleration of the loans. Upon a voluntary or mandatory prepayment of the loans, the Company is also required to pay SVB's expenses and all accrued but unpaid interest on the loans through the prepayment date.

A final payment (the Final Payment) equal to \$0.4 million will be due at the earlier of the maturity date, acceleration of the loans, or a voluntary or mandatory prepayment of the loans. The Final Payment is being accrued through interest expense using the effective interest method.

Under the 2021 Loan Agreement, the Company agrees to maintain as of the last day of each month, certain consolidated trailing three-month minimum revenue levels as set forth in the 2021 Loan Agreement.

The 2021 Loan Agreement includes customary representations and covenants that, subject to exceptions and qualifications, restrict the Company's ability to do the following things: engage in mergers, acquisitions, and asset sales; transact with affiliates; undergo a change in control; engage in businesses that are not related to the Company's existing business; add or change business locations; incur additional indebtedness; incur additional liens; make loans and investments; declare dividends or redeem or repurchase equity interests; and make certain amendments or payments in respect of any subordinated debt. In addition, the 2021 Loan Agreement contains customary affirmative covenants, including covenants regarding the payment of taxes and other obligations, maintenance of insurance, maintenance of our bank accounts, protection of our intellectual property, reporting requirements, compliance with applicable laws and regulations, and formation or acquisition of new subsidiaries. The Company is in compliance with its covenants as of March 31, 2021.

The 2021 Loan Agreement also includes customary indemnification obligations and customary events of default, including, among other things, payment defaults, breaches of covenants following any applicable cure period, material misrepresentations, a failure of the loans or the lender's security interest in the collateral to have the priority as required under the 2021 Loan Agreement, a material adverse change as defined in the 2021 Loan Agreement (including without limitation as a result of a government approval having been revoked, rescinded, suspended, modified or not renewed), certain material judgments and attachments, and events relating to bankruptcy or insolvency.

The 2021 Loan Agreement also contains a cross default provision under which, if a third party (under any agreement) has a right to accelerate indebtedness greater than \$0.5 million, the Company would be in default of the 2021 Loan Agreement. During the continuance of an event of default, SVB may apply a default interest rate of an additional 5% to the outstanding loan balances, and SVB may declare all outstanding obligations immediately due and payable and may exercise other rights and remedies as set forth in the 2021 Loan Agreement and related loan documents. Acceleration would result in the payment of all outstanding loans, any default interest charged by the lender, all expenses of the lender and the Final Payment.

The Company bifurcated a compound derivative liability related to the contingent interest feature and acceleration clause (contingent put option) under the 2021 Loan Agreement. The contingent put option liability was valued and separately accounted for in the Company's condensed consolidated financial statements. The contingent put option liability is classified as a component of derivative liabilities on the condensed consolidated balance sheet. As of March 31, 2021, the estimated fair value of the contingent put option liability was \$0.3 million, which was determined by using a risk-neutral valuation model wherein the fair value of the underlying debt facility is estimated, both with and without the presence of the default provisions, holding all other assumptions constant (see Note 3).

The estimated future principal payments due under the 2021 Loan Agreement were as follows:

	March 31, 2021
Estimated future principal payments due	
2022	\$ 2,500
2023	6,000
2024	6,000
2025	500
Total	\$ 15,000

9. PREFERRED STOCK

In March 2021, the Company further amended its Amended and Restated Certificate of Incorporation (the Amended and Restated Certificate), filed in December of 2019, to increase the authorized number of its Series A-1 Preferred Stock by 249,632 shares, resulting in 15,651,869 shares of Series A-1 Preferred Stock.

Additional rights, preferences, privileges and restrictions relating to Series A Preferred Stock, Series A-1 Preferred Stock, and Series Z Preferred Stock (together the Series Preferred) are as set forth below (in thousands, except share amounts):

	December 31, 2020				
	Total shares authorized	Total shares issued and outstanding	Carrying value	Liquidation preference	Common shares issuable upon conversion
Series Z Preferred Stock	7,500,000	7,500,000	\$ 1	\$ 7,500	7,500,000
Series A Preferred Stock	22,797,830	22,797,830	20,992	43,717	22,797,830
Series A-1 Preferred Stock	15,402,237	14,940,170	17,921	43,989	14,940,170
Total	45,700,067	45,238,000	\$ 38,914	\$ 95,206	45,238,000

	March 31, 2021				
	Total shares authorized	Total shares issued and outstanding	Carrying value	Liquidation preference	Common shares issuable upon conversion
Series Z Preferred Stock	7,500,000	7,500,000	\$ 1	\$ 7,500	7,500,000
Series A Preferred Stock	22,797,830	22,797,830	20,992	43,717	22,797,830
Series A-1 Preferred Stock	15,651,869	14,940,170	17,921	43,989	14,940,170
Total	45,949,699	45,238,000	\$ 38,914	\$ 95,206	45,238,000

Preferred Stock Warrants

In connection with the Company's Series A-1 convertible preferred stock financing in December 2019, the Company issued a warrant to purchase up to 462,067 shares of Series A-1 Preferred Stock (the A-1 Warrants) to SGI at an exercise price of \$1.20177 per share, which was the exercise price stated in the financing agreement entered into with the Series A-1 investors at that time. The A-1 Warrants were recorded as a liability at their fair value, which was \$0.6 million at December 31, 2020 and \$0.8 million at March 31, 2021. The warrant liability is included in derivative liabilities on the Company's accompanying condensed consolidated balance sheets. The A-1 Warrants were valued using the Black-Scholes option-pricing model, the inputs for which included the exercise price of the warrants, the fair value of the underlying preferred shares, the expected term, volatility based on a group of the Company's peers and the risk-free interest rate corresponding to the expected term of the warrants.

In connection with the 2021 Loan Agreement, the Company issued the Preferred Warrant to SVB. The Preferred Warrant is exercisable into the number of preferred shares equal to approximately \$0.2 million divided by the applicable warrant price. The Preferred Warrant is initially exercisable for Series A-1 convertible preferred stock at an exercise price of \$1.20177 per share, and will become exercisable for any series of convertible preferred stock issued by the Company in the future prior to August 1, 2021, at an exercise price equal to the lowest original purchase price paid by investors for such convertible preferred stock. The Preferred Warrant was recorded as a liability at its fair value, which was \$0.3 million at March 31, 2021. The warrant liability is included in derivative liabilities on the Company's accompanying condensed consolidated balance sheets. The warrant was valued using the Black-Scholes option-pricing model, the inputs for which included the exercise price of the warrant, the fair value of the underlying preferred shares, the expected term, volatility based on a group of the Company's peers and the risk-free interest rate corresponding to the expected term of the warrant.

Participation Right

Prior to March 2019, the Company was a wholly owned subsidiary of SGI. As part of its divestiture of the Company in March of 2019, SGI retained a right to participate in a future merger or acquisition of the Company under certain conditions. This participation right was modified in August of 2019 to provide SGI a right to additional warrants exercisable into 3% of shares of stock of the Company sold in future equity financing prior to an initial public offering or certain change of control transactions, if any, under certain conditions. To date, this right has resulted in the issuance of a warrant exercisable into Series A-1 convertible preferred stock. The fair value of the participation right was \$0.4 million at December 31, 2020 and March 31, 2021.

10. COMMON STOCK

Common Stock Warrant

Prior to March 2019, the Company was a wholly owned subsidiary of SGI. As part of its divestiture of the Company in March of 2019, SGI retained a right to participate in an initial public offering of the Company under certain conditions. This participation right was modified in August of 2019 to provide SGI with a warrant exercisable into 3,245,235 shares of common stock of the Company, with an aggregate exercise price of \$1. The fair value of the common stock warrants was \$0.8 million at December 31, 2020 and March 31, 2021.

11. STOCK-BASED COMPENSATION

For the three months ended March 31, 2020 and 2021, the Company recorded stock-based compensation expense of approximately \$15,000 and \$67,000, respectively. No income tax benefit was recognized in the accompanying condensed consolidated statements of operations and comprehensive loss for the Company's equity incentive plan.

The Company's Board of Directors approved the adoption of the SGI-DNA, Inc. 2019 Stock Plan (the 2019 Plan) in March of 2019. The 2019 Plan permits the Company to grant up to 5,544,187 shares for options and restricted stock units of the Company's common stock. On March 3, 2021, the Company's board of directors and stockholders approved the termination of the 2019 Plan and the adoption of the 2021 Plan (the 2021 Plan). 4,300,000 common shares were initially reserved for issuance under the 2021 Plan.

The 2021 Plan provides for the grant of incentive and nonstatutory stock options to employees, nonemployee directors and consultants of the Company. Options granted under the 2019 Plan and 2021 Plan generally become exercisable over a 4-year period following the date service begins and expire 10 years from the date of grant. The exercise price of incentive stock options granted under the 2019 Plan and 2021 Plan must be at least equal to 100% of the fair value of the Company's common stock at the date of the grant, except for greater than 10% stockholders for which the exercise price of incentive stock options granted under the 2019 Plan and 2021 Plan must be at least equal to 110% of the fair value of the Company's common stock at the date of the grant, as determined by the Board of Directors. The exercise price of nonstatutory options granted under the 2019 Plan and 2021 Plan must be at least equal to 100% of the fair value of the Company's common stock at the date of grant, as determined by the Board of Directors. The 2019 Plan and 2021 Plan grants the Company a right of first refusal to repurchase shares issued under the plan at a price set by the optionee. As of December 31, 2020 and March 31, 2021, there were no outstanding shares subject to these repurchase rights.

Stock option activity under the 2019 Plan and 2021 Plan for the three months ended March 31, 2021 is as follows:

	Number of options	Weighted average exercise price	Weighted average remaining contractual term (in years)	Aggregate intrinsic value (in thousands)
Balances at December 31, 2020	2,285,843	\$ 0.20	8.7	\$ 2,884
Options granted	1,986,394	1.46	9.9	1,033
Options exercised	(669,682)	0.20	8.4	1,193
Options cancelled	(162,181)	0.22	8.9	276
Balances at March 31, 2021	3,440,374	\$ 0.93	9.3	\$ 3,628
Vested and expected to vest at March 31, 2021	3,440,374	\$ 0.93	9.3	\$ 3,628
Exercisable at March 31, 2021	267,761	\$ 0.17	8.3	\$ 486

There were 1,986,394 options granted during the three months ended March 31, 2021. The weighted average grant date calculated fair value of options granted during the three months ended March 31, 2021 was \$0.58 per share.

The calculated value of option grants during the three months ended March 31, 2021 were estimated using the Black-Scholes option pricing model with the following weighted average assumptions:

	March 31, 2021
Risk free interest rate	1.1 %
Expected dividend yield	— %
Expected term	6.1 years
Expected volatility	39.9 %

Stock-based compensation expense related to stock options was classified in the condensed consolidated statements of operations and comprehensive loss as follows (in thousands):

	March 31, 2021
Research and development	\$ 3
Sales and marketing	15
General and administrative	49
Total	\$ 67

As of March 31, 2021, total unrecognized stock-based compensation expense related to unvested stock-based awards was \$1.1 million, which is expected to be recognized over a weighted average period of 3.2 years.

12. INCOME TAXES

The Company estimates an annual effective tax rate of 0% for the year ending December 31, 2021 as the Company incurred losses for the three months ended March 31, 2021 and is forecasting additional losses through the remainder of fiscal year ending December 31, 2021, resulting in an estimated net loss for both financial statement and tax purposes for the year ending December 31, 2021. Therefore, no federal or state income taxes are expected and none have been recorded at this time. Income taxes have been accounted for using the liability method.

Due to the Company's history of losses since inception, there is not enough evidence at this time to support that the Company will generate future income of a sufficient amount and nature to utilize the benefits of its net deferred tax

assets. Accordingly, the deferred tax assets have been reduced by a full valuation allowance, since the Company does not currently believe that realization of its deferred tax assets is more likely than not.

As of March 31, 2021, the Company had no unrecognized income tax benefits that would reduce the Company's effective tax rate if recognized.

13. COMMITMENTS AND CONTINGENCIES

Litigation

The Company may become involved in various claims, suits, and legal proceedings from time to time in the ordinary course of its business. The Company accrues a liability when it believes that it is both probable and the amount of loss can be reasonably estimated. While the outcome of such claims, lawsuits or other proceedings cannot be predicted with certainty, management expects that any liability, to the extent not provided for by insurance or otherwise, will not have a material adverse effect on the Company's consolidated financial position or results of operations.

Contingencies

As described in the above in Note 8, the Company has a success fee contingent liability to a creditor that may require a payment of \$0.8 million. This contingent liability was recorded at its fair value of \$0.5 million and \$0.6 million at December 31, 2020 and March 31, 2021, respectively. The contingent liability is recorded as a component of derivative liabilities on the condensed consolidated balance sheets.

As described in Note 3, our former parent company has a participation right which requires the issuance of warrants equal to 3% of the shares raised in all future equity financings prior to an initial public offering or certain change of control transactions. As of December 31, 2020 and March 31, 2021, the participation right liability was recorded at its fair value of \$0.4 million and \$0.4 million, respectively, as a component of derivative liabilities on the condensed consolidated balance sheets.

Leases

The Company's non-cancelable lease commitments are described in Note 7.

14. NET LOSS PER SHARE

Net loss per share

Basic and diluted net loss per share attributable to common stockholders was calculated as follows (in thousands, except share and per share amounts):

	Three months ended March 31,	
	2020	2021
Numerator:		
Net loss	\$ (3,880)	\$ (7,422)
Net loss attributable to common stockholders	\$ (3,880)	\$ (7,422)
Denominator:		
Weighted average common stock outstanding - basic and diluted	15,000,000	15,579,423
Net loss per share attributable to common stockholders - basic and diluted	\$ (0.26)	\$ (0.48)

The Company's potential dilutive securities have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares from the computation of diluted net loss per

share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	March 31,	
	2020	2021
Series Z convertible preferred stock (as converted to common stock)	7,500,000	7,500,000
Series A convertible preferred stock (as converted to common stock)	22,797,830	22,797,830
Series A-1 convertible preferred stock (as converted to common stock)	14,940,170	15,651,869
Warrants to purchase common stock	3,245,235	3,245,235
Warrants to purchase Series A-1 convertible preferred stock (as converted to common stock)	462,067	649,287
Stock options to purchase common stock	2,592,249	3,440,374
Total	51,537,551	53,284,595

15. RETIREMENT PLAN

The Company has a retirement saving plan (the 401(k) Plan) that allows participating employees to defer a portion of their annual compensation on a pretax basis. The Company made no contributions to the 401(k) Plan for the three months ended March 31, 2020 and 2021.

16. RELATED PARTY TRANSACTIONS

During the three months ended March 31, 2020 and 2021, the Company made payments to SGI of approximately \$41,000 and \$25,000, respectively, for services relating to intellectual property matters, including patent filings and patent prosecution.

17. SUBSEQUENT EVENTS

The Company has evaluated subsequent events from the condensed consolidated balance sheet date through May 28, 2021, the date these condensed consolidated financial statements were issued.

Amendment to Certificate of Incorporation

On April 26, 2021, the Company amended its Amended and Restated Certificate of Incorporation to increase the authorized number of shares of its common stock by 3,000,000 shares, resulting in 75,000,000 authorized shares of common stock.

2021 Equity Incentive Plan

On April 24, 2021 and May 19, 2021, the Company's board of directors authorized the issuance of an aggregate of 3,042,700 and 412,500 stock options to employees, at an exercise price of \$1.98 and \$3.78 per share, respectively, under the 2021 Plan.

On April 24, 2021, the Company's board of directors and stockholders approved an increase to the number of common shares reserved for issuance under the 2021 Plan to 6,000,000 shares.

Shares



Codex DNA, Inc.

Common Stock

PRELIMINARY PROSPECTUS

**Jefferies
Cowen
KeyBanc Capital Markets**

, 2021

PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the expenses to be incurred in connection with the offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimates except the SEC registration fee, the Financial Industry Regulatory Authority, Inc. (FINRA) filing fee and the Nasdaq listing fee.

	Amount Paid or to Be Paid
SEC registration fee	\$ 10,910.00
FINRA filing fee	15,500.00
Nasdaq listing fee	25,000.00
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent and registrar fees	*
Miscellaneous expenses	*
Total	\$ *

* To be provided by amendment.

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law empowers a corporation to indemnify its directors and officers and to purchase insurance with respect to liability arising out of their capacity or status as directors and officers, provided that the person acted in good faith and in a manner the person reasonably believed to be in our best interests, and, with respect to any criminal action, had no reasonable cause to believe the person's actions were unlawful. The Delaware General Corporation Law further provides that the indemnification permitted thereunder shall not be deemed exclusive of any other rights to which the directors and officers may be entitled under the corporation's bylaws, any agreement, a vote of stockholders or otherwise. The certificate of incorporation of the registrant to be in effect upon the completion of this offering provides for the indemnification of the registrant's directors and officers to the fullest extent permitted under the Delaware General Corporation Law. In addition, the bylaws of the registrant to be in effect upon the completion of this offering require the registrant to fully indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) by reason of the fact that such person is or was a director or officer of the registrant, or is or was a director or officer of the registrant serving at the registrant's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorney's fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, to the fullest extent permitted by applicable law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) for payments of unlawful dividends or unlawful stock repurchases or redemptions or (4) for any transaction from which the director derived an improper personal benefit. The registrant's certificate of incorporation to be in effect upon the completion of this offering provides that the registrant's directors shall not be personally liable to it or its stockholders for monetary damages for breach of fiduciary duty as a director and that if the Delaware General Corporation Law is amended to authorize corporate action further eliminating or

limiting the personal liability of directors, then the liability of the registrant's directors shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Section 174 of the Delaware General Corporation Law provides, among other things, that a director who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption may be held liable for such actions. A director who was either absent when the unlawful actions were approved, or dissented at the time, may avoid liability by causing his or her dissent to such actions to be entered in the books containing minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

As permitted by the Delaware General Corporation Law, the registrant has entered into separate indemnification agreements with each of the registrant's directors and executive officers which would require the registrant, among other things, to indemnify them against certain liabilities which may arise by reason of their status as directors or executive officers.

The registrant expects to obtain and maintain insurance policies under which its directors and officers are insured, within the limits and subject to the limitations of those policies, against certain expenses in connection with the defense of, and certain liabilities which might be imposed as a result of, actions, suits or proceedings to which they are parties by reason of being or having been directors or officers. The coverage provided by these policies may apply whether or not the registrant would have the power to indemnify such person against such liability under the provisions of the Delaware General Corporation Law.

These indemnification provisions and the indemnification agreements entered into between the registrant and the registrant's officers and directors may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

The underwriting agreement between the registrant and the underwriters filed as Exhibit 1.1 to this registration statement provides for the indemnification by the underwriters of the registrant's directors and officers and certain controlling persons against specified liabilities, including liabilities under the Securities Act with respect to information provided by the underwriters specifically for inclusion in the registration statement. The investors' rights agreement with certain holders of our capital stock also provides for cross-indemnification in connection with the registration of the registrant's common stock on behalf of such holders.

Item 15. Recent Sales of Unregistered Securities

The following list sets forth information regarding all unregistered securities sold by us since January 1, 2017. No underwriters were involved in the sales and the certificates representing the securities sold and issued contain legends restricting transfer of the securities without registration under the Securities Act or an applicable exemption from registration.

Issuances of Convertible Preferred Stock

In 2018, we issued 7,500,000 shares of Series Z convertible preferred stock and 10,000 shares of common stock to our parent company, SGI, in exchange for certain assets.

On August 27, 2019, we sold 22,797,831 shares of Series A convertible preferred stock to four accredited investors at a price of \$0.96 per share, for aggregate proceeds of \$21.9 million.

On December 19, 2019, we sold 14,940,170 shares of Series A-1 convertible preferred stock to three accredited investors at a price of \$1.20 per share, for aggregate proceeds of \$18.0 million.

Warrant Issuances

On March 8, 2019, we issued SGI a warrant to purchase common stock, equal to 6% of the shares of common stock issued and outstanding as of the time of exercise, which will automatically be exercised immediately prior to the consummation of an initial public offering. This warrant and participation right were later amended on August 27, 2019 to provide a warrant on 3,245,235 shares of common stock at an exercise price of \$1.00.

On December 14, 2019, we issued SGI a warrant to purchase 462,067 shares of Series A-1 convertible preferred stock at an exercise price of \$1.20 per share.

On March 4, 2021, we issued SVB a warrant to purchase shares of convertible preferred stock (the Preferred Warrant). The Preferred Warrant is exercisable into the number of preferred shares equal to approximately \$0.2 million divided by the applicable warrant price. The Preferred Warrant is initially exercisable for Series A-1 convertible preferred stock at an exercise price of \$1.20177 per share, and will become exercisable for any series of convertible preferred stock issued by the Company in the future prior to August 1, 2021, at an exercise price equal to the lowest original purchase price paid by investors for such convertible preferred stock.

Option Issuances

From March 8, 2019 to May 21, 2021, we issued and sold to our officers, directors, employees, consultants and other service providers an aggregate of 741,560 shares of our common stock upon the exercise of options under our equity compensation plans at exercise prices ranging from \$0.13 to \$0.24 per share, for a weighted-average exercise price of \$0.20 per share.

The offers, sales and issuances of the convertible preferred stock and warrants described in this Item 15 were exempt from registration under the Securities Act under Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder as transactions by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was an accredited person and had adequate access, through employment, business or other relationships, to information about the registrant.

The offers, sales and issuances of the options described in Item 15 were exempt from registration under the Securities Act under either (1) Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701 or (2) Section 4(a)(2) of the Securities Act as transactions by an issuer not involving any public offering. The recipients of such securities were the registrant's employees, consultants or directors and received the securities under our 2019 Plan and 2021 Plan. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions.

Item 16. Exhibit and Financial Statement Schedules

(a) Exhibits.

See the Exhibit Index immediately preceding the signature page hereto for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules.

Schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto.

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation of the Registrant, and amendments thereto, as currently in effect.
3.2	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect upon the completion of this offering.
3.3	Amended and Restated Bylaws of the Registrant, as currently in effect.
3.4	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon the completion of this offering.
4.1	Amended and Restated Investors' Rights Agreement by and among the Registrant and certain of its stockholders, dated December 19, 2019.
4.2*	Specimen common stock certificate of the Registrant.
4.3	Warrant to Purchase Stock issued to Silicon Valley Bank, dated as of March 4, 2021.
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1+	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.
10.2+	2019 Stock Plan, as amended, and forms of agreement thereunder.
10.3+	2021 Equity Incentive Plan, as amended, and forms of agreement thereunder.
10.4+	2021 Stock Incentive Plan to be in effect upon the completion of this offering.
10.5+	2021 Employee Stock Purchase Plan and forms of agreements thereunder, to be in effect upon the completion of this offering.
10.6+	Confirmatory Employment Letter between the Registrant and Todd Nelson dated May 19, 2021.
10.7+	Confirmatory Employment Letter between the Registrant and Jennifer McNealey dated May 19, 2021.
10.8+	Confirmatory Employment Letter between the Registrant and Daniel Gibson dated May 19, 2021.
10.9+	Confirmatory Employment Letter between the Registrant and Timothy Cloutier dated May 19, 2021.
10.10+	Confirmatory Employment Letter between the Registrant and Brent Hunter dated May 19, 2021.
10.11+	Executive Incentive Compensation Plan.
10.12+	Form of Change in Control Severance Agreement.
10.13+	Outside Director Compensation Policy.
10.14	Office Lease, dated April 4, 2019, between the Registrant and BMR-Waples LP, as amended.
10.15#	Supply Agreement, dated October 26, 2015, between the Registrant and Integrated DNA Technologies, Inc., as amended.
10.16#	Loan and Security Agreement, dated March 4, 2021, between the Registrant and Silicon Valley Bank.
10.17#	Confidential Settlement Agreement between the Registrant and New England Biolabs, Inc. dated September 20, 2017.
21.1	Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm.
23.2*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
24.1	Power of Attorney (see page II-6 to this Form S-1).

* To be filed by amendment.

+ Indicates management contract or compensatory plan.

Portions of the exhibit have been omitted as the Registrant has determined that (i) the omitted information is not material; and (ii) the Registrant customarily and actually treats the omitted information as private or confidential.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on May 28, 2021.

CODEX DNA, INC.

By: /s/ Todd R. Nelson
Todd R. Nelson
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Todd R. Nelson and Jennifer I. McNealey as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities to sign any or all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents or any of them, or their, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Todd R. Nelson</u> Todd R. Nelson	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	May 28, 2021
<u>/s/ Jennifer I. McNealey</u> Jennifer I. McNealey	Chief Financial Officer <i>(Principal Financial Officer)</i>	May 28, 2021
<u>/s/ Brent M. Hunter</u> Brent M. Hunter	Senior Director, Corporate Controller <i>(Principal Accounting Officer)</i>	May 28, 2021
<u>/s/ Andrea L. Jackson</u> Andrea L. Jackson	Director	May 28, 2021
<u>/s/ William F. Snider</u> William F. Snider	Director	May 28, 2021
<u>/s/ Christine A. Tsingos</u> Christine A. Tsingos	Director	May 28, 2021
<u>/s/ Frank R. Witney</u> Frank R. Witney	Chair of the Board of Directors	May 28, 2021

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SGI-DNA, INC.
(Pursuant to Sections 242 and 245 of the
General Corporation Law of the State of Delaware)

SGI-DNA, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”),

DOES HEREBY CERTIFY:

1. That the name of this corporation is SGI-DNA, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on March 24, 2011 under the name Synthetic Genomics Solutions, Inc.

2. That the Board of Directors of the corporation duly adopted resolutions proposing to amend and restate the Amended and Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Amended and Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is SGI-DNA, Inc. (the “**Corporation**”).

SECOND: The address of the registered office of the Corporation in the State of Delaware is 251 Little Falls Drive, in the City of Wilmington, County of New Castle, 19808. The name of its registered agent at such address is Corporation Service Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 72,000,000 shares of Common Stock, \$0.0001 par value per share (“**Common Stock**”) and (ii) 45,700,067 shares of Preferred Stock, \$0.0001 par value per share (“**Preferred Stock**”).

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. **General.** The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. **Voting.** The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings). There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Amended and Restated Certificate of Incorporation (this "**Restated Certificate**")) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

15,402,237 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series A-1 Preferred Stock**", 22,797,830 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series A Preferred Stock**" and 7,500,000 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated "**Series Z Preferred Stock**", each with the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "sections" or "Sections" in this Part B of this Article Fourth refer to sections and Sections of Part B of this Article Fourth. The Series A-1 Preferred Stock and the Series A Preferred Stock are sometimes collectively referred to herein as the "**Senior Preferred Stock**."

1. **Dividends.** From and after the date of the issuance of any shares of the Preferred Stock, the holders of such Preferred Stock shall be entitled to receive dividends, out of any assets legally available therefor, at the rate of eight percent (8%) of the applicable Original Issue Price (as defined below) per annum per outstanding share of Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such series of Preferred Stock) (the "**Preferred Dividend**"). The Preferred Dividend shall be payable only when, as, and if declared by the Board of Directors of the Corporation (the "**Board of Directors**") and shall be non-cumulative. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Restated Certificate) the holders of the Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Preferred Stock in an amount at least equal to (x) the Preferred Dividend (if any) plus (y) (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (B) the number of shares of Common Stock

issuable upon conversion of a share of Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Preferred Stock determined by (A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Preferred Stock dividend. The “**Series A-1 Original Issue Price**” shall mean \$1.20177 per share, the “**Series A Original Issue Price**” shall mean \$0.9588 per share, and the “**Series Z Original Issue Price**” shall mean \$1.00 per share, each subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the applicable series of Preferred Stock. The Series A-1 Original Issue Price, Series A Original Issue Price and the Series Z Original Issue Price are sometimes individually referred to herein as an “Original Issue Price” and collectively referred to herein as the “**Original Issue Prices.**”

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock.

2.1.1 Preferential Payments to Holders of Senior Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Senior Preferred Stock then outstanding, on a pari passu basis, shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event (as defined below), the holders of shares of Senior Preferred Stock then outstanding, on a pari passu basis, shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds (as defined below), as applicable, before any payment shall be made to the holders of Series Z Preferred Stock and Common Stock by reason of their ownership thereof, with respect to each share of Senior Preferred Stock, an amount per share equal to the greater of (i) two (2) times the applicable Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Senior Preferred Stock been converted into Common Stock pursuant to Section 4 hereof immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Senior Preferred Stock the full amount to which they shall be entitled under the foregoing provisions of this Section 2.1.1, the holders of shares of Senior Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in

full. The aggregate amount which a holder of a share of Series A Preferred Stock is entitled to receive under this Section 2.1.1 is hereinafter referred to as the “**Series A Liquidation Amount.**”

2.1.2 Second Preferential Payments to Holders of Series A-1 Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation and after payment in full of the amounts set forth in Section 2.1.1 above and provided that the holders of Series A-1 Preferred Stock did not receive an amount per share as would have been payable had all shares of Series A-1 Preferred Stock been converted into Common Stock pursuant to Section 4 hereof immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event pursuant to clause (ii) of the first sentence of Section 2.1.1, the holders of shares of Series A-1 Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event, the holders of shares of Series A-1 Preferred Stock then outstanding shall be entitled to be paid out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds, as applicable, before any additional payment shall be made to the holders of Series A Preferred Stock by reason of their ownership thereof and before any payment shall be made to the holders of Series Z Preferred Stock and Common Stock by reason of their ownership thereof, with respect to each share of Series A-1 Preferred Stock, an amount per share equal to 0.45 times the Series A-1 Original Issue Price. If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A-1 Preferred Stock the full amount to which they shall be entitled under the foregoing provisions of this Section 2.1.2, the holders of shares of Series A-1 Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full. The aggregate amount which a holder of a share of Series A-1 Preferred Stock is entitled to receive under Section 2.1.1 and this Section 2.1.2 is hereinafter referred to as the “**Series A-1 Liquidation Amount.**”

2.1.3 Preferential Payments to Holders of Series Z Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation and after payment in full of the amounts set forth in Section 2.1.1 and Section 2.1.2 above, the holders of shares of Series Z Preferred Stock then outstanding shall be entitled to be paid out of the remaining assets of the Corporation available for distribution to its stockholders, and in the event of a Deemed Liquidation Event, the holders of shares of Series Z Preferred Stock then outstanding shall be entitled to be paid out of the remaining consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds, as applicable, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, with respect to each share of Series Z Preferred Stock, an amount per share equal to the greater of (i) the Series Z Original Issue Price, plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series Z Preferred Stock been converted into Common Stock pursuant to Section 4 hereof immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant

to this sentence is hereinafter referred to as the “**Series Z Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the remaining assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series Z Preferred Stock the full amount to which they shall be entitled under the foregoing provisions of this Section 2.1.3, the holders of shares of Series Z Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full. The Series A-1 Liquidation Amount, the Series A Liquidation Amount and the Series Z Liquidation Amount are sometimes individually referred to herein as an “**Liquidation Amount**” and collectively referred to herein as the “**Liquidation Amounts**.”

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment in full of all Liquidation Amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, the consideration not payable to the holders of shares of Preferred pursuant to Section 2.1 or the remaining Available Proceeds, as the case may be, shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless the holders of a majority of the outstanding shares of Preferred Stock (the “**Requisite Holders**”), voting together as a single class on an as converted basis, elect otherwise by written notice sent to the Corporation at least five (5) business days prior to the effective date of any such event:

(a) a merger or consolidation in which

(i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation, except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) (1) the sale, exclusive lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the

Corporation and its subsidiaries taken as a whole, or (2) the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or a series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation in such Deemed Liquidation Event shall be paid to the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.3.1(a)(ii) or 2.3.1(b) if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within thirty (30) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred Stock no later than the thirtieth (30th) day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause; (ii) to require the redemption of such shares of Preferred Stock, and (iii) unless the Requisite Holders request otherwise in a written instrument delivered to the Corporation, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the “**Available Proceeds**”), on the ninetieth (90th) day after such Deemed Liquidation Event, to redeem all outstanding shares of Series A-1 Preferred Stock at a price per share equal to the Series A-1 Liquidation Amount, to redeem all outstanding shares of Series A Preferred Stock at a price per share equal to the Series A Liquidation Amount and to redeem all outstanding shares of Series Z Preferred Stock at a price per share equal to the Series Z Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Senior Preferred Stock and Series Z Preferred Stock, the Corporation shall redeem a pro rata portion of each holder’s shares of Senior Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Following the redemption of all shares of Senior Preferred Stock pursuant to the preceding sentence, the Corporation shall redeem a pro rata portion of each holder’s shares of Series Z Preferred Stock to the fullest extent of the remaining Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining

shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Section 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

(c) Surrender of Certificates; Payment. On or before the redemption effected pursuant to Section 2.3.2(b), each holder of shares of Preferred Stock to be redeemed on such date, unless such holder has previously exercised his, her or its right to convert such shares as provided in Section 4, shall surrender the certificate or certificates representing such shares (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation, as requested in writing by the Corporation, and thereupon the portion of such Available Proceeds payable with respect to such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities to be paid or distributed to such holders pursuant to such Deemed Liquidation Event. The value of such property, rights or securities shall be determined in good faith by the Board of Directors.

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Section 2.3.1(a)(i) if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the “**Additional Consideration**”), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction. For the purposes of this Section 2.3.4, consideration placed into escrow or retained as a holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares

of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of this Restated Certificate, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, exclusively and together as a single class, shall be entitled to elect one (1) director of the Corporation (the “**Series A Director**”). The holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect one (1) director of the Corporation (the “**Common Director**”). Any director elected as provided in the preceding sentences may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series A Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class (and with respect to the Series A Preferred Stock, on an as converted basis), pursuant to this Section 3.2, then any directorship not so filled shall remain vacant until such time as the requisite holders of the Series A Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class (and with respect to the Series A Preferred Stock, on an as converted basis). The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Preferred Stock), exclusively and voting together as a single class (and with respect to the Preferred Stock, on an as converted basis), shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Section 3.2.

Any director may be removed during his or her term of office, either with or without cause, by, and only by, the affirmative vote of the holders of the shares of the class or series of stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders, and any vacancy thereby created may be filled by the holders of that class or series of stock represented at the meeting or pursuant to written consent.

3.3 Preferred Stock Protective Provisions. As long as 7,574,458 shares of Senior Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Senior Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment,

merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the Requisite Holders, given in writing or by vote at a meeting, consenting or voting (as the case may be) together as a single class on an as converted basis, and any such act or transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect.

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, alter or repeal any provision of this Restated Certificate or Bylaws of the Corporation (the “**Bylaws**”);

3.3.3 alter, change or waive the rights, preferences or privileges of the Preferred Stock;

3.3.4 create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Preferred Stock in all respects, including with respect to the distribution of assets upon liquidation the payment of dividends and redemption rights;

3.3.5 increase or decrease the authorized number of shares of Preferred Stock or Common Stock;

3.3.6 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, and (ii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at a purchase price no greater than the original purchase price thereof;

3.3.7 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue, any shares of any class or series of capital stock, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary;

3.3.8 increase or decrease the authorized number of directors constituting the Board of Directors;

3.3.9 increase the number of shares of Common Stock reserved under the Corporation’s existing stock option plan or any other employee stock option plan, or create any new stock plan or stock option plan;

3.3.10 effect any transactions with directors, stockholders, senior management, or known affiliates or related parties (other than arm's length agreements on reasonable terms approved by the Board of Directors, including the Series A Director); or

3.3.11 effect any material change in the activity or industry of the business of the Corporation.

4. Optional Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "**Conversion Rights**"):

4.1 Right to Convert. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the applicable Original Issue Price by the applicable Conversion Price (as defined below) for such series of Preferred Stock in effect at the time of conversion. The "**Conversion Price**" for each series of Preferred Stock in effect at the of conversion shall initially mean the applicable Original Issue Price for such series of Preferred Stock. Such initial Conversion Price, and the rate at which shares of each series of Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or

accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the “**Conversion Time**”), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates (or notice of issuance if such shares are uncertificated) for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate (if any) that were not converted into Common Stock, (ii) pay in cash such amount as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Restated Certificate. Before taking any action which would cause an adjustment reducing the Conversion Price of a series of Preferred Stock below the then par value of the shares of Common Stock issuable upon conversion of the Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Conversion Price of the applicable series of Preferred Stock shall be made for

any declared but unpaid dividends on the Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4. Adjustments to Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

Convertible Securities.

(a) **“Option”** shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or

(b) **“Original Issue Date”** shall mean the date on which the first share of Series A-1 Preferred Stock was issued.

(c) **“Convertible Securities”** shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) **“Additional Shares of Common Stock”** shall mean all shares of Common Stock issued (or, pursuant to Section 4.4.3 below, deemed to be issued) by the Corporation after the Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, **“Exempted Securities”**):

(i) shares of Series A-1 Preferred Stock sold and issued pursuant to a Series A-1 Preferred Stock Purchase Agreement, dated on or about the date hereof;

(ii) shares of Common Stock issued upon conversion of the Preferred Stock;

(iii) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

(iv) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section 4.5, 4.6, 4.7 or 4.8;

(v) shares of Common Stock or Options issued to employees, officers or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors;

(vi) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(vii) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors (including leasing companies), or to other providers of goods and services, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors;

(viii) shares of Common Stock, Options or Convertible Securities issued to suppliers or third-party service providers as consideration for the provision of goods or services pursuant to transactions approved by the Board of Directors, including the approval of the Series A Director;

(ix) shares of Common Stock, Options or Convertible Securities issued as acquisition consideration pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided that such issuances are approved by the Board of Directors, including the approval of the Series A Director;

(x) shares of Common Stock, Options or Convertible Securities issued as consideration for sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors, including the approval of the Series A Director;

(xi) shares of Common Stock issued in a registered public offering under the Securities Act of 1933, as amended (the “**Securities Act**”), pursuant to which all outstanding Preferred Stock are automatically converted into Common Stock.

4.4.2 No Adjustment of Conversion Price. No adjustment in any Conversion Price of the Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the Requisite Holders agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Conversion Price of a series of Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of a majority of the then outstanding shares of such series of Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (i) the Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4 (either because the consideration per share (determined pursuant to Section 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than the Conversion Price then in effect, or because such Option or Convertible Security was issued before the Original Issue Date), are revised after the Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1)

any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the Conversion Price pursuant to the terms of Section 4.4.4, the Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the Conversion Price provided for in this Section 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Section 4.4.3). If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the Conversion Price that would result under the terms of this Section 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4.3), without consideration or for a consideration per share less than the Conversion Price in effect immediately prior to such issuance or deemed issuance, then the Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

- (a) “CP₂” shall mean the applicable Conversion Price in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock;
- (b) “CP₁” shall mean the applicable Conversion Price in effect immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock;
- (c) “A” shall mean the number of shares of Common Stock outstanding immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issuance or deemed issuance or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (d) “B” shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued or deemed issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁; and
- (e) “C” shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Section 4.4, the consideration received by the Corporation for the issuance or deemed issuance of any Additional Shares of Common Stock shall be computed as follows:

- (a) Cash and Property: Such consideration shall:
 - (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
 - (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and
 - (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors.
- (b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the Conversion Price of a series of Preferred Stock pursuant to the terms of Section 4.4.4, and such issuance dates occur within a period of no more than ninety (90) days from the first such issuance to the final such issuance, then, upon the final such issuance, the Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Original Issue Date effect a subdivision of the outstanding Common Stock, the Conversion Price for such series of Preferred Stock in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this Section shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have

been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect by a fraction:

- (1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and
- (2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price shall be adjusted pursuant to this Section as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Sections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions in this Section 4 with respect to

the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than twenty (20) days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than twenty (20) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice

(the “**Notice Period**”); provided, however, the Notice Period may be waived or shortened by the affirmative written consent or vote of the Requisite Holders.

5. **Mandatory Conversion.**

5.1 **Trigger Events.** Upon either (a) the closing of the sale of shares of Common Stock to the public at a price of at least \$2.40 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act, resulting in at least \$40,000,000 of gross proceeds to the Corporation or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the Requisite Holders (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the “**Mandatory Conversion Time**”), then (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective conversion rate as calculated pursuant to Section 2.FourthB.4.3.1 and (ii) such shares may not be reissued by the Corporation.

5.2 **Procedural Requirements.** All holders of record of shares of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such

appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. **Redemption.** The shares of Preferred Stock shall not be redeemable at the option of the holders thereof, except as may be otherwise provided herein.

7. **Redeemed or Otherwise Acquired Shares.** Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

8. **Waiver.** Unless otherwise specific herein, any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the Requisite Holders. Unless otherwise specific herein, any of the rights, powers, preferences and other terms of any series of Preferred Stock set forth herein may be waived on behalf of all holders of such series of Preferred Stock by the affirmative written consent or vote of the holders of a majority of the outstanding shares of such series of Preferred Stock.

9. **Notices.** Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by this Restated Certificate or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws.

SIXTH: Subject to any additional vote required by this Restated Certificate, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation. Each director shall be entitled to one vote on each matter presented to the Board of Directors.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize

corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not (a) adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification or (b) increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, the persons referred to in clauses (i) and (ii) are “**Covered Persons**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of the Corporation while such Covered Person is performing services in such capacity. Any repeal or modification of this Article Eleventh will only be prospective and will not affect the rights under this Article Eleventh in effect at the time of the occurrence of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in this Restated Certificate, the affirmative vote of the Requisite Holders, will be required to amend or repeal, or to adopt any provisions inconsistent with this Article Eleventh.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the

Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

THIRTEENTH: For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under this Restated Certificate from employees, officers, directors or consultants of the Corporation in connection with a termination of employment or services pursuant to agreements or arrangements approved by the Board of Directors (in addition to any other consent required under this Restated Certificate), such repurchase may be made without regard to any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined therein) shall be deemed to be zero (0).

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Restated Certificate, which restates and integrates and further amends the provisions of this Corporation's Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 19th day of December, 2019.

By: /s/ Todd Nelson _____
Name: Todd Nelson
Title: Chief Executive Officer

**CERTIFICATE OF AMENDMENT
TO THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
SGI-DNA, INC.**

The undersigned, for purposes of amending the Amended and Restated Certificate of Incorporation (the "**Certificate**") of SGI-DNA, Inc. (the "**Corporation**"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "**DGCL**"), does hereby certify as follows:

1. The date on which the original Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware was March 24, 2011, under the name Synthetic Genomics Solutions, Inc.

2. The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the DGCL, adopted resolutions to amend the Certificate, in the section noted below, to read in its entirety as follows:

"FIRST: The name of the corporation is Codex DNA, Inc. (the "**Corporation**")."

3. This amendment to the Certificate shall be effective on and as of the date of filing of this Certificate of Amendment to the Amended and Restated Certificate of Incorporation (the "**Certificate of Amendment**") with the Secretary of State of the State of Delaware.

* * * * *

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its duly authorized officer this 31st day of March, 2020.

SGI-DNA, INC.

By: /s/ Todd Nelson
Name: Todd Nelson
Title: Chief Executive Officer

**CERTIFICATE OF AMENDMENT
TO THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CODEX DNA INC.**

The undersigned, for purposes of amending the Amended and Restated Certificate of Incorporation (as amended, the “**Certificate**”) of Codex DNA, Inc. (the “**Corporation**”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DCGL**”), does hereby certify as follows:

1. The date on which the original Certificate of Incorporation of the Corporation was filed with the Secretary of State of Delaware was March 24, 2011, under the name Synthetic Genomics Solutions, Inc,
2. The Amended and Restated Certificate of Incorporation of the Corporation, as amended, is hereby amended as follows:

Article IV, Section B, Subsection 3.3 of the Certificate is amended and restated in its entirety to read as follows:

"3.3 Preferred Stock Protective Provisions. As long as 7,574,458 shares of Senior Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Senior Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or affirmative vote of the Requisite Holders, given in writing or by vote at a meeting, consenting or voting (as the case may be) together as a single class on an as converted basis, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.3.1 liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

3.3.2 amend, alter or repeal any provision of this Restated Certificate or Bylaws of the Corporation (the “**Bylaws**”);

3.3.3 alter, change or waive the rights, preferences or privileges of the Preferred Stock;

3.3.4 create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Preferred Stock in all respects, including with respect to the distribution of assets upon liquidation the payment of dividends and redemption rights;

3.3.5 increase or decrease the authorized number of shares of Preferred Stock or Common Stock;

3.3.6 create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue, any shares of any class or series of capital stock, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

3.3.7 increase or decrease the authorized number of directors constituting the Board of Directors.”

Article IV, Section B, Subsection 3 of the Certificate is amended by the addition of new Subsection 3.4 to read in its entirety as follows:

"3.4 Preferred Stock Protective Provisions. As long as 7,574,458 shares of Senior Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Senior Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Restated Certificate) the written consent or of vote of the holders of at least thirty-five percent (35%) of the outstanding shares of Preferred Stock, given in writing or by vote at a meeting consenting or voting (as the case may be) together as a single class on an as converted basis, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

3.4.1 purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock, and (ii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at a purchase price no greater than the original purchase price thereof;

3.4.2 increase the number of shares of Common Stock reserved under the Corporation's existing stock option plan or any other employee stock option plan, or create any new stock plan or stock option plan;

3.4.3 effect any transactions with directors, stockholders, senior management, or known affiliates or related parties (other than arm's length

agreements on reasonable terms approved by the Board of Directors, including the Series A Director); or

3.4.4 effect any material change in the activity or industry of the business of the Corporation.”

3. This Certificate of Amendment to the Amended and Restated Certificate of Incorporation of the Corporation herein certified has been duly adopted by the directors and stockholders of the Corporation in accordance with the provisions of Sections 141, 242 and 228 of the DGCL.

4. Pursuant to Section 228(a) of the DGCL, the holders of outstanding shares of the Corporation having not less than the minimum number of votes that would be necessary to authorize or take such actions at a meeting at which all shares entitled to vote thereon were present and voted consented to the adoption of the aforesaid amendment without a meeting, without a vote and without prior notice and that written notice of the taking of such actions is being given in accordance with Section 228(e) of the DGCL.

* * * * *

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its duly authorized officer this 20th day of April, 2020.

CODEX DNA, INC.

By: /s/ Todd Nelson
Name: Todd Nelson
Title: Chief Executive Officer

CERTIFICATE OF AMENDMENT
TO THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
CODEX DNA, INC.

Codex DNA, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**Corporation**”), hereby certifies as follows:

1. The name of the Corporation is Codex DNA, Inc. The Corporation’s original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 24, 2011, under the name Synthetic Genomics Solutions, Inc.

2. Pursuant to Section 242 of the DGCL, this Certificate of Amendment to the Amended and Restated Certificate of Incorporation further amends the provisions of the Corporation’s Amended and Restated Certificate of Incorporation.

3. The first paragraph of Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

“The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 72,000,000 shares of Common Stock, \$0.0001 par value per share (“**Common Stock**”) and (ii) 45,949,693 shares of Preferred Stock, \$0.0001 par value per share (“**Preferred Stock**”).”

4. The first sentence of Article FOURTH, Part B of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

“15,651,863 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated “**Series A-1 Preferred Stock**”, 22,797,830 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series A Preferred Stock**” and 7,500,000 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series Z Preferred Stock**”, each with the following rights, preferences powers, privileges and restrictions, qualifications and limitations.”

5. This Certificate of Amendment to the Corporation’s Amended and Restated Certificate of Incorporation has been duly authorized and adopted by the Corporation’s Board of Directors in accordance with the provisions of Section 242 of the Delaware General Corporation Law, and has been duly approved by the written consent of the stockholders of the Corporation in accordance with Section 228 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Codex DNA, Inc. has caused this Certificate of Amendment to be signed by Todd Nelson, a duly authorized officer of the Corporation, on March 3, 2021.

/s/ Todd R. Nelson

Todd R. Nelson

Chief Executive Officer

CERTIFICATE OF AMENDMENT
TO THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
CODEX DNA, INC.

Codex DNA, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**Corporation**”), hereby certifies as follows:

1. The name of the Corporation is Codex DNA, Inc. The Corporation’s original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 24, 2011, under the name Synthetic Genomics Solutions, Inc.

2. Pursuant to Section 242 of the DGCL, this Certificate of Amendment to the Amended and Restated Certificate of Incorporation further amends the provisions of the Corporation’s Amended and Restated Certificate of Incorporation.

3. The first paragraph of Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

“The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 72,000,000 shares of Common Stock, \$0.0001 par value per share (“**Common Stock**”) and (ii) 45,949,699 shares of Preferred Stock, \$0.0001 par value per share (“**Preferred Stock**”).”

4. The first sentence of Article FOURTH, Part B of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

“15,651,869 shares of the authorized and unissued Preferred Stock of the Corporation are hereby designated “**Series A-1 Preferred Stock**”, 22,797,830 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series A Preferred Stock**” and 7,500,000 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series Z Preferred Stock**”, each with the following rights, preferences powers, privileges and restrictions, qualifications and limitations.”

5. This Certificate of Amendment to the Corporation’s Amended and Restated Certificate of Incorporation has been duly authorized and adopted by the Corporation’s Board of Directors in accordance with the provisions of Section 242 of the Delaware General Corporation Law, and has been duly approved by the written consent of the stockholders of the Corporation in accordance with Section 228 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Codex DNA, Inc. has caused this Certificate of Amendment to be signed by Todd R. Nelson, a duly authorized officer of the Corporation, on March 29, 2021.

/s/ Todd R. Nelson

Todd R. Nelson

Chief Executive Officer

CERTIFICATE OF AMENDMENT
TO THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
CODEX DNA, INC.

Codex DNA, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**Corporation**”), hereby certifies as follows:

1. The name of the Corporation is Codex DNA, Inc. The Corporation’s original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on March 24, 2011, under the name Synthetic Genomics Solutions, Inc.

2. Pursuant to Section 242 of the DGCL, this Certificate of Amendment to the Amended and Restated Certificate of Incorporation further amends the provisions of the Corporation’s Amended and Restated Certificate of Incorporation.

3. The first paragraph of Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

“The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 75,000,000 shares of Common Stock, \$0.0001 par value per share (“**Common Stock**”) and (ii) 45,949,699 shares of Preferred Stock, \$0.0001 par value per share (“**Preferred Stock**”).”

4. This Certificate of Amendment to the Corporation’s Amended and Restated Certificate of Incorporation has been duly authorized and adopted by the Corporation’s Board of Directors in accordance with the provisions of Section 242 of the Delaware General Corporation Law, and has been duly approved by the written consent of the stockholders of the Corporation in accordance with Section 228 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, Codex DNA, Inc. has caused this Certificate of Amendment to be signed by Todd R. Nelson, a duly authorized officer of the Corporation, on April 26, 2021.

/s/ Todd R. Nelson

Todd R. Nelson

Chief Executive Officer

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF**CODEX DNA, INC.****a Delaware corporation**

Codex DNA, Inc., a corporation organized and existing under the laws of the State of Delaware (the “**Company**”), does hereby certify as follows:

A. The Company was originally incorporated under the name of Synthetic Genomics Solutions, Inc., and the original Certificate of Incorporation of the Company was filed with the Secretary of State of the State of Delaware on March 24, 2011.

B. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware (the “**DGCL**”) by the Board of Directors of the Company (the “**Board of Directors**”) and has been duly approved by the written consent of the stockholders of the Company in accordance with Section 228 of the DGCL.

C. The text of the Amended and Restated Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:

ARTICLE I

The name of the Company is Codex DNA, Inc.

ARTICLE II

The address of the Company’s registered office in the State of Delaware is 251 Little Falls Drive, in the City of Wilmington, County of New Castle, Delaware 19808. The name of its registered agent at such address is Corporation Service Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted by the Company is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

Section 1. This Company is authorized to issue two classes of stock, to be designated, respectively, Common Stock and Preferred Stock. The total number of shares of stock that the Company shall have authority to issue is 105,000,000 shares, of which 100,000,000 shares are Common Stock, \$0.0001 par value per share, and 5,000,000 shares are Preferred Stock, \$0.0001 par value per share.

Section 2. Each share of Common Stock outstanding as of the applicable record date shall entitle the holder thereof to one (1) vote on any matter submitted to a vote at a meeting of stockholders.

Section 3. The Preferred Stock may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized, subject to limitations prescribed by law, to fix by resolution or resolutions the

designations, powers, preferences and rights, and the qualifications, limitations or restrictions thereof, of any series of Preferred Stock, including, without limitation, authority to fix by resolution or resolutions the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of any such series, and the number of shares constituting any such series and the designation thereof, or any of the foregoing. The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in this Amended and Restated Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. Except as may be otherwise specified by the terms of any series of Preferred Stock, if the number of shares of any series of Preferred Stock is so decreased, then the Company shall take all such steps as are necessary to cause the shares constituting such decrease to resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

Section 4. Except as otherwise required by law or provided in this Amended and Restated Certificate of Incorporation, holders of Common Stock shall not be entitled to vote on any amendment to this Amended and Restated Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon by law or pursuant to this Amended and Restated Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock).

Section 5. The number of authorized shares of Preferred Stock or Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of all the then-outstanding shares of capital stock of the Company entitled to vote thereon, without a separate vote of the holders of the class or classes the number of authorized shares of which are being increased or decreased, unless a vote of any holders of one or more series of Preferred Stock is required pursuant to the terms of any certificate of designation relating to any series of Preferred Stock, irrespective of the provisions of Section 242(b) (2) of the DGCL.

ARTICLE V

Section a. Subject to the rights of holders of Preferred Stock, the number of directors that constitutes the entire Board of Directors of the Company shall be fixed only by resolution of the Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board. For the purposes of this Amended and Restated Certificate of Incorporation, the term “**Whole Board**” shall mean the total number of authorized directorships whether or not there exist any vacancies or other unfilled seats in previously authorized directorships. At each annual meeting of stockholders, directors of the Company shall be elected to hold office until the expiration of the term for which they are elected and until their successors have been duly elected and qualified or until their earlier resignation or removal; except that if any such meeting shall not be so held, such election shall take place at a stockholders’ meeting called and held in accordance with the DGCL.

Section b. From and after the effectiveness of this Amended and Restated Certificate of Incorporation, the directors of the Company (other than any who may be elected by holders of Preferred Stock under specified circumstances) shall be divided into three classes as nearly equal in size as is practicable, hereby designated Class I, Class II and Class III. Directors already in office shall be assigned

to each class at the time such classification becomes effective in accordance with a resolution or resolutions adopted by the Board of Directors. At the first annual meeting of stockholders following the date hereof, the term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the date hereof, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the date hereof, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting. If the number of directors is changed, any newly created directorships or decrease in directorships shall be so apportioned hereafter among the classes as to make all classes as nearly equal in number as is practicable, *provided that* no decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

ARTICLE VI

Section 1. From and after the effectiveness of this Amended and Restated Certificate of Incorporation, only for so long as the Board of Directors is classified and subject to the rights of holders of Preferred Stock, any director or the entire Board of Directors may be removed from office at any time, but only for cause, and only by the affirmative vote of the holders of at least a majority of the voting power of the issued and outstanding capital stock of the Company entitled to vote in the election of directors.

Section 2. Except as otherwise provided for or fixed by or pursuant to the provisions of ARTICLE IV hereof in relation to the rights of the holders of Preferred Stock to elect directors under specified circumstances or except as otherwise provided by resolution of a majority of the Whole Board, newly created directorships resulting from any increase in the number of directors, created in accordance with the Bylaws of the Company, and any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other cause shall be filled only by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director, and not by the stockholders. A person so elected by the Board of Directors to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen until his or her successor shall have been duly elected and qualified, or until such director's earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

ARTICLE VII

Section 1. The Company is to have perpetual existence.

Section 2. The business and affairs of the Company shall be managed by or under the direction of the Board of Directors. In addition to the powers and authority expressly conferred upon them by statute or by this Amended and Restated Certificate of Incorporation or the Bylaws of the Company, the directors are hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Company.

Section 3. In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to adopt, alter, amend or repeal the Bylaws of the Company. The affirmative vote of at least a majority of the Whole Board shall be required in order for the Board of

Directors to adopt, amend, alter or repeal the Company's Bylaws. The Company's Bylaws may also be adopted, amended, altered or repealed by the stockholders of the Company. Notwithstanding the above or any other provision of this Amended and Restated Certificate of Incorporation, the Bylaws of the Company may not be amended, altered or repealed except in accordance with the provisions of the Bylaws relating to amendments to the Bylaws. No Bylaw hereafter legally adopted, amended, altered or repealed shall invalidate any prior act of the directors or officers of the Company that would have been valid if such Bylaw had not been adopted, amended, altered or repealed.

Section 4. The election of directors need not be by written ballot unless the Bylaws of the Company shall so provide.

Section 5. No stockholder will be permitted to cumulate votes at any election of directors.

ARTICLE VIII

Section 1. From and after the closing of a firm commitment underwritten initial public offering of securities of the Company pursuant to an effective registration statement filed under the Securities Act of 1933, as amended, and subject to the rights of holders of Preferred Stock, any action required or permitted to be taken by the stockholders of the Company must be effected at a duly called annual or special meeting of stockholders of the Company and may not be effected by any consent in writing by such stockholders.

Section 2. Subject to the terms of any series of Preferred Stock, special meetings of stockholders of the Company may be called only by the Chairperson of the Board of Directors, the Chief Executive Officer, the President or the Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board, but a special meeting may not be called by any other person or persons and any power of stockholders to call a special meeting of stockholders is specifically denied. Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting.

Section 3. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Company shall be given in the manner and to the extent provided in the Bylaws of the Company.

ARTICLE IX

Section 1. To the fullest extent permitted by the DGCL as the same exists or as may hereafter be amended from time to time, a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Section 2. Subject to any provisions in the Bylaws of the Company related to indemnification of directors of the Company, the Company shall indemnify, to the fullest extent permitted by applicable law, any director of the Company who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**") by reason of the fact that he or she is or was a director of the Company or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to

employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding. The Company shall be required to indemnify a person in connection with a Proceeding (or part thereof) initiated by such person only if the Proceeding (or part thereof) was authorized by the Board of Directors.

Section 3. The Company shall have the power to indemnify, to the extent permitted by applicable law, any officer, employee or agent of the Company who was or is a party or is threatened to be made a party to any Proceeding by reason of the fact that he or she is or was a director, officer, employee or agent of the Company or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding.

Section 4. Neither any amendment nor repeal of any Section of this ARTICLE IX, nor the adoption of any provision of this Amended and Restated Certificate of Incorporation or the Bylaws of the Company inconsistent with this ARTICLE IX, shall eliminate or reduce the effect of this ARTICLE IX in respect of any matter occurring, or any Proceeding accruing or arising or that, but for this ARTICLE IX, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

ARTICLE X

Meetings of stockholders may be held within or outside of the State of Delaware, as the Bylaws may provide. The books of the Company may be kept (subject to any provision of applicable law) outside of the State of Delaware at such place or places or in such manner or manners as may be designated from time to time by the Board of Directors or in the Bylaws of the Company.

ARTICLE XI

The Company reserves the right to amend or repeal any provision contained in this Amended and Restated Certificate of Incorporation in the manner prescribed by the laws of the State of Delaware and all rights conferred upon stockholders are granted subject to this reservation; *provided, however*, that notwithstanding any other provision of this Amended and Restated Certificate of Incorporation or any provision of law that might otherwise permit a lesser vote, the Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board and the affirmative vote of 66 2/3% of the voting power of the then outstanding voting securities of the Company, voting together as a single class, shall be required for the amendment, repeal or modification of the provisions of Section 3 of ARTICLE IV, Section 2 of ARTICLE V, Section 1 of ARTICLE VI, Section 2 of ARTICLE VI, Section 5 of ARTICLE VII, Section 1 of ARTICLE VIII, Section 2 of ARTICLE VIII, Section 3 of ARTICLE VIII or this ARTICLE XI of this Amended and Restated Certificate of Incorporation.

IN WITNESS WHEREOF, Codex DNA, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by the Chief Executive Officer of the Company on this day of 20 .

Todd R. Nelson
Chief Executive Officer

**AMENDED AND RESTATED BYLAWS OF
SGI-DNA, INC.
(A DELAWARE CORPORATION)**

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**AMENDED AND RESTATED BYLAWS OF
SGI-DNA, INC.**

**ARTICLE I
OFFICES**

1.1 **Registered Office.** The registered office shall be in the City of Dover, County of Kent, State of Delaware.

1.2 **Offices.** The corporation may also have offices at such other places both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

**ARTICLE II
MEETINGS OF STOCKHOLDERS**

2.1 **Location.** All meetings of the stockholders for the election of directors shall be held in San Diego, California, at such place as may be fixed from time to time by the Board of Directors, or at such other place either within or without the State of Delaware as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting; provided, however, that the Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211 of the Delaware General Corporations Law ("DGCL"). Meetings of stockholders for any other purpose may be held at such time and place, if any, within or without the State of Delaware, as shall be stated in the notice of the meeting or in a duly executed waiver of notice thereof, or a waiver by electronic transmission by the person entitled to notice.

2.2 **Timing.** Annual meetings of stockholders, commencing with the year following the adoption of these bylaws, shall be held at such date and time as shall be designated from time to time by the Board of Directors and stated in the notice of the meeting, at which they shall elect by a plurality vote a Board of Directors, and transact such other business as may properly be brought before the meeting.

2.3 **Notice of Meeting.** Written notice of any stockholder meeting stating the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, shall be given to each stockholder entitled to vote at such meeting not fewer than ten (10) nor more than sixty (60) days before the date of the meeting.

2.4 **Stockholders' Records.** The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address (but not the electronic address or other electronic contact information) of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is

provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.5 **Special Meetings.** Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the certificate of incorporation, may be called by the Chief Executive Officer and shall be called by the Chief Executive Officer or secretary at the request in writing of a majority of the Board of Directors, or at the request in writing of stockholders owning at least fifty percent (50%) in amount of the entire capital stock of the corporation issued and outstanding and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting.

2.6 **Notice of Meeting.** Written notice of a special meeting stating the place, date and hour of the meeting and the purpose or purposes for which the meeting is called, shall be given not fewer than ten (10) nor more than sixty (60) days before the date of the meeting, to each stockholder entitled to vote at such meeting. The means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting shall also be provided in the notice.

2.7 **Business Transacted at Special Meeting.** Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

2.8 **Quorum; Meeting Adjournment; Presence by Remote Means.**

(a) *Quorum; Meeting Adjournment.* The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by statute or by the certificate of incorporation. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present or represented. At such adjourned meeting at which a quorum shall be present or represented, any business may be transacted that might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

(b) *Presence by Remote Means.* If authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of

Directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication:

(1) participate in a meeting of stockholders; and

(2) be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the corporation.

2.9 Voting Thresholds. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person or represented by proxy shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the certificate of incorporation, a different vote is required, in which case such express provision shall govern and control the decision of such question.

2.10 Number of Votes Per Share. Unless otherwise provided in the certificate of incorporation, each stockholder shall at every meeting of the stockholders be entitled to one vote by such stockholder or by proxy for each share of the capital stock having voting power held by such stockholder, but no proxy shall be voted on after three years from its date, unless the proxy provides for a longer period.

2.11 Action by Written Consent of Stockholders; Electronic Consent; Notice of Action.

(a) *Action by Written Consent of Stockholders.* Unless otherwise provided by the certificate of incorporation, any action required or permitted to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote, if a consent in writing setting forth the action so taken, is signed in a manner permitted by law by the holders of outstanding stock having not less than the number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Written stockholder consents shall bear the date of signature of each stockholder who signs the consent in the manner permitted by law and shall be delivered to the corporation as provided in subsection (b) below. No written consent shall be effective to take the action set forth therein unless, within sixty (60) days of the earliest dated consent delivered to the corporation in the manner provided above, written consents signed by a sufficient number of stockholders to take the action set forth therein are delivered to the corporation in the manner provided above.

(b) *Electronic Consent.* A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (1) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder and (2) the date on which such stockholder or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form is delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the Board of Directors of the corporation.

(c) *Notice of Action.* Prompt notice of any action taken pursuant to this Section 2.11 shall be provided to the stockholders in accordance with Section 228(e) of the DGCL.

ARTICLE III DIRECTORS

3.1 **Authorized Directors.** The number of directors that shall constitute the whole Board of Directors shall be determined by resolution of the Board of Directors or by the stockholders at the annual meeting of the stockholders, except as provided in Section 3.2 of this Article, and each director elected shall hold office until his or her successor is elected and qualified. Directors need not be stockholders.

3.2 **Vacancies.** Unless otherwise provided in the corporation's certificate of incorporation, as it may be amended, vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next annual election and until their successors are duly elected and shall qualify, unless sooner displaced. If there are no directors in office, then an election of directors may be held in the manner provided by statute. If, at the time of filling any vacancy or any newly created directorship, the directors then in office shall constitute less than a majority of the whole Board of Directors (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten

percent (10%) of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.

3.3 **Board Authority.** The business of the corporation shall be managed by or under the direction of its Board of Directors, which may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by the certificate of incorporation or by these bylaws directed or required to be exercised or done by the stockholders.

3.4 **Location of Meetings.** The Board of Directors of the corporation may hold meetings, both regular and special, either within or without the State of Delaware.

3.5 **First Meeting.** The first meeting of each newly elected Board of Directors shall be held at such time and place as shall be fixed by the vote of the stockholders at the annual meeting and no notice of such meeting shall be necessary to the newly elected directors in order to legally constitute the meeting, provided a quorum shall be present. In the event of the failure of the stockholders to fix the time or place of such first meeting of the newly elected Board of Directors, or in the event such meeting is not held at the time and place so fixed by the stockholders, the meeting may be held at such time and place as shall be specified in a notice given as hereinafter provided for special meetings of the Board of Directors, or as shall be specified in a written waiver signed by all of the directors.

3.6 **Regular Meetings.** Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the Board of Directors.

3.7 **Special Meetings.** Special meetings of the Board of Directors may be called by the Chief Executive Officer upon notice to each director; special meetings shall be called by the Chief Executive Officer or secretary in like manner and on like notice on the written request of two (2) directors unless the Board of Directors consists of only one director, in which case special meetings shall be called by the Chief Executive Officer or secretary in like manner and on like notice on the written request of the sole director. Notice of any special meeting shall be given to each director at his or her business or residence in writing, or by telegram, facsimile transmission, telephone communication or electronic transmission (provided, with respect to electronic transmission, that the director has consented to receive the form of transmission at the address to which it is directed). If mailed, such notice shall be deemed adequately delivered when deposited in the United States mails so addressed, with postage thereon prepaid, at least five (5) days before such meeting. If by telegram, such notice shall be deemed adequately delivered when the telegram is delivered to the telegraph company at least twenty-four (24) hours before such meeting. If by facsimile transmission or other electronic transmission, such notice shall be transmitted at least twenty-four (24) hours before such meeting. If by telephone, the notice shall be given at least twelve (12) hours prior to the time set for the meeting. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board of Directors need be specified in the notice of such meeting, except for amendments to these bylaws as provided under Section 8.1 of Article VIII hereof. A meeting may be held at any time without notice if all the directors are present (except as otherwise

provided by law) or if those not present waive notice of the meeting in writing, either before or after such meeting.

3.8 **Quorum.** At all meetings of the Board of Directors, the greater of (a) a majority of the directors at any time in office, and (b) one-third of the number of directors fixed by the Board of Directors or by the stockholders pursuant to Section 3.1 of Article III hereof shall constitute a quorum for the transaction of business and any act of a majority of the directors present at any meeting at which there is a quorum shall be an act of the Board of Directors, except as may be otherwise specifically provided by statute or by the certificate of incorporation. If a quorum is not present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

3.9 **Action Without a Meeting.** Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing, writings, electronic transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee.

3.10 **Telephonic Meetings.** Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the Board of Directors or any committee designated by the Board of Directors may participate in a meeting of the Board of Directors or any committee, by means of conference telephone or other means of communication by which all persons participating in the meeting can hear each other, and such participation shall constitute presence in person at the meeting.

3.11 **Committees.** The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee.

In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it, but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval or (ii) adopting, amending or repealing any provision of these bylaws.

3.12 **Minutes of Meetings.** Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

3.13 **Compensation of Directors.** Unless otherwise restricted by the certificate of incorporation or these bylaws, the Board of Directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for attending committee meetings.

3.14 **Removal of Directors.** Unless otherwise provided by the certificate of incorporation or these bylaws, any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of shares entitled to vote at an election of directors.

ARTICLE IV NOTICES

4.1 **Notice.** Unless otherwise provided in these bylaws, whenever, under the provisions of the statutes or of the certificate of incorporation or of these bylaws, notice is required to be given to any director or stockholder, it shall not be construed to mean personal notice, but such notice may be given in writing, by mail, addressed to such director or stockholder, at his or her address as it appears on the records of the corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Notice to directors may also be given by telegram.

4.2 **Waiver of Notice.** Whenever any notice is required to be given under the provisions of the statutes or of the certificate of incorporation or of these bylaws, a waiver thereof in writing, signed by the person or persons entitled to said notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

4.3 **Electronic Notice.**

(a) *Electronic Transmission.* Without limiting the manner by which notice otherwise may be given effectively to stockholders and directors, any notice to stockholders or directors given by the corporation under any provision of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder or director to whom the notice is given. Any such consent shall be revocable by the stockholder or director by written notice to the corporation. Any such consent shall be deemed revoked if (1) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent and (2) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

(b) *Effective Date of Notice.* Notice given pursuant to subsection (a) of this section shall be deemed given: (1) if by facsimile telecommunication, when directed to a number at which the stockholder or director has consented to receive notice; (2) if by electronic mail, when directed to an electronic mail address at which the stockholder or director has consented to receive notice; (3) if by a posting on an electronic network together with separate notice to the stockholder or director of such specific posting, upon the later of (i) such posting and (ii) the giving of such separate notice; and (4) if by any other form of electronic transmission, when directed to the stockholder or director. An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

(c) *Form of Electronic Transmission.* For purposes of these bylaws, “electronic transmission” means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

ARTICLE V OFFICERS

5.1 **Required and Permitted Officers.** The officers of the corporation shall be chosen by the Board of Directors and shall be a Chief Executive Officer and/or a president, a treasurer and a secretary. The Board of Directors may elect from among its members a Chairman of the Board and a Vice-Chairman of the Board. The Board of Directors may also choose one or more vice presidents, assistant secretaries and assistant treasurers. Any number of offices may be held by the same person, unless the certificate of incorporation or these bylaws otherwise provide.

5.2 **Appointment of Required Officers.** The Board of Directors at its first meeting after each annual meeting of stockholders shall choose a Chief Executive Officer and/or a president, a treasurer, and a secretary and may choose vice presidents.

5.3 **Appointment of Permitted Officers.** The Board of Directors may appoint such other officers and agents as it shall deem necessary who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors.

5.4 **Officer Compensation.** The salaries of all officers and agents of the corporation shall be fixed by the Board of Directors.

5.5 **Term of Office; Vacancies.** The officers of the corporation shall hold office until their successors are chosen and qualify. Any officer elected or appointed by the Board of Directors may be removed at any time by the affirmative vote of a majority of the Board of Directors. Any vacancy occurring in any office of the corporation shall be filled by the Board of Directors.

THE CHAIRMAN OF THE BOARD

5.6 **Chairman Presides.** Unless the Board of Directors appoints a Chairman of the Board, the Chief Executive Officer shall be the Chairman of the Board, so long as the Chief Executive Officer is a director of the corporation. The Chairman of the Board shall preside at all meetings of the Board of Directors and of the stockholders at which he or she shall be present. He or she shall have and may exercise such powers as are, from time to time, assigned to him or her by the Board of Directors and as may be provided by law.

5.7 **Absence of Chairman.** In the absence of the Chairman of the Board, the Vice-Chairman of the Board, if any, shall preside at all meetings of the Board of Directors and of the stockholders at which he or she shall be present. He or she shall have and may exercise such powers as are, from time to time, assigned to him or her by the Board of Directors and as may be provided by law.

THE CHIEF EXECUTIVE OFFICER

5.8 **Powers of Chief Executive Officer.** The Chief Executive Officer shall have general and active management of the business of the corporation and shall see that all orders and resolutions of the Board of Directors are carried into effect.

5.9 **Chief Executive Officer's Signature Authority.** The Chief Executive Officer shall execute bonds, mortgages and other contracts requiring a seal, under the seal of the corporation, except where required or permitted by law to be otherwise signed and executed and except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the corporation. The Chief Executive Officer may sign certificates for shares of stock of the corporation.

5.10 **Absence of Chief Executive Officer.** In the absence of the Chief Executive Officer or in the event of his or her inability or refusal to act, the president shall perform the duties of the Chief Executive Officer, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer.

THE PRESIDENT AND VICE PRESIDENTS

5.11 **Powers of President.** Unless the Board of Directors appoints a president of the corporation, the Chief Executive Officer shall be the president of the corporation. The president of the corporation shall have such powers as required by law and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

5.12 **Absence of President.** In the absence of the president or in the event of his or her inability or refusal to act, the vice president, if any, (or in the event there be more than one vice president, the vice presidents in the order designated by the directors, or in the absence of any designation, then in the order of their election) shall perform the duties of the president, and when so acting, shall have all the powers of and be subject to all the restrictions upon the president. The vice-presidents shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

THE SECRETARY AND ASSISTANT SECRETARY

5.13 **Duties of Secretary.** The secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings of the meetings of the corporation and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the standing committees when required. He or she shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or the Chief Executive Officer, under whose supervision he or she shall be. He or she shall have custody of the corporate seal of the corporation and he or she, or an assistant secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his or her signature or by the signature of such assistant secretary. The Board of Directors may give general authority to any other officer to affix the seal of the corporation and to attest the affixing by his or her signature.

5.14 **Duties of Assistant Secretary.** The assistant secretary, or if there be more than one, the assistant secretaries in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election) shall, in the absence of the secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

THE TREASURER AND ASSISTANT TREASURERS

5.15 **Duties of Treasurer.** The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the Board of Directors.

5.16 **Disbursements and Financial Reports.** He or she shall disburse the funds of the corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the Chief Executive Officer and the Board of Directors, at its regular meetings or when the Board of Directors so requires, an account of all his or her transactions as treasurer and of the financial condition of the corporation.

5.17 **Treasurer's Bond.** If required by the Board of Directors, the treasurer shall give the corporation a bond (which shall be renewed every six years) in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of his or her office and for the restoration to the corporation, in case of his or her death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his or her possession or under his or her control belonging to the corporation.

5.18 **Duties of Assistant Treasurer.** The assistant treasurer, or if there shall be more than one, the assistant treasurers in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election) shall, in the absence of the

treasurer or in the event of the treasurer's inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the Board of Directors may from time to time prescribe.

ARTICLE VI CERTIFICATE OF STOCK

6.1 **Stock Certificates.** Every holder of stock in the corporation shall be entitled to have a certificate, signed by or in the name of the corporation by, the Chairman or Vice-Chairman of the Board of Directors, or the president or a vice president and the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation, certifying the number of shares owned by him or her in the corporation.

Certificates may be issued for partly paid shares and in such case upon the face or back of the certificates issued to represent any such partly paid shares, the total amount of the consideration to be paid therefor, and the amount paid thereon shall be specified.

If the corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualification, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the corporation shall issue to represent such class or series of stock, provided that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the corporation shall issue to represent such class or series of stock, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

6.2 **Facsimile Signatures.** Any or all of the signatures on the certificate may be facsimile. In the event that any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, the certificate may be issued by the corporation with the same effect as if such officer, transfer agent or registrar were still acting as such at the date of issue.

6.3 **Lost Certificates.** The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed upon the making of an affidavit of that fact by the person claiming the certificate to be lost, stolen or destroyed. When authorizing such issuance of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance, require the owner of such lost, stolen or destroyed certificate or certificates, or his or her legal representative, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

6.4 **Transfer of Stock.** Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

6.5 **Fixing a Record Date.** In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

6.6 **Registered Stockholders.** The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, to vote as such owner, to hold liable for calls and assessments a person registered on its books as the owner of shares and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII GENERAL PROVISIONS

7.1 **Dividends.** Dividends upon the capital stock of the corporation, if any, subject to the provisions of the certificate of incorporation, may be declared by the Board of Directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property or in shares of the capital stock, subject to the provisions of the certificate of incorporation.

7.2 **Reserve for Dividends.** Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their sole discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purposes as the directors think conducive to the interests of the corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

7.3 **Checks.** All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

7.4 **Fiscal Year.** The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

7.5 **Corporate Seal.** The Board of Directors may adopt a corporate seal having inscribed thereon the name of the corporation, the year of its organization and the words "Corporate Seal, Delaware." The seal may be used by causing it or a facsimile thereof to be impressed or affixed or otherwise reproduced.

7.6 **Indemnification.** The corporation shall, to the fullest extent authorized under the laws of the State of Delaware, as those laws may be amended and supplemented from time to time, indemnify any director made, or threatened to be made, a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of being a director of the corporation or a predecessor corporation or a director or officer of another corporation, if such person served in such position at the request of the corporation; provided, however, that the corporation shall indemnify any such director or officer in connection with a proceeding initiated by such director or officer only if such proceeding was authorized by the Board of Directors of the corporation. The indemnification provided for in this Section 7.6 shall: (i) not be deemed exclusive of any other rights to which those indemnified may be entitled under these bylaws, agreement or vote of stockholders or disinterested directors or otherwise, both as to action in their official capacities and as to action in another capacity while holding such office, (ii) continue as to a person who has ceased to be a director, and (iii) inure to the benefit of the heirs, executors and administrators of a person who has ceased to be a director. The corporation's obligation to provide indemnification under this Section 7.6 shall be offset to the extent of any other source of indemnification or any otherwise applicable insurance coverage under a policy maintained by the corporation or any other person.

Expenses incurred by a director of the corporation in defending a civil or criminal action, suit or proceeding by reason of the fact that he or she is or was a director of the corporation (or was serving at the corporation's request as a director or officer of another corporation) shall be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the corporation as authorized by relevant sections of the DGCL. Notwithstanding the foregoing, the corporation shall not be required to advance such expenses to an agent who is a party to an action, suit or proceeding brought by the corporation and approved by a majority of the Board of Directors of the corporation that alleges willful misappropriation of corporate assets by such agent, disclosure of confidential information in violation of such agent's fiduciary or contractual obligations to the corporation or any other willful and deliberate breach in bad faith of such agent's duty to the corporation or its stockholders.

The foregoing provisions of this Section 7.6 shall be deemed to be a contract between the corporation and each director who serves in such capacity at any time while this bylaw is in effect, and any repeal or modification thereof shall not affect any rights or obligations then existing with respect to any state of facts then or theretofore existing or any action, suit or proceeding theretofore or thereafter brought based in whole or in part upon any such state of facts.

The Board of Directors in its sole discretion shall have power on behalf of the corporation to indemnify any person, other than a director, made a party to any action, suit or proceeding by reason of the fact that he or she, his or her testator or intestate, is or was an officer or employee of the corporation.

To assure indemnification under this Section 7.6 of all directors, officers and employees who are determined by the corporation or otherwise to be or to have been “fiduciaries” of any employee benefit plan of the corporation that may exist from time to time, Section 145 of the DGCL shall, for the purposes of this Section 7.6, be interpreted as follows: an “other enterprise” shall be deemed to include such an employee benefit plan, including without limitation, any plan of the corporation that is governed by the Act of Congress entitled “Employee Retirement Income Security Act of 1974,” as amended from time to time; the corporation shall be deemed to have requested a person to serve the corporation for purposes of Section 145 of the DGCL, as administrator of an employee benefit plan where the performance by such person of his or her duties to the corporation also imposes duties on, or otherwise involves services by, such person to the plan or participants or beneficiaries of the plan; excise taxes assessed on a person with respect to an employee benefit plan pursuant to such Act of Congress shall be deemed “fines.”

CERTIFICATE OF INCORPORATION GOVERNS

7.7 **Conflicts with Certificate of Incorporation.** In the event of any conflict between the provisions of the corporation’s certificate of incorporation and these bylaws, the provisions of the certificate of incorporation shall govern.

ARTICLE VIII AMENDMENTS

These bylaws may be altered, amended or repealed, or new bylaws may be adopted by the stockholders or by the Board of Directors, when such power is conferred upon the Board of Directors by the certificate of incorporation at any regular meeting of the stockholders or of the Board of Directors or at any special meeting of the stockholders or of the Board of Directors if notice of such alteration, amendment, repeal or adoption of new bylaws be contained in the notice of such special meeting. If the power to adopt, amend or repeal bylaws is conferred upon the Board of Directors by the certificate of incorporation, it shall not divest or limit the power of the stockholders to adopt, amend or repeal bylaws.

ARTICLE IX LOANS TO OFFICERS

The corporation may lend money to, or guarantee any obligation of or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these bylaws shall

be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

**ARTICLE X
RECORDS AND REPORTS**

The application and requirements of Section 1501 of the California General Corporation Law are hereby expressly waived to the fullest extent permitted thereunder.

CERTIFICATE OF SECRETARY OF

SGI-DNA, INC.

The undersigned, Robert Cutler, hereby certifies that he or she is the duly elected and acting Secretary of SGI-DNA, Inc., a Delaware corporation (the "Corporation"), and that the bylaws attached hereto constitute the bylaws of said Corporation as duly adopted by Action by Written Consent of the Board of Directors on July 18, 2018.

IN WITNESS WHEREOF, the undersigned has hereunto subscribed his or her name this July 18, 2018.

/s/ Robert Cutler

Robert Cutler, Secretary

**AMENDED AND RESTATED BYLAWS OF
CODEX DNA, INC.**

(as amended on May 20, 2021; effective as of the
closing of the company's initial public offering)

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BYLAWS OF CODEX DNA, INC.

ARTICLE I - CORPORATE OFFICES

1.1 REGISTERED OFFICE

The registered office of Codex DNA, Inc. (the “**Company**”) shall be fixed in the Company’s certificate of incorporation, as the same may be amended from time to time.

1.2 OTHER OFFICES

The Company may at any time establish other offices.

ARTICLE II - MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS

Meetings of stockholders shall be held at a place, if any, within or outside the State of Delaware, determined by the board of directors of the Company (the “**Board of Directors**”). The Board of Directors may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law (the “**DGCL**”). In the absence of any such designation or determination, stockholders’ meetings shall be held at the Company’s principal executive office.

2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held each year. The Board of Directors shall designate the date and time of the annual meeting. At the annual meeting, directors shall be elected and any other proper business, brought in accordance with Section 2.4 of these bylaws, may be transacted. The Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board may cancel, postpone or reschedule any previously scheduled annual meeting at any time, before or after the notice for such meeting has been sent to the stockholders. For the purposes of these bylaws, the term “**Whole Board**” shall mean the total number of authorized directorships whether or not there exist any vacancies or other unfilled seats in previously authorized directorships.

2.3 SPECIAL MEETING

(a) A special meeting of the stockholders, other than as required by statute, may be called at any time by (i) the Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board, (ii) the chairperson of the Board of Directors, (iii) the chief executive officer or (iv) the president, but a special meeting may not be called by any other person or persons and any power of stockholders to call a special meeting of stockholders is specifically denied. The Board of Directors acting pursuant to a resolution adopted by a majority of the Whole Board may cancel, postpone or reschedule any previously scheduled special meeting at any time, before or after the notice for such meeting has been sent to the stockholders.

(b) The notice of a special meeting shall include the purpose for which the meeting is called. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting by or at the direction of a majority of the Whole Board, the chairperson of the Board of Directors, the chief executive officer or the president. Nothing contained in this Section 2.3(b) shall be construed as limiting, fixing or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

2.4 ADVANCE NOTICE PROCEDURES

(a) *Annual Meetings of Stockholders.*

(i) Nominations of persons for election to the Board of Directors or the proposal of other business to be transacted by the stockholders at an annual meeting of stockholders may be made only (1) pursuant to the Company's notice of meeting (or any supplement thereto); (2) by or at the direction of the Board of Directors; (3) as may be provided in the certificate of designations for any class or series of preferred stock; or (4) by any stockholder of the Company who (A) is a stockholder of record at the time of giving of the notice contemplated by Section 2.4(a)(ii); (B) is a stockholder of record on the record date for the determination of stockholders entitled to notice of the annual meeting; (C) is a stockholder of record on the record date for the determination of stockholders entitled to vote at the annual meeting; (D) is a stockholder of record at the time of the annual meeting; and (E) complies with the procedures set forth in this Section 2.4(a).

(ii) For nominations or other business to be properly brought before an annual meeting of stockholders by a stockholder pursuant to clause (4) of Section 2.4(a)(i), the stockholder must have given timely notice in writing to the secretary and any such nomination or proposed business must constitute a proper matter for stockholder action. To be timely, a stockholder's notice must be received by the secretary at the principal executive offices of the Company no earlier than 8:00 a.m., local time, on the 120th day and no later than 5:00 p.m., local time, on the 90th day prior to the day of the first anniversary of the preceding year's annual meeting of stockholders. However, if no annual meeting of stockholders was held in the preceding year, or if the date of the applicable annual meeting has been changed by more than 25 days from the first anniversary of the preceding year's annual meeting, then to be timely such notice must be received by the secretary at the principal executive offices of the Company no earlier than 8:00 a.m., local time, on the 120th day prior to the day of the annual meeting and no later than 5:00 p.m., local time, on the 10th day following the day on which public announcement of the date of the annual meeting was first made by the Company. In no event will the adjournment, rescheduling or postponement of any annual meeting, or any announcement thereof, commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above. If the number of directors to be elected to the Board of Directors is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors at least 10 days before the last day that a stockholder may deliver a notice of nomination pursuant to the foregoing provisions, then a stockholder's notice required by this Section 2.4(a)(ii) will also be considered timely, but only with respect to nominees for any new positions created by such increase, if it is received by the secretary at the principal executive offices of the Company no later than 5:00 p.m., local time, on the 10th day following the day on which such public announcement is first made. "**Public announcement**" means disclosure in a press release reported by a national news service or in a document publicly filed by the Company with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934 (as amended and inclusive of rules and regulations thereunder, the "**1934 Act**").

(iii) A stockholder's notice to the secretary must set forth:

(1) as to each person whom the stockholder proposes to nominate for election as a director:

(A) such person's name, age, business address, residence address and principal occupation or employment; the class and number of shares of the Company that are held of record or are beneficially owned by such person and a description of any Derivative Instruments (defined below) held or beneficially owned thereby or of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit of share price changes for, or to increase or decrease the voting power of such person; and all information relating to such person that is required to be disclosed in solicitations of proxies for the contested election of directors, or is otherwise required, in each case pursuant to the Section 14 of the 1934 Act;

(B) such person's written consent to being named in such stockholder's proxy statement as a nominee of such stockholder and to serving as a director of the Company if elected;

(C) a reasonably detailed description of any direct or indirect compensatory, payment, indemnification or other financial agreement, arrangement or understanding that such person has, or has had within the past three years, with any person or entity other than the Company (including the amount of any payment or payments received or receivable thereunder), in each case in connection with candidacy or service as a director of the Company (a "**Third-Party Compensation Arrangement**"); and

(D) a description of any other material relationships between such person and such person's respective affiliates and associates, or others acting in concert with them, on the one hand, and such stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination is made, and their respective affiliates and associates, or others acting in concert with them, on the other hand;

(2) as to any other business that the stockholder proposes to bring before the annual meeting:

(A) a brief description of the business desired to be brought before the annual meeting;

(B) the text of the proposal or business (including the text of any resolutions proposed for consideration and, if applicable, the text of any proposed amendment to these bylaws or the Company's certificate of incorporation);

(C) the reasons for conducting such business at the annual meeting;

(D) any material interest in such business of such stockholder giving the notice and the beneficial owner, if any, on whose behalf the proposal is made, and their respective affiliates and associates, or others acting in concert with them; and

(E) a description of all agreements, arrangements and understandings between such stockholder and the beneficial owner, if any, on whose behalf the proposal is made, and their respective affiliates or associates or others acting in concert with them, and any other person or persons (including their names) in connection with the proposal of such business by such stockholder; and

(3) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made:

(A) the name and address of such stockholder (as they appear on the Company's books), of such beneficial owner and of their respective affiliates or associates or others acting in concert with them;

(B) for each class or series, the number of shares of stock of the Company that are, directly or indirectly, held of record or are beneficially owned by such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them;

(C) a description of any agreement, arrangement or understanding between such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them, and any other person or persons (including, in each case, their names) in connection with the proposal of such nomination or other business;

(D) a description of any agreement, arrangement or understanding (including, regardless of the form of settlement, any derivative, long or short positions, profit interests, forwards, futures, swaps, options, warrants, convertible securities, stock appreciation or similar rights, hedging transactions and borrowed or loaned shares) that has been entered into by or on behalf of such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them, with respect to the Company's securities (any of the foregoing, a "**Derivative Instrument**"), or any other agreement, arrangement or understanding that has been made the effect or intent of which is to create or mitigate loss to, manage risk or benefit of share price changes for or increase or decrease the voting power of such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them, with respect to the Company's securities;

(E) any rights to dividends on the Company's securities owned beneficially by such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them, that are separated or separable from the underlying security;

(F) any proportionate interest in the Company's securities or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them, is a general partner or, directly or indirectly, beneficially owns an interest in a general partner of such general or limited partnership;

(G) any performance-related fees (other than an asset-based fee) that such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with, them is entitled to based on any increase or decrease in the value of the Company's securities or Derivative Instruments, including, without limitation, any such interests held by members of the immediate family of such persons sharing the same household;

(H) any significant equity interests or any Derivative Instruments in any principal competitor of the Company that are held by such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them;

(I) any direct or indirect interest of such stockholder, such beneficial owner or their respective affiliates or associates or others acting in concert with them, in any contract with the Company, any affiliate of the Company or any principal competitor of the Company (in each case, including any employment agreement, collective bargaining agreement or consulting agreement);

(J) a representation and undertaking that the stockholder is a holder of record of stock of the Company as of the date of submission of the stockholder's notice and intends to appear in person or by proxy at the meeting to bring such nomination or other business before the meeting;

(K) a representation and undertaking that such stockholder or any such beneficial owner intends, or is part of a group that intends, to (x) deliver a proxy statement or form of proxy to holders of at least the percentage of the voting power of the Company's then-outstanding stock required to approve or adopt the proposal or to elect each such nominee; or (y) otherwise solicit proxies from stockholders in support of such proposal or nomination;

(L) any other information relating to such stockholder, such beneficial owner, or their respective affiliates or associates or others acting in concert with them, or director nominee or proposed business that, in each case, would be required to be disclosed in a proxy statement or other filing required to be made in connection with the solicitation of proxies in support of such nominee (in a contested election of directors) or proposal pursuant to Section 14 of the 1934 Act; and

(M) such other information relating to any proposed item of business as the Company may reasonably require to determine whether such proposed item of business is a proper matter for stockholder action.

(iv) In addition to the requirements of this Section 2.4, to be timely, a stockholder's notice (and any additional information submitted to the Company in connection therewith) must further be updated and supplemented (1) if necessary, so that the information provided or required to be provided in such notice is true and correct as of the record date(s) for determining the stockholders entitled to notice of, and to vote at, the meeting and as of the date that is 10 business days prior to the meeting or any adjournment, rescheduling or postponement thereof and (2) to provide any additional information that the Company may reasonably request. Such update and supplement or additional information, if applicable, must be received by the secretary at the principal executive offices of the Company, in the case of a request for additional information, promptly following a request therefor, which response must be delivered not later than such reasonable time as is specified in any such request from the Company or, in the case of any other update or supplement of any information, not later than five business days after the record date(s) for the meeting (in the case of any update and supplement required to be made as of the record date(s)), and not later than eight business days prior to the date for the meeting or any adjournment, rescheduling or postponement thereof (in the case of the update and supplement required to be made as of 10 business days prior to the meeting or any adjournment, rescheduling or postponement thereof). The failure to timely provide such update, supplement or

additional information shall result in the nomination or proposal no longer being eligible for consideration at the meeting.

(b) *Special Meetings of Stockholders.* Except to the extent required by the DGCL, and subject to Section 2.3(a), special meetings of stockholders may be called only in accordance with the Company's certificate of incorporation and these bylaws. Only such business will be conducted at a special meeting of stockholders as has been brought before the special meeting pursuant to the Company's notice of meeting. If the election of directors is included as business to be brought before a special meeting in the Company's notice of meeting, then nominations of persons for election to the Board of Directors at such special meeting may be made by any stockholder who (i) is a stockholder of record at the time of giving of the notice contemplated by this Section 2.4(b); (ii) is a stockholder of record on the record date for the determination of stockholders entitled to notice of the special meeting; (iii) is a stockholder of record on the record date for the determination of stockholders entitled to vote at the special meeting; (iv) is a stockholder of record at the time of the special meeting; and (v) complies with the procedures set forth in this Section 2.4(b). For nominations to be properly brought by a stockholder before a special meeting pursuant to this Section 2.4(b), the stockholder's notice must be received by the secretary at the principal executive offices of the Company no earlier than 8:00 a.m., local time, on the 120th day prior to the day of the special meeting and no later than 5:00 p.m., local time, on the 10th day following the day on which public announcement of the date of the special meeting was first made. In no event will any adjournment, rescheduling or postponement of a special meeting or the announcement thereof commence a new time period (or extend any time period) for the giving of a stockholder's notice. A stockholder's notice to the Secretary must comply with the applicable notice requirements of Section 2.4(a)(iii).

(c) *Other Requirements.*

(i) To be eligible to be a nominee by any stockholder for election as a director of the Company, the proposed nominee must provide to the secretary, in accordance with the applicable time periods prescribed for delivery of notice under Section 2.4(a)(ii) or Section 2.4(b):

(1) a signed and completed written questionnaire (in the form provided by the secretary at the written request of the nominating stockholder, which form will be provided by the secretary within 10 days of receiving such request) containing information regarding such nominee's background and qualifications and such other information as may reasonably be required by the Company to determine the eligibility of such nominee to serve as a director of the Company or to serve as an independent director of the Company;

(2) a written representation and undertaking that, unless previously disclosed to the Company, such nominee is not, and will not become, a party to any voting agreement, arrangement, commitment, assurance or understanding with any person or entity as to how such nominee, if elected as a director, will vote on any issue;

(3) a written representation and undertaking that, unless previously disclosed to the Company, such nominee is not, and will not become, a party to any Third-Party Compensation Arrangement;

(4) a written representation and undertaking that, if elected as a director, such nominee would be in compliance, and will continue to comply, with the Company's

corporate governance guidelines as disclosed on the Company's website, as amended from time to time; and

(5) a written representation and undertaking that such nominee, if elected, intends to serve a full term on the Board of Directors.

(ii) At the request of the Board of Directors, any person nominated by the Board of Directors for election as a director must furnish to the secretary the information that is required to be set forth in a stockholder's notice of nomination that pertains to such nominee.

(iii) No person will be eligible to be nominated by a stockholder for election as a director of the Company unless nominated in accordance with the procedures set forth in this Section 2.4. No business proposed by a stockholder will be conducted at a stockholder meeting except in accordance with this Section 2.4.

(iv) The chairperson of the applicable meeting of stockholders will, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the procedures prescribed by these bylaws or that business was not properly brought before the meeting. If the chairperson of the meeting should so determine, then the chairperson of the meeting will so declare to the meeting and the defective nomination will be disregarded or such business will not be transacted, as the case may be.

(v) Notwithstanding anything to the contrary in this Section 2.4, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear in person at the meeting to present a nomination or other proposed business, such nomination will be disregarded or such proposed business will not be transacted, as the case may be, notwithstanding that proxies in respect of such nomination or business may have been received by the Company and counted for purposes of determining a quorum. For purposes of this Section 2.4, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting, and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting.

(vi) Without limiting this Section 2.4, a stockholder must also comply with all applicable requirements of the 1934 Act with respect to the matters set forth in this Section 2.4, it being understood that (1) any references in these bylaws to the 1934 Act are not intended to, and will not, limit any requirements applicable to nominations or proposals as to any other business to be considered pursuant to this Section 2.4; and (2) compliance with clause (4) of Section 2.4(a)(i) and with Section 2.4(b) are the exclusive means for a stockholder to make nominations or submit other business (other than as provided in Section 2.4(c)(vii)).

(vii) Notwithstanding anything to the contrary in this Section 2.4, the notice requirements set forth in these bylaws with respect to the proposal of any business pursuant to this Section 2.4 will be deemed to be satisfied by a stockholder if (1) such stockholder has submitted a proposal to the Company in compliance with Rule 14a8 under the 1934 Act; and (2) such stockholder's proposal has been included in a proxy statement that has been prepared by the Company to solicit proxies for the meeting of stockholders. Subject to Rule 14a8 and other applicable rules and regulations under the 1934 Act, nothing in these bylaws will be construed to permit any stockholder, or give any

stockholder the right, to include or have disseminated or described in the Company's proxy statement any nomination of a director or any other business proposal.

2.5 NOTICE OF STOCKHOLDERS' MEETINGS

Whenever stockholders are required or permitted to take any action at a meeting, a notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Except as otherwise provided in the DGCL, the certificate of incorporation or these bylaws, the notice of any meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting.

2.6 QUORUM

The holders of a majority of the voting power of the capital stock of the Company issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. Where a separate vote by a class or series or classes or series is required, a majority of the voting power of the outstanding shares of such class or series or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter, except as otherwise provided by law, the certificate of incorporation or these bylaws.

If, however, such quorum is not present or represented at any meeting of the stockholders, then either (a) the chairperson of the meeting, or (b) the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the original meeting.

2.7 ADJOURNED MEETING; NOTICE

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Company may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for stockholders entitled to vote is fixed for the adjourned meeting, the Board of Directors shall fix a new record date for notice of such adjourned meeting in accordance with Section 213(a) of the DGCL and Section 2.11 of these bylaws, and shall give notice of the adjourned meeting to each stockholder of record entitled to vote at such adjourned meeting as of the record date fixed for notice of such adjourned meeting.

2.8 CONDUCT OF BUSINESS

The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of business and discussion as seem to the chairperson in order. The chairperson of any meeting of stockholders shall be designated by the Board of Directors; in the absence of such designation, the chairperson of the Board of Directors, if any, or the chief executive officer (in the absence of the chairperson of the Board of Directors) or the president (in the absence of the chairperson of the Board of Directors and the chief executive officer), or in their absence any other executive officer of the Company, shall serve as chairperson of the stockholder meeting. The chairperson of any meeting of stockholders shall have the power to adjourn the meeting to another place, if any, date or time, whether or not a quorum is present.

2.9 VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

Except as otherwise provided by law, the certificate of incorporation, these bylaws or the rules of the stock exchange on which the Company's securities are listed, in all matters other than the election of directors, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Except as otherwise required by law, the certificate of incorporation or these bylaws, directors shall be elected by a plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Where a separate vote by a class or series or classes or series is required, in all matters other than the election of directors, the affirmative vote of the majority of the voting power of the outstanding shares of such class or series or classes or series present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of such class or series or classes or series, except as otherwise provided by law, the certificate of incorporation, these bylaws or the rules of the stock exchange on which the securities of the Company are listed.

2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Subject to the rights of holders of preferred stock of the Company, any action required or permitted to be taken by the stockholders of the Company must be effected at a duly called annual or special meeting of stockholders of the Company and may not be effected by any consent in writing by such stockholders.

2.11 RECORD DATES

In order that the Company may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining

the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination.

If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however*, that the Board of Directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance with the provisions of Section 213 of the DGCL and this Section 2.11 at the adjourned meeting.

In order that the Company may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

2.12 PROXIES

Each stockholder entitled to vote at a meeting of stockholders, or such stockholder's authorized officer, director, employee or agent, may authorize another person or persons to act for such stockholder by proxy authorized by a document or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL.

2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The Company shall prepare, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; *provided, however*, if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The Company shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (a) on a reasonably accessible electronic network, *provided* that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the Company's principal place of business. In the event that the Company determines to make the list available on an electronic network, the Company may take reasonable steps to ensure that such information is available only to

stockholders of the Company. If the meeting is to be held at a place, then a list of stockholders entitled to vote at the meeting shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then such list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

2.14 INSPECTORS OF ELECTION

Before any meeting of stockholders, the Company shall appoint an inspector or inspectors of election to act at the meeting or its adjournment. The Company may designate one or more persons as alternate inspectors to replace any inspector who fails to act.

Such inspectors shall:

- (a) ascertain the number of shares outstanding and the voting power of each;
- (b) determine the shares represented at the meeting and the validity of proxies and ballots;
- (c) count all votes and ballots;
- (d) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors; and
- (e) certify their determination of the number of shares represented at the meeting, and their count of all votes and ballots.

The inspectors of election shall perform their duties impartially, in good faith, to the best of their ability and as expeditiously as is practical. If there are multiple inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is *prima facie* evidence of the facts stated therein.

ARTICLE III - DIRECTORS

3.1 POWERS

The business and affairs of the Company shall be managed by or under the direction of the Board of Directors, except as may be otherwise provided in the DGCL or the certificate of incorporation.

3.2 NUMBER OF DIRECTORS

The Board of Directors shall consist of one or more members, each of whom shall be a natural person. Unless the certificate of incorporation fixes the number of directors, the number of directors shall be determined from time to time by resolution of a majority of the Whole Board. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws. The certificate of incorporation or these bylaws may prescribe other qualifications for directors.

If so provided in the certificate of incorporation, the directors of the Company shall be divided into three classes.

3.4 RESIGNATION AND VACANCIES

Any director may resign at any time upon notice given in writing or by electronic transmission to the Company. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. Unless otherwise provided in the certificate of incorporation or these bylaws, when one or more directors resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective.

Unless otherwise provided in the certificate of incorporation or these bylaws or permitted in the specific case by resolution of the Board of Directors, and subject to the rights of holders of Preferred Stock, vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director, and not by stockholders. If the directors are divided into classes, a person so chosen to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

The Board of Directors may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the Board of Directors may participate in a meeting of the Board of Directors by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 REGULAR MEETINGS

Regular meetings of the Board of Directors may be held without notice at such time and at such place as shall from time to time be determined by the Board of Directors.

3.7 SPECIAL MEETINGS; NOTICE

Special meetings of the Board of Directors for any purpose or purposes may be called at any time by the chairperson of the Board of Directors, the chief executive officer, the president, the secretary or a majority of the Whole Board.

Notice of the time and place of special meetings shall be:

- (a) delivered personally by hand, by courier or by telephone;
- (b) sent by United States first-class mail, postage prepaid;
- (c) sent by facsimile;
- (d) sent by electronic mail; or
- (e) otherwise given by electronic transmission (as defined in Section 232 of the DGCL),

directed to each director at that director's address, telephone number, facsimile number, electronic mail address or other contact for notice by electronic transmission, as the case may be, as shown on the Company's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile, (iii) sent by electronic mail or (iv) otherwise given by electronic transmission, it shall be delivered, sent or otherwise directed to each director, as applicable, at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the Company's principal executive office) nor the purpose of the meeting, unless required by statute.

3.8 QUORUM; VOTING

At all meetings of the Board of Directors, a majority of the Whole Board shall constitute a quorum for the transaction of business. If a quorum is not present at any meeting of the Board of Directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present.

The affirmative vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute, the certificate of incorporation or these bylaws.

If the certificate of incorporation provides that one or more directors shall have more or less than one vote per director on any matter, except as may otherwise be expressly provided herein or therein and denoted with the phrase "notwithstanding the final paragraph of Section 3.8 of the bylaws" or language to similar effect, every reference in these bylaws to a majority or other proportion of the directors shall refer to a majority or other proportion of the votes of the directors.

3.9 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission. Any person (whether or not then a director) may provide, whether through instruction to an agent or otherwise, that a consent to action will be effective at a future time (including a time determined upon the happening of an event), no later than 60 days after such instruction is given or such provision is made and such consent shall be deemed to have been given for purposes of this Section 3.9 at such effective time so long as such person is then a director and did not revoke the consent prior to such time. Any such consent shall be revocable prior to its becoming effective.

3.10 FEES AND COMPENSATION OF DIRECTORS

Unless otherwise restricted by the certificate of incorporation or these bylaws, the Board of Directors shall have the authority to fix the compensation of directors.

3.11 REMOVAL OF DIRECTORS

Any director or the entire Board of Directors may be removed from office by stockholders of the Company in the manner specified in the certificate of incorporation and applicable law. No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE IV - COMMITTEES

4.1 COMMITTEES OF DIRECTORS

The Board of Directors may, by resolution passed by a majority of the Whole Board, designate one or more committees, each committee to consist of one or more of the directors of the Company. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors or in these bylaws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Company, and may authorize the seal of the Company to be affixed to all papers that may require it; but no such committee shall have the power or authority to (a) approve or adopt, or recommend to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (b) adopt, amend or repeal any bylaw of the Company.

4.2 COMMITTEE MINUTES

Each committee and subcommittee shall keep regular minutes of its meetings.

4.3 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees and subcommittees shall be governed by, and held and taken in accordance with, the provisions of:

- (a) Section 3.5 (place of meetings and meetings by telephone);
- (b) Section 3.6 (regular meetings);
- (c) Section 3.7 (special meetings and notice);
- (d) Section 3.8 (quorum; voting);
- (e) Section 3.9 (action without a meeting); and
- (f) Section 7.4 (waiver of notice)

with such changes in the context of those bylaws as are necessary to substitute the committee or subcommittee and its members for the Board of Directors and its members. *However*, (i) the time and place of regular meetings of committees or subcommittees may be determined either by resolution of the Board of Directors or by resolution of the committee or subcommittee; (ii) special meetings of committees or subcommittees may also be called by resolution of the Board of Directors or the committee or the subcommittee; and (iii) notice of special meetings of committees and subcommittees shall also be given to all alternate members who shall have the right to attend all meetings of the committee or subcommittee. The Board of Directors may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

Any provision in the certificate of incorporation providing that one or more directors shall have more or less than one vote per director on any matter shall apply to voting in any committee or subcommittee, unless otherwise provided in the certificate of incorporation or these bylaws.

4.4 SUBCOMMITTEES

Unless otherwise provided in the certificate of incorporation, these bylaws or the resolutions of the Board of Directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

ARTICLE V - OFFICERS

5.1 OFFICERS

The officers of the Company shall be a president and a secretary. The Company may also have, at the discretion of the Board of Directors, a chairperson of the Board of Directors, a vice chairperson of the Board of Directors, a chief executive officer, a chief financial officer or treasurer, one or more vice presidents, one or more assistant vice presidents, one or more assistant treasurers, one or more assistant secretaries and any such other officers as may be appointed in accordance with the provisions of these bylaws. Any number of offices may be held by the same person.

5.2 APPOINTMENT OF OFFICERS

The Board of Directors shall appoint the officers of the Company, except such officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws, subject to the rights, if any, of an officer under any contract of employment.

5.3 SUBORDINATE OFFICERS

The Board of Directors may appoint, or empower the chief executive officer or, in the absence of a chief executive officer, the president, to appoint, such other officers as the business of the Company may require. Each of such officers shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the Board of Directors may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by the Board of Directors or, for the avoidance of doubt, any duly authorized committee or subcommittee thereof or by any officer who has been conferred such power of removal.

Any officer may resign at any time by giving notice, in writing or by electronic transmission, to the Company. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the Company under any contract to which the officer is a party.

5.5 VACANCIES IN OFFICES

Any vacancy occurring in any office of the Company shall be filled by the Board of Directors or as provided in Section 5.3.

5.6 REPRESENTATION OF SECURITIES OF OTHER ENTITIES

The chairperson of the Board of Directors, the chief executive officer, the president, any vice president, the treasurer, the secretary or assistant secretary of this Company or any other person authorized by the Board of Directors or the chief executive officer, the president or a vice president, is authorized to vote, represent and exercise on behalf of this Company all rights incident to any and all shares or other securities of any other entity or entities, and all rights incident to any management authority conferred on the Company in accordance with the governing documents of any entity or entities, standing in the name of this Company, including the right to act by written consent. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

5.7 AUTHORITY AND DUTIES OF OFFICERS

All officers of the Company shall respectively have such authority and perform such duties in the management of the business of the Company as may be designated from time to time by the Board of Directors and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the Board of Directors.

ARTICLE VI - STOCK

6.1 STOCK CERTIFICATES; PARTLY PAID SHARES

The shares of the Company shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Company. Unless otherwise provided by resolution of the Board of Directors, every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of, the Company by any two officers of the Company representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Company with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. The Company shall not have power to issue a certificate in bearer form.

The Company may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly-paid shares, or upon the books and records of the Company in the case of uncertificated partly-paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully-paid shares, the Company shall declare a dividend upon partly-paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

6.2 SPECIAL DESIGNATION ON CERTIFICATES

If the Company is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the Company shall issue to represent such class or series of stock; *provided, however*, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate that the Company shall issue to represent such class or series of stock, a statement that the Company will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the registered owner thereof shall be given a notice, in writing or by electronic transmission, containing the information required to be set forth or stated on certificates pursuant to this Section 6.2 or Sections 156, 202(a), 218(a) or 364 of the DGCL or with respect to this Section 6.2 a statement that the Company will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly provided by law, the rights and obligations of the holders of uncertificated stock and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

6.3 LOST CERTIFICATES

Except as provided in this Section 6.3, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the Company and cancelled at the same time. The Company may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Company may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the Company a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

6.4 DIVIDENDS

The Board of Directors, subject to any restrictions contained in the certificate of incorporation or applicable law, may declare and pay dividends upon the shares of the Company's capital stock. Dividends may be paid in cash, in property, or in shares of the Company's capital stock, subject to the provisions of the certificate of incorporation. The Board of Directors may set apart out of any of the funds of the Company available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve.

6.5 TRANSFER OF STOCK

Transfers of record of shares of stock of the Company shall be made only upon its books by the holders thereof, in person or by an attorney duly authorized, and, if such stock is certificated, upon the surrender of a certificate or certificates for a like number of shares, properly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer.

6.6 STOCK TRANSFER AGREEMENTS

The Company shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the Company to restrict the transfer of shares of stock of the Company of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

6.7 REGISTERED STOCKHOLDERS

The Company:

(a) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and notices and to vote as such owner; and

(b) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII - MANNER OF GIVING NOTICE AND WAIVER

7.1 NOTICE OF STOCKHOLDERS' MEETINGS

Notice of any meeting of stockholders shall be given in the manner set forth in the DGCL.

7.2 NOTICE TO STOCKHOLDERS SHARING AN ADDRESS

Except as otherwise prohibited under the DGCL, without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Company under the provisions of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any such consent shall be revocable by the stockholder by written notice to the Company. Any stockholder who fails to object in writing to the Company, within 60 days of having been given written notice by the Company of its intention to send the single notice, shall be deemed to have consented to receiving such single written notice. This Section 7.2 shall not apply to Sections 164, 296, 311, 312 or 324 of the DGCL.

7.3 NOTICE TO PERSON WITH WHOM COMMUNICATION IS UNLAWFUL

Whenever notice is required to be given, under the DGCL, the certificate of incorporation or these bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the Company is such as to require the filing of a certificate under the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

7.4 WAIVER OF NOTICE

Whenever notice is required to be given under any provision of the DGCL, the certificate of incorporation or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

ARTICLE VIII - INDEMNIFICATION

8.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN THIRD PARTY PROCEEDINGS

Subject to the other provisions of this Article VIII, the Company shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding") (other than an action by or in the right of the Company) by reason of the fact that such person is or was a director or officer of the Company, or is or was a director or officer of the Company serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Company, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

8.2 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN ACTIONS BY OR IN THE RIGHT OF THE COMPANY

Subject to the other provisions of this Article VIII, the Company shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed Proceeding by or in the right of the Company to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the Company, or is or was a director or officer of the Company serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such Proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Company; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Company unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

8.3 SUCCESSFUL DEFENSE

To the extent that a present or former director or officer (for purposes of this Section 8.3 only, as such term is defined in Section 145(c)(1) of the DGCL) of the Company has been successful on the merits or otherwise in defense of any action, suit or proceeding described in Section 8.1 or Section 8.2, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith. The Company may indemnify any other person who is not a present or former director or officer of the

Company against expenses (including attorneys' fees) actually and reasonably incurred by such person to the extent he or she has been successful on the merits or otherwise in defense of any suit or proceeding described in Section 8.1 or Section 8.2, or in defense of any claim, issue or matter therein.

8.4 INDEMNIFICATION OF OTHERS

Subject to the other provisions of this Article VIII, the Company shall have power to indemnify its employees and agents, or any other persons, to the extent not prohibited by the DGCL or other applicable law. The Board of Directors shall have the power to delegate to any person or persons identified in subsections (1) through (4) of Section 145(d) of the DGCL the determination of whether employees or agents shall be indemnified.

8.5 ADVANCED PAYMENT OF EXPENSES

Expenses (including attorneys' fees) actually and reasonably incurred by an officer or director of the Company in defending any Proceeding shall be paid by the Company in advance of the final disposition of such Proceeding upon receipt of a written request therefor (together with documentation reasonably evidencing such expenses) and an undertaking by or on behalf of the person to repay such amounts if it shall ultimately be determined that the person is not entitled to be indemnified under this Article VIII or the DGCL. Such expenses (including attorneys' fees) actually and reasonably incurred by former directors and officers or other employees and agents of the Company or by persons serving at the request of the Company as directors, officers, employees or agents of another corporation, partnership, joint venture, trust or other enterprise may be so paid upon such terms and conditions, if any, as the Company deems appropriate. The right to advancement of expenses shall not apply to any Proceeding (or any part of any Proceeding) for which indemnity is excluded pursuant to these bylaws, but shall apply to any Proceeding (or any part of any Proceeding) referenced in Section 8.6(b) or 8.6(c) prior to a determination that the person is not entitled to be indemnified by the Company.

Notwithstanding the foregoing, unless otherwise determined pursuant to Section 8.8, no advance shall be made by the Company to an officer of the Company (except by reason of the fact that such officer is or was a director of the Company, in which event this paragraph shall not apply) in any Proceeding if a determination is reasonably and promptly made (a) by a vote of the directors who are not parties to such Proceeding, even though less than a quorum, or (b) by a committee of such directors designated by the vote of the majority of such directors, even though less than a quorum, or (c) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, that facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the Company.

8.6 LIMITATION ON INDEMNIFICATION

Subject to the requirements in Section 8.3 and the DGCL, the Company shall not be obligated to indemnify any person pursuant to this Article VIII in connection with any Proceeding (or any part of any Proceeding):

(a) for which payment has actually been made to or on behalf of such person under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the 1934 Act, or similar provisions of federal, state or local statutory law or common law, if such person is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by such person of any bonus or other incentive-based or equity-based compensation or of any profits realized by such person from the sale of securities of the Company, as required in each case under the 1934 Act (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "**Sarbanes-Oxley Act**"), or the payment to the Company of profits arising from the purchase and sale by such person of securities in violation of Section 306 of the Sarbanes-Oxley Act), if such person is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by such person, including any Proceeding (or any part of any Proceeding) initiated by such person against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Board of Directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise required to be made under Section 8.7 or (iv) otherwise required by applicable law; or

(e) if prohibited by applicable law.

8.7 DETERMINATION; CLAIM

If a claim for indemnification or advancement of expenses under this Article VIII is not paid in full within 90 days after receipt by the Company of the written request therefor, the claimant shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of expenses. The Company shall indemnify such person against any and all expenses that are actually and reasonably incurred by such person in connection with any action for indemnification or advancement of expenses from the Company under this Article VIII, to the extent such person is successful in such action, and to the extent not prohibited by law. In any such suit, the Company shall, to the fullest extent not prohibited by law, have the burden of proving that the claimant is not entitled to the requested indemnification or advancement of expenses.

8.8 NON-EXCLUSIVITY OF RIGHTS

The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VIII shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the certificate of incorporation or any statute, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. The Company is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advancement of expenses, to the fullest extent not prohibited by the DGCL or other applicable law.

8.9 INSURANCE

The Company may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other

enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Company would have the power to indemnify such person against such liability under the provisions of the DGCL.

8.10 SURVIVAL

The rights to indemnification and advancement of expenses conferred by this Article VIII shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

8.11 EFFECT OF REPEAL OR MODIFICATION

A right to indemnification or to advancement of expenses arising under a provision of the certificate of incorporation or a bylaw shall not be eliminated or impaired by an amendment to or repeal or elimination of the certificate of incorporation or these bylaws after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought, unless the provision in effect at the time of such act or omission explicitly authorizes such elimination or impairment after such action or omission has occurred.

8.12 CERTAIN DEFINITIONS

For purposes of this Article VIII, references to the "**Company**" shall include, in addition to the resulting company, any constituent company (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent company, or is or was serving at the request of such constituent company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VIII with respect to the resulting or surviving company as such person would have with respect to such constituent company if its separate existence had continued. For purposes of this Article VIII, references to "**other enterprises**" shall include employee benefit plans; references to "**finances**" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "**servicing at the request of the Company**" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "**not opposed to the best interests of the Company**" as referred to in this Article VIII.

ARTICLE IX - GENERAL MATTERS

9.1 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS

Except as otherwise provided by law, the certificate of incorporation or these bylaws, the Board of Directors may authorize any officer or officers, or agent or agents, to enter into any contract or execute any document or instrument in the name of and on behalf of the Company; such authority may be general or confined to specific instances. Unless so authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the

Company by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

9.2 FISCAL YEAR

The fiscal year of the Company shall be fixed by resolution of the Board of Directors and may be changed by the Board of Directors.

9.3 SEAL

The Company may adopt a corporate seal, which shall be adopted and which may be altered by the Board of Directors. The Company may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

9.4 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term “**person**” includes a corporation, partnership, limited liability company, joint venture, trust or other enterprise, and a natural person. Any reference in these bylaws to a section of the DGCL shall be deemed to refer to such section as amended from time to time and any successor provisions thereto.

9.5 FORUM SELECTION

Unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another State court in Delaware or the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Company, (b) any action asserting a claim of breach of a fiduciary duty owed by any director, stockholder, officer or other employee of the Company to the Company or the Company’s stockholders, (c) any action arising pursuant to any provision of the DGCL or the certificate of incorporation or these bylaws (as either may be amended from time to time) or (d) any action asserting a claim governed by the internal affairs doctrine, except for, as to each of (a) through (d) above, any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within 10 days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than such court or for which such court does not have subject matter jurisdiction.

Unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended.

Any person or entity purchasing or otherwise acquiring any interest in any security of the Company shall be deemed to have notice of and consented to the provisions of this Section 9.5. For the avoidance of doubt, nothing contained in this Section 9.5 shall apply to any action brought to enforce a duty or liability created by the 1934 Act or any successor thereto.

ARTICLE X - AMENDMENTS

These bylaws may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the affirmative vote of the holders of at least 66 2/3% of the total voting power of outstanding voting securities, voting together as a single class, shall be required for the stockholders of the Company to alter, amend or repeal, or adopt any bylaw inconsistent with, the following provisions of these bylaws: Article II, Section 3.1, Section 3.2, Section 3.4, Section 3.11, Article VIII, Section 9.5 or this Article X (including, without limitation, any such Article or Section as renumbered as a result of any amendment, alteration, change, repeal, or adoption of any other bylaw). The Board of Directors shall also have the power to adopt, amend or repeal bylaws; provided, however, that a bylaw amendment adopted by stockholders which specifies the votes that shall be necessary for the election of directors shall not be further amended or repealed by the Board of Directors.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of the 19th day of December, 2019, by and among SGI-DNA, Inc., a Delaware corporation (the "**Company**"), each of the investors listed on Schedule A hereto, each of which is referred to in this Agreement as an "**Investor**", and any Additional Purchaser (as defined in the Purchase Agreement) that becomes a party to this Agreement in accordance with Section 6.9 hereof.

RECITALS

WHEREAS, certain of the Investors (the "**Existing Investors**") hold shares of the Company's Series A Preferred Stock, Series Z Preferred Stock and/or shares of Common Stock and possess registration rights, information rights, rights of first offer, and other rights pursuant to that certain Investors' Rights Agreement, dated as of August 27, 2019, by and among the Company and such Existing Investors (the "**Prior Agreement**");

WHEREAS, the Company and the Existing Investors desire to amend and restate the Prior Agreement in its entirety and to accept the rights and obligations created pursuant to this Agreement in lieu of the rights and obligations set forth in the Prior Agreement; and

WHEREAS, certain of the Investors are parties to that certain Series A-1 Preferred Stock Purchase Agreement of even date herewith by and among the Company and such Investors (as amended from time to time, the "**Purchase Agreement**"), under which certain of the Company's and such Investors' obligations are conditioned upon the execution and delivery of this Agreement by certain of the Investors and the Company.

AGREEMENT

NOW, THEREFORE, effective as of the date hereof, the Company and the Existing Investors hereby agree that the Prior Agreement shall be amended and restated in its entirety by this Agreement, and the Company and the Investors further agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer, director or trustee of such Person, or any venture capital fund or registered investment company now or hereafter existing that is controlled by one or more general partners, managing members or investment adviser of, or shares the same management company or investment adviser with, such Person.

1.2 "**Board of Directors**" means the board of directors of the Company.

1.3 "**Certificate of Incorporation**" means the Company's Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.4 "**Common Stock**" means shares of the Company's common stock, par value \$0.0001 per share.

1.5 "**Competitor**" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in a business that is competitive with the Company, as determined in good faith by the Board of Directors, but shall not include Northpond Ventures, LP or any other financial

investment firm or collective investment vehicle that, together with its Affiliates, holds less than twenty percent (20)% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the board of directors of any Competitor.

1.6 **“Damages”** means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.7 **“Derivative Securities”** means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.8 **“Exchange Act”** means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.9 **“Excluded Registration”** means (i) a registration relating to the sale or grant of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, equity incentive or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.10 **“FOIA Party”** means a Person that, in the reasonable determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 (**“FOIA”**), any state public records access law, any state or other jurisdiction’s laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.11 **“Form S-1”** means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.12 **“Form S-3”** means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits forward incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.13 **“GAAP”** means generally accepted accounting principles in the United States as in effect from time to time.

1.14 **“Holder”** means any holder of Registrable Securities who is a party to this Agreement.

1.15 **“Immediate Family Member”** means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, domestic partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, of a natural person referred to herein.

1.16 **“Initiating Holders”** means, collectively, Holders who properly initiate a registration request under this Agreement.

1.17 **“IPO”** means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.18 **“Key Employee”** means any executive-level employee (including, division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.19 **“Major Investor”** means any Investor that, individually or together with such Investor’s Affiliates, holds at least 3,000,000 Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.20 **“New Securities”** means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.21 **“Person”** means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.22 **“Preferred Stock”** means, collectively, all shares of Series A-1 Preferred Stock, Series A Preferred Stock and Series Z Preferred Stock.

1.23 **“Registrable Securities”** means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; (ii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof; and (iii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to [Section 6.1](#), and excluding for purposes of [Section 2](#) any shares for which registration rights have terminated pursuant to [Section 2.13](#) of this Agreement.

1.24 **“Registrable Securities then outstanding”** means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.25 **“Restricted Securities”** means the securities of the Company required to be notated with the legend set forth in [Section 2.12\(b\)](#) hereof.

1.26 **“SEC”** means the Securities and Exchange Commission.

- 1.27 “**SEC Rule 144**” means Rule 144 promulgated by the SEC under the Securities Act.
- 1.28 “**SEC Rule 145**” means Rule 145 promulgated by the SEC under the Securities Act.
- 1.29 “**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.
- 1.30 “**Selling Expenses**” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.
- 1.31 “**Series A Director**” shall have the meaning set forth in the Certificate of Incorporation.
- 1.32 “**Series A Preferred Stock**” means shares of the Company’s Series A Preferred Stock, par value \$0.0001 per share.
- 1.33 “**Series A-1 Preferred Stock**” means shares of the Company’s Series A-1 Preferred Stock, par value \$0.0001 per share.
- 1.34 “**Series Z Preferred Stock**” means shares of the Company’s Series Z Preferred Stock, par value \$0.0001 per share.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five (5) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to the Registrable Securities of such Holders having an aggregate offering price, net of Selling Expenses, of at least \$10,000,000, then the Company shall (x) within ten (10) days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least twenty percent (20%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$3,000,000, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering

all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1(c) and Section 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; provided, however, that the Company may not invoke this right more than once in any twelve (12) month period; and provided further that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90) days period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(a) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(b)(i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(d); provided, that if such withdrawal is during a period the Company has deferred taking action pursuant to Section 2.1(c), then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in

such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein; provided, however, that the liability of each Holder of Registrable Securities in respect of any indemnification, contribution or other obligation of such Holder arising under such underwriting agreement (i) shall be limited to losses arising out of or based upon an untrue statement or alleged untrue statement or omission or alleged omission made in such registration statement, any such preliminary prospectus, final prospectus, summary prospectus, amendment or supplement, incorporated document or other such disclosure document or other document or report, in reliance upon and in conformity with written information furnished to the Company by or on behalf of, and relating to, such Holder expressly for inclusion therein and (ii) shall not in any event exceed an amount equal to the net proceeds to such Holder (after deduction of all underwriters' discounts and commissions paid by such Holder) from the disposition of the Registrable Securities disposed of by such Holder pursuant to such registration. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company; provided, however, that the liability of each Holder of Registrable Securities in respect of any indemnification, contribution or other obligation of such Holder arising under such underwriting agreement (i) shall be limited to losses arising out of or based upon an untrue statement or alleged untrue statement or omission or alleged omission made in such registration statement, any such preliminary prospectus, final prospectus, summary prospectus, amendment or supplement, incorporated document or

other such disclosure document or other document or report, in reliance upon and in conformity with written information furnished to the Company by or on behalf of, and relating to, such Holder expressly for inclusion therein and (ii) shall not in any event exceed an amount equal to the net proceeds to such Holder (after deduction of all underwriters' discounts and commissions) from the disposition of the Registrable Securities disposed of by such Holder pursuant to such registration. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest one hundred (100) shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below twenty-five percent (25%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

(c) For purposes of Section 2.1, a registration shall not be counted as "effected" if, as a result of an exercise of the underwriter's cutback provisions in Section 2.3(a), fewer than fifty percent (50%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration, and (ii) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such one

hundred twenty (120) day period shall be extended for up to sixty (60) days, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; provided that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its

insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 **Furnish Information.** It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 **Expenses of Registration.** All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$25,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; provided, however, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1(a) or Section 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf

2.7 **Delay of Registration.** No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 **Indemnification.** If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder regarding itself or the Registrable Securities held by it, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder regarding itself or the Registrable Securities held by it expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and provided further that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Section 2.8(b) and Section 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other

relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company, that would (i) allow such holder or prospective holder to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such

holder or prospective holder; provided that this limitation shall not apply to Registrable Securities acquired by any additional Investor that becomes a party to this Agreement in accordance with Section 6.9.

2.11 “Market Stand-off” Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the registration by the Company for its own behalf of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1, and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days, in the case of the IPO, or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports, and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock (whether such shares or any such securities are then owned by the Holder or are thereafter acquired) or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Section 2.11 shall apply only to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers and directors are subject to the same restrictions and the Company obtains a similar agreement from all stockholders individually owning more than one percent (1%) of the Company’s outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Company stockholders that are subject to such agreements, based on the number of shares subject to such agreements.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2.12(c)) be notated with a legend substantially in the following form:

THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH TRANSFER MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL IN A FORM SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.12.

The foregoing legend shall be removed from the certificates representing any Restricted Securities, at the request of the holder thereof, at such time as (a) a period of at least one year, as determined in accordance with paragraph (d) of SEC Rule 144, has elapsed since the later of the date the Restricted Securities were acquired from the Company or an affiliate of the Company, and (b) the Restricted Securities become eligible for resale pursuant to SEC Rule 144(b)(1)(i).

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Section

2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of:

- (a) the closing of a Deemed Liquidation Event (as such term is defined in the Certificate of Incorporation);
- (b) such time after consummation of the IPO as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration;
- (c) the fifth (5th) anniversary of the date of the IPO.

3. Information Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor, provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company:

(a) as soon as practicable, but in any event within ninety (90) days after the end of each fiscal year of the Company (i) an unaudited balance sheet as of the end of such year, (ii) unaudited statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all prepared in accordance with GAAP (except that such financial statements may (1) be subject to normal year-end audit adjustments; and (2) not contain all notes thereto that may be required in accordance with GAAP;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company and solely to the extent requested by such Major Investor, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company;

(d) as soon as practicable, but in any event within thirty (30) days of the end of each month, an unaudited income statement for such month, and an unaudited balance sheet as of the end of such month, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(e) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the “**Budget**”), approved by the Board of Directors (including the Series A Director) and prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company; and

(f) such other information relating to the financial condition, business, prospects, or corporate affairs of the Company as any Major Investor may from time to time reasonably request; provided, however, that the Company shall not be obligated under this Section 3.1 to provide information (i) that the Company reasonably determines in good faith to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in a form acceptable to the Company); or (ii) the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 during the period starting with the date sixty (60) days before the Company’s good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company’s covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor (provided that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company), at such Major Investor’s expense, to visit and inspect the Company’s properties; examine its books of account and records; and discuss the Company’s affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; provided, however, that the Company shall not be obligated pursuant to this Section 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Termination of Information Rights. The covenants set forth in Section 3.1 and Section 3.2 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon the closing of a Deemed Liquidation Event, whichever event occurs first.

3.4 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3.4 by such Investor), (b) is or has been independently developed or conceived by such Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to such Investor by a third party without, to such Investor's knowledge, a breach of any obligation of confidentiality such third party may have to the Company; provided, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Section 3.4; (iii) to any existing or prospective Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, provided that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be required by law, regulation, rule, court order or subpoena, provided that such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Section 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself and (ii) its Affiliates; provided that each such Affiliate (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Amended and Restated Voting Agreement and Amended and Restated Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an **"Investor"** under each such agreement (provided that any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Section 3.1, Section 3.2 and Section 4.1 hereof).

(a) The Company shall give notice (the **"Offer Notice"**) to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Major Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Major Investor) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and any other Derivative Securities then outstanding). At the expiration of such twenty (20) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a **"Fully Exercising Investor"**) of any other Major Investor's failure to do likewise. During the ten (10) day period commencing after the Company has given such notice, each Fully

Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Section 4.1(b) shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Section 4.1(b), the Company may, during the ninety (90) day period following the expiration of the periods provided in Section 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Section 4.1.

(d) The right of first offer in this Section 4.1 shall not be applicable to (i) Exempted Securities (as defined in the Certificate of Incorporation); and (ii) shares of Common Stock issued in the IPO; and (iii) the issuance of shares of Series A-1 Preferred Stock to Additional Purchasers pursuant to Section 1.3 of the Purchase Agreement.

(e) Notwithstanding any provision hereof to the contrary, in lieu of complying with the provisions of this Section 4.1, the Company may elect to give notice to the Major Investors within thirty (30) days after the issuance of New Securities. Such notice shall describe the type, price, and terms of the New Securities. Each Major Investor shall have twenty (20) days from the date notice is given to elect to purchase up to the number of New Securities that would, if purchased by such Major Investor, maintain such Major Investor's percentage-ownership position, calculated as set forth in Section 4.1(b) before giving effect to the issuance of such New Securities.

4.2 Termination. The covenants set forth in Section 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon the closing of a Deemed Liquidation Event, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall use commercially reasonable efforts to maintain, from financially sound and reputable insurers, its Directors and Officers liability insurance and term "key-person" insurance on Todd Nelson, each in an amount and on terms and conditions satisfactory to the Board of Directors until such time as the Board of Directors determines that such insurance should be discontinued. The key-person policy shall name the Company as loss payee, and no such policy shall be cancelable by the Company without prior approval by the Board of Directors, including the Series A Director. Notwithstanding any other provision of this Section 5.1 to the contrary, for so long as the Series A Director is serving on the Board of Directors, following the Company obtaining Directors and Officers liability insurance policy pursuant to the first sentence of this Section 5.1, the Company shall not cease to

maintain a Directors and Officers liability insurance policy in an amount of at least one (1) million unless approved by the Series A Director.

5.2 Employee Agreements. The Company will cause each Person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement in a form approved by the Board of Directors.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including the Series A Director, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Section 2.11. Without the prior approval by the Board of Directors, including the Series A Director, the Company shall not amend, modify, terminate, waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be inconsistent with this Section 5.2. In addition, unless otherwise approved by the Board of Directors, the Company shall retain (and not waive) a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the nonemployee directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors. The Series A Director shall be entitled in such director's discretion to be a member of any committee of the Board of Directors.

5.5 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, the Certificate of Incorporation, or elsewhere, as the case may be.

5.6 Right to Conduct Activities. The Company hereby agrees and acknowledges that certain Investors (together with their respective Affiliates) are professional investment organizations (such Investors, "**Fund Investors**"), and as such reviews the business plans and related proprietary information of many enterprises, some of which may compete directly or indirectly with the Company's business (as currently conducted or as currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, each Fund Investor (and its respective Affiliates) shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by such Fund Investor (and its respective Affiliates) in any entity competitive with the Company, or (ii) actions taken by any partner, officer, employee or other representative of such Fund Investor (and its respective Affiliates) to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability

associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

5.7 Termination of Covenants. The covenants set forth in this Section 5 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, or (iii) upon a Deemed Liquidation Event, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 500,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall, as a condition to the applicable transfer, establish a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

6.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or

(i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on Schedule A hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this Section 6.5. If notice is given to the Company, a copy shall also be sent to Jeff Baglio, DLA Piper LLP (US), 4365 Executive Drive, Suite 1100, San Diego, CA 92121, E-mail Jeff.Baglio@US.DLAPiper.com. If notice is given to any Investor, a copy (which shall not constitute notice) shall also be given to Ropes & Gray LLP, The Prudential Tower, 800 Boylston Street, Boston, MA 02199, Attention: Joel F. Freedman, Telephone 617- 951-7309, Fax: 617-951-7050.

(b) Consent to Electronic Notice. Each Investor consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "DGCL"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address or the facsimile number set forth below such Investor's name on the Schedules hereto, as updated from time to time by notice to the Company, or as on the books of the Company. To the extent that any notice given by means of electronic transmission is returned or undeliverable for any reason, the foregoing consent shall be deemed to have been revoked until a new or corrected electronic mail address has been provided, and such attempted Electronic Notice shall be ineffective and deemed to not have been given. Each Investor agrees to promptly notify the Company of any change in such stockholder's electronic mail address, and that failure to do so shall not affect the foregoing.

6.6 Amendments and Waivers. Any term of this Agreement may be amended, modified or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of (i) the Company and (ii) the Investors holding a majority of the Registrable Securities then outstanding and held by the Investors (voting as a single separate class and on an as-converted basis); provided that the Company may in its sole discretion waive compliance with Section 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Section 2.12(c) shall be deemed to be a waiver); and provided further that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (a) this Agreement may not be amended, modified or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, modification, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction); (b) Section 3.1, Section 3.2 and Section 4, and any other section of this Agreement applicable to the Major Investors (including this clause (b) of this Section 6.6) may not be amended, modified, terminated or waived without the written consent of the holders of a majority of the Registrable Securities then outstanding and held by the Major Investors. Notwithstanding the foregoing, Schedule A hereto may be amended by the Company from time to time to add transferees of any Registrable Securities in compliance with the terms of this Agreement without the consent of the other parties; and Schedule A hereto may also be amended by the Company after the date of this

Agreement without the consent of the other parties to add information regarding any additional Investor who becomes a party to this Agreement in accordance with Section 6.9. The Company shall give prompt notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination, or waiver. Any amendment, modification, termination, or waiver effected in accordance with this Section 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 Entire Agreement. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled. Upon the effectiveness of this Agreement, the Prior Agreement shall be deemed amended and restated and superseded and replaced in its entirety by this Agreement, and shall be of no further force or effect. This Agreement shall be effective as of the date hereof

6.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of San Diego, California and to the jurisdiction of the United States District Court for the Southern District of California for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of San Diego, California or the United States District Court for the Southern District of California, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

Each party will bear its own costs in respect of any disputes arising under this Agreement. Each of the parties to this Agreement consents to personal jurisdiction for any equitable action sought in the U.S. District Court for the Southern District of California or any court of the State of California having subject matter jurisdiction.

6.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

Remainder of Page Intentionally Left Blank.

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR

NORTH POND VENTURES, LP

By: Northpond Ventures GP
its general partner:

By: /s/ Patrick Smerkers

Name: Patrick Smerkers

Title: Director of Finance and Operations

Signature Page to Amended and Restated Investors' Rights Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR

DH LIFE SCIENCES LLC

By: /s/ Michael Egholm

Name: Michael Egholm

Title: Chief Technology Officer

Signature Page to Amended and Restated Investors' Rights Agreement

IN WITNESS WHEREOF, the parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR

TODD NELSON

/s/ Todd Nelson

Signature Page to Amended and Restated Investors' Rights Agreement

SCHEDULE A
INVESTORS

Name and Address

NORTHPOUND VENTURES, LP
7500 Old Georgetown Rd, Suite 850
Bethesda, MD 20814

GATTACA MINING LLC
9535 Waples Street, Suite 100 San Diego, Ca 92121
TNelson@sgidna.com

DH LIFE SCIENCES LLC
2200 Pennsylvania Avenue N.W., Suite 800W Washington, D.C. 20037

BROADOAK FUND IV, LLC
4800 Montgomery Lane, Suite 230
Bethesda, MD 20814
bsnider@broadoak.com

TODD NELSON
9535 Waples Street, Suite 100
San Diego, Ca 92121
TNelson@sgidna.com

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “**ACT**”), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN SECTIONS 5.3 AND 5.4 BELOW, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR IN FORM AND SUBSTANCE SATISFACTORY TO THE COMPANY, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

WARRANT TO PURCHASE STOCK

Company: CODEX DNA, INC.

Number of Shares: The number of Shares which is equal to \$225,000 divided by the Warrant Price for such Type/Series of Stock, plus all Additional Shares, which Holder is entitled to pursuant to Section 1.7.

Type/Series of Stock: Either (a) Series A-1 Preferred Stock, or (b) if the Company issues its Next Round Stock, on or prior to the earlier of (i) August 1, 2021, and (ii) the closing of an acquisition or sale of substantially all of the assets of the Company, then, the Type/Series of Stock issuable pursuant to this Warrant shall be the Next Round Stock of Borrower. As used herein, “**Next Round Stock**” means the Series B Preferred Stock, or such other next series of the Company’s preferred equity securities, issued in connection with the Company’s next bona fide round of preferred stock equity financing that is consummated after the Issue Date of this Warrant (the “**Next Equity Round**”).

Warrant Price: (a) For Series A-1 Preferred Stock, \$1.20177 per share, which is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date in an arms-length transaction in which at least \$500,000 of such shares were sold, and (b) for Next Round Stock, the lowest price per Share paid by an investor for a Share of Next Round Stock in the Next Equity Round.

Issue Date: March 4, 2021

Expiration Date: March 4, 2031 See also Section 5.1(b).

Credit Facility: This Warrant to Purchase Stock (as the same may from time to time be amended, modified, supplemented or restated, the “**Warrant**”) is issued in connection with that certain Loan and Security Agreement dated as of even date herewith between Silicon Valley Bank and the Company (as the same may from time to time be amended, modified, supplemented or restated, the “**Loan Agreement**”).

THIS WARRANT CERTIFIES THAT, for good and valuable consideration, SILICON VALLEY BANK (together with any successor or permitted assignee or transferee of this Warrant or of any shares issued upon exercise hereof, "**Holder**") is entitled to purchase the number of fully paid and non-assessable shares (the "**Shares**") of the above-stated Type/Series of Stock (the "**Class**") of the above-named company (the "**Company**") at the above-stated Warrant Price, all as set forth above and as adjusted pursuant to Section 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant. Reference is made to Section 5.4 of this Warrant whereby Silicon Valley Bank shall transfer this Warrant to its parent company, SVB Financial Group.

SECTION 1. **EXERCISE.**

1.1 **Method of Exercise.** Holder may at any time and from time to time exercise this Warrant, in whole or in part, by delivering to the Company the original of this Warrant together with a duly executed Notice of Exercise in substantially the form attached hereto as Appendix 1 and, unless Holder is exercising this Warrant pursuant to a cashless exercise set forth in Section 1.2, a check, wire transfer of same-day funds (to an account designated by the Company), or other form of payment acceptable to the Company for the aggregate Warrant Price for the Shares being purchased.

1.2 **Cashless Exercise.** On any exercise of this Warrant, in lieu of payment of the aggregate Warrant Price in the manner as specified in Section 1.1 above, but otherwise in accordance with the requirements of Section 1.1, Holder may elect to receive Shares equal to the value of this Warrant, or portion hereof as to which this Warrant is being exercised. Thereupon, the Company shall issue to the Holder such number of fully paid and non-assessable Shares as are computed using the following formula:

$$X = Y(A-B)/A$$

where:

X = the number of Shares to be issued to the Holder;

Y = the number of Shares with respect to which this Warrant is being exercised (inclusive of the Shares surrendered to the Company in payment of the aggregate Warrant Price);

A = the Fair Market Value (as determined pursuant to Section 1.3 below) of one Share; and

B = the Warrant Price.

1.3 **Fair Market Value.** If the Company's common stock is then traded or quoted on a nationally recognized securities exchange, inter-dealer quotation system or over-the-counter market (a "**Trading Market**") and the Class is common stock, the fair market value of a Share shall be the closing price or last sale price of a share of common stock reported for the Business

Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company. If the Company's common stock is then traded in a Trading Market and the Class is a series of the Company's convertible preferred stock, the fair market value of a Share shall be the closing price or last sale price of a share of the Company's common stock reported for the Business Day immediately before the date on which Holder delivers this Warrant together with its Notice of Exercise to the Company multiplied by the number of shares of the Company's common stock into which a Share is then convertible. If the Company's common stock is not traded in a Trading Market, the Board of Directors of the Company shall determine the fair market value of a Share in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Within a reasonable time after Holder exercises this Warrant in the manner set forth in Section 1.1 or 1.2 above, the Company shall deliver to Holder a certificate representing the Shares issued to Holder upon such exercise and, if this Warrant has not been fully exercised and has not expired, a new warrant of like tenor representing the Shares not so acquired.

1.5 Replacement of Warrant. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form, substance and amount to the Company or, in the case of mutilation, on surrender of this Warrant to the Company for cancellation, the Company shall, within a reasonable time, execute and deliver to Holder, in lieu of this Warrant, a new warrant of like tenor and amount.

1.6 Treatment of Warrant Upon Acquisition of Company.

(a) Acquisition. For the purpose of this Warrant, "**Acquisition**" means any transaction or series of related transactions involving: (i) the sale, lease, exclusive license, or other disposition of all or substantially all of the assets of the Company (ii) any merger or consolidation of the Company into or with another person or entity (other than a merger or consolidation effected exclusively to change the Company's domicile), or any other corporate reorganization, in which the stockholders of the Company in their capacity as such immediately prior to such merger, consolidation or reorganization, own less than a majority of the Company's (or the surviving or successor entity's) outstanding voting power immediately after such merger, consolidation or reorganization; or (iii) any sale or other transfer by the stockholders of the Company of shares representing at least a majority of the Company's then-total outstanding combined voting power. For the avoidance of doubt, "Acquisition" shall exclude any transaction or series of transactions in which the Company sells and issues its capital stock to venture capital investors, for capital raising purposes, in a bona fide round of preferred stock financing (in which the Company is the sole surviving corporation).

(b) Treatment of Warrant at Acquisition. In the event of an Acquisition in which the consideration to be received by the Company's stockholders consists solely of cash, solely of Marketable Securities or a combination of cash and Marketable Securities (a "**Cash/Public Acquisition**"), and the fair market value of one Share as determined in accordance with Section 1.3 above would be greater than the Warrant Price in effect on such date immediately prior to such Cash/Public Acquisition, and Holder has not exercised this Warrant pursuant to

Section 1.1 above as to all Shares, then this Warrant shall automatically be deemed to be Cashless Exercised pursuant to Section 1.2 above as to all Shares effective immediately prior to and contingent upon the consummation of a Cash/Public Acquisition. In connection with such Cashless Exercise, Holder shall be deemed to have restated each of the representations and warranties in Section 4 of the Warrant as the date thereof and the Company shall promptly notify the Holder of the number of Shares (or such other securities) issued upon exercise. In the event of a Cash/Public Acquisition where the fair market value of one Share as determined in accordance with Section 1.3 above would be less than the Warrant Price in effect immediately prior to such Cash/Public Acquisition, then this Warrant will expire immediately prior to the consummation of such Cash/Public Acquisition.

(c) Upon the closing of any Acquisition other than a Cash/Public Acquisition defined above, the acquiring, surviving or successor entity shall assume the obligations of this Warrant, and this Warrant shall thereafter be exercisable for the same securities and/or other property as would have been paid for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on and as of the closing of such Acquisition, subject to further adjustment from time to time in accordance with the provisions of this Warrant.

(d) As used in this Warrant, "**Marketable Securities**" means securities meeting all of the following requirements: (i) the issuer thereof is then subject to the reporting requirements of Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), and is then current in its filing of all required reports and other information under the Act and the Exchange Act; (ii) the class and series of shares or other security of the issuer that would be received by Holder in connection with the Acquisition were Holder to exercise this Warrant on or prior to the closing thereof is then traded in Trading Market, and (iii) following the closing of such Acquisition, Holder would not be restricted from publicly reselling all of the issuer's shares and/or other securities that would be received by Holder in such Acquisition were Holder to exercise or convert this Warrant in full on or prior to the closing of such Acquisition, except to the extent that any such restriction (x) arises solely under federal or state securities laws, rules or regulations, and (y) does not extend beyond six (6) months from the closing of such Acquisition.

1.7 **Additional Shares.** In addition to the right to purchase the Initial Shares granted to Holder on the Issue Date, the Company shall be deemed to have automatically granted Holder, in addition to the number of Shares for which this warrant can otherwise be exercised by Holder, the right to purchase on the funding date of each Term Loan Advance under the Loan Agreement after the Effective Date, at an exercise price per share equal to the Warrant Price, that number of additional Shares equal to one and one-half percent (1.5%) of each such Term Loan Advance divided by the Warrant Price (all such additional Shares being called the "**Additional Shares**"); provided that if the funding date of any Term Loan Advance under the Loan Agreement occurs after the earlier of (i) August 1, 2021, and (ii) the closing of an acquisition or sale of substantially all of the assets of Borrower, and Borrower has closed its Next Equity Round, then, if this Warrant is not already exercisable for the Company's Next Round Stock, then Borrower shall issue a new warrant for the Additional Shares, which Additional Shares shall be the Next Round

Stock, and such Additional Shares shall be at an exercise price per share equal to the lowest price paid per share of such next Round Stock, the number of additional Shares shall equal to one and one-half percent (1.5%) of each such Term Loan Advance divided by the lowest price paid per share of such Next Round Stock. Capitalized terms used but not defined in this Section 1.7 shall have the meanings given to them in the Loan Agreement.

SECTION 2. ADJUSTMENTS TO THE SHARES AND WARRANT PRICE.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend or distribution on the outstanding shares of the Class payable in common stock or other securities or property (other than cash), then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without additional cost to Holder, the total number and kind of securities and property which Holder would have received had Holder owned the Shares of record as of the date the dividend or distribution occurred. If the Company subdivides the outstanding shares of the Class by reclassification or otherwise into a greater number of shares, the number of Shares purchasable hereunder shall be proportionately increased and the Warrant Price shall be proportionately decreased. If the outstanding shares of the Class are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased and the number of Shares shall be proportionately decreased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any event whereby all of the outstanding shares of the Class are reclassified, exchanged, combined, substituted, or replaced for, into, with or by Company securities of a different class and/or series, then from and after the consummation of such event, this Warrant will be exercisable for the number, class and series of Company securities that Holder would have received had the Shares been outstanding on and as of the consummation of such event, and subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, combinations substitutions, replacements or other similar events.

2.3 Conversion of Preferred Stock. If the Class is a class and series of the Company's convertible preferred stock, in the event that all outstanding shares of the Class are converted, automatically or by action of the holders thereof, into common stock pursuant to the provisions of the Company's Certificate of Incorporation, including, without limitation, in connection with the Company's initial, underwritten public offering and sale of its common stock pursuant to an effective registration statement under the Act (the "IPO"), then from and after the date on which all outstanding shares of the Class have been so converted, this Warrant shall be exercisable for such number of shares of common stock into which the Shares would have been converted had the Shares been outstanding on the date of such conversion, and the Warrant Price shall equal the Warrant Price in effect as of immediately prior to such conversion divided by the number of shares of common stock into which one Share would have been converted, all subject to further adjustment thereafter from time to time in accordance with the provisions of this Warrant.

2.4 Adjustments for Diluting Issuances. Without duplication of any adjustment otherwise provided for in this Section 2, the number of shares of common stock issuable upon conversion of the Shares shall be subject to anti-dilution adjustment from time to time in the

manner set forth in the Company's Certificate of Incorporation as if the Shares were issued and outstanding on and as of the date of any such required adjustment.

2.5 No Fractional Share. No fractional Share shall be issuable upon exercise of this Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional Share interest arises upon any exercise of the Warrant, the Company shall eliminate such fractional Share interest by paying Holder in cash the amount computed by multiplying the fractional interest by (i) the fair market value (as determined in accordance with Section 1.3 above) of a full Share, less (ii) the then-effective Warrant Price.

2.6 Notice/Certificate as to Adjustments. Upon each adjustment of the Warrant Price, Class and/or number of Shares, the Company, at the Company's expense, shall notify Holder in writing within a reasonable time setting forth the adjustments to the Warrant Price, Class and/or number of Shares and facts upon which such adjustment is based. The Company shall, upon written request from Holder, furnish Holder with a certificate of its Chief Financial Officer, including computations of such adjustment and the Warrant Price, Class and number of Shares in effect upon the date of such adjustment.

SECTION 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to, and agrees with, the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than the price per share at which shares of the Class were last sold and issued prior to the Issue Date hereof in an arms-length transaction in which at least \$500,000 of such shares were sold.

(b) All Shares which may be issued upon the exercise of this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and non-assessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws. The Company covenants that it shall at all times cause to be reserved and kept available out of its authorized and unissued capital stock such number of shares of the Class, common stock and other securities as will be sufficient to permit the exercise in full of this Warrant and the conversion of the Shares into common stock or such other securities.

(c) The Company's capitalization table attached hereto as Schedule 1 is true and complete, in all material respects, as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time to:

(a) declare any dividend or distribution upon the outstanding shares of the Class or common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend;

- (b) offer for subscription or sale pro rata to the holders of the outstanding shares of the Class any additional shares of any class or series of the Company's stock (other than pursuant to contractual pre-emptive rights);
- (c) effect any reclassification, exchange, combination, substitution, reorganization or recapitalization of the outstanding shares of the Class;
- (d) effect an Acquisition or to liquidate, dissolve or wind up; or
- (e) effect an IPO;

then, in connection with each such event, the Company shall give Holder:

(1) at least seven (7) Business Days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of outstanding shares of the Class will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (a) and (b) above;

(2) in the case of the matters referred to in (c) and (d) above at least seven (7) Business Days prior written notice of the date when the same will take place (and specifying the date on which the holders of outstanding shares of the Class will be entitled to exchange their shares for the securities or other property deliverable upon the occurrence of such event and such reasonable information as Holder may reasonably require regarding the treatment of this Warrant in connection with such event giving rise to the notice); and

(3) with respect to the IPO, at least seven (7) Business Days prior written notice of the date on which the Company proposes to file its registration statement in connection therewith.

Company will also provide information requested by Holder that is reasonably necessary to enable Holder to comply with Holder's accounting or reporting requirements, subject to Holder being bound by the confidentiality obligations set forth in Section 12.9 of the Loan Agreement.

SECTION 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER.

The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. This Warrant and the securities to be acquired upon exercise of this Warrant by Holder are being acquired for investment for Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the Act. Holder also represents that it has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. Holder is aware of the Company's business affairs and financial condition and has received or has had full access to all the information it considers

necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to Holder or to which Holder has access.

4.3 Investment Experience. Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. Holder has experience as an investor in securities of companies in the development stage and acknowledges that Holder can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. Holder is an "accredited investor" within the meaning of Regulation D promulgated under the Act.

4.5 The Act. Holder understands that this Warrant and the Shares issuable upon exercise hereof have not been registered under the Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Holder's investment intent as expressed herein. Holder understands that this Warrant and the Shares issued upon any exercise hereof must be held indefinitely unless subsequently registered under the Act and qualified under applicable state securities laws, or unless exemption from such registration and qualification are otherwise available. Holder is aware of the provisions of Rule 144 promulgated under the Act.

4.6 Market Stand-off Agreement. The Holder agrees that the Shares shall be subject to the Market Standoff provisions in Section 2.11 of the Amended and Restated Investor Rights Agreement dated as of December 19, 2019, as may be amended from time to time.

4.7 No Voting Rights. Holder, as a Holder of this Warrant, will not have any voting rights until the exercise of this Warrant.

SECTION 5. MISCELLANEOUS.

5.1 Term and Automatic Conversion Upon Expiration.

(a) Term. Subject to the provisions of Section 1.6 above, this Warrant is exercisable in whole or in part at any time and from time to time on or before 6:00 PM, Pacific time, on the Expiration Date and shall be void thereafter.

(b) Automatic Cashless Exercise upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Warrant Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be exercised pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised, and the Company shall, within a reasonable time, deliver a certificate representing the Shares (or such other securities) issued upon such exercise to Holder.

5.2 Legends. The Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

THE SHARES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR THE SECURITIES LAWS OF ANY STATE AND, EXCEPT AS SET FORTH IN THAT CERTAIN WARRANT TO PURCHASE STOCK ISSUED BY THE ISSUER TO SILICON VALLEY BANK DATED MARCH 4, 2021, MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED UNLESS AND UNTIL REGISTERED UNDER SAID ACT AND LAWS OR IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER, SUCH OFFER, SALE, PLEDGE OR OTHER TRANSFER IS EXEMPT FROM SUCH REGISTRATION.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part except in compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to SVB Financial Group (Silicon Valley Bank's parent company) or any other affiliate of Holder, provided that any such transferee is an "accredited investor" as defined in Regulation D promulgated under the Act. Additionally, the Company shall also not require an opinion of counsel if there is no material question as to the availability of Rule 144 promulgated under the Act.

5.4 Transfer Procedure. After receipt by Silicon Valley Bank of the executed Warrant, Silicon Valley Bank will transfer all of this Warrant to its parent company, SVB Financial Group. By its acceptance of this Warrant, SVB Financial Group hereby makes to the Company each of the representations and warranties set forth in Section 4 hereof and agrees to be bound by all of the terms and conditions of this Warrant as if the original Holder hereof. Subject to the provisions of Section 5.3 and upon providing the Company with written notice,

SVB Financial Group and any subsequent Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable directly or indirectly, upon conversion of the Shares, if any) to any transferee, provided, however, in connection with any such transfer, SVB Financial Group or any subsequent Holder will give the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and Holder will surrender this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable); and provided further, that any subsequent transferee other than SVB Financial Group shall agree in writing with the Company to be bound by all of the terms and conditions of this Warrant. Notwithstanding any contrary provision herein, at all times prior to the IPO, Holder may not, without the Company's prior written consent, transfer this Warrant or any portion hereof, or any Shares issued upon any exercise hereof, or any shares or other securities issued upon any conversion of any Shares issued upon any exercise hereof, to any person or entity who directly competes with the Company, except in connection with an Acquisition of the Company by such a direct competitor.

5.5 Notices. All notices and other communications hereunder from the Company to the Holder, or vice versa, shall be deemed delivered and effective (i) when given personally, (ii) on the third (3rd) Business Day after being mailed by first-class registered or certified mail, postage prepaid, (iii) upon actual receipt if given by facsimile or electronic mail and such receipt is confirmed in writing by the recipient, or (iv) on the first Business Day following delivery to a reliable overnight courier service, courier fee prepaid, in any case at such address as may have been furnished to the Company or Holder, as the case may be, in writing by the Company or such Holder from time to time in accordance with the provisions of this Section 5.5. All notices to Holder shall be addressed as follows until the Company receives notice of a change of address in connection with a transfer or otherwise:

SVB Financial Group
Attn: Treasury Department
3003 Tasman Drive, HC 215
Santa Clara, CA 95054
Telephone: (408) 654-7400
Facsimile: (408) 988-8317
Email address: derivatives@svb.com

Notice to the Company shall be addressed as follows until Holder receives notice of a change in address:

Codex DNA, Inc.
Attn: Todd Nelson, CEO
9535 Waples Street, Ste 100
Email: todd@codexdna.com

With a copy (which shall not constitute notice) to:

Wilson Sonsini Goodrich & Rosati
Attn: Martin Waters
12235 El Camino Real
San Diego, CA 92130
Telephone: (858) 350-2300
Email: MWaters@wsgr.com

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated (either generally or in a particular instance and either retroactively or prospectively) only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

5.8 Counterparts; Facsimile/Electronic Signatures. This Warrant may be executed in counterparts, all of which together shall constitute one and the same agreement. Company, Holder and any other party hereto may execute this Warrant by electronic means and each party hereto recognizes and accepts the use of electronic signatures and records by any other party hereto in connection with the execution and storage hereof. To the extent that this Warrant or any agreement subject to the terms hereof or any amendment hereto is executed, recorded or delivered electronically, it shall be binding to the same extent as though it had been executed on paper with an original ink signature. The fact that this Warrant is executed, signed, stored or delivered electronically shall not prevent the transfer by any Holder of this Warrant pursuant to Section 5.4 or the enforcement of the terms hereof.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

5.10 Headings. The headings in this Warrant are for purposes of reference only and shall not limit or otherwise affect the meaning of any provision of this Warrant.

5.11 Business Days. "**Business Day**" is any day that is not a Saturday, Sunday or a day on which Silicon Valley Bank is closed.

[Remainder of page left blank intentionally]
[Signature page follows]

IN WITNESS WHEREOF, the parties have caused this Warrant to Purchase Stock to be executed by their duly authorized representatives effective as of the Issue Date written above.

“COMPANY”

CODEX DNA, INC.

By: /s/ Todd Nelson

Name: Todd Nelson
Title: CEO

“HOLDER”

SILICON VALLEY BANK

By: /s/ Brendan Crawford

Name: Brendan Crawford
Title: Vice President

[Signature Page to Warrant to Purchase Stock]

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned Holder hereby exercises its right to purchase _____ shares of the Common/Series _____ Preferred [circle one] Stock of CODEX DNA, INC., a Delaware corporation (the "Company") in accordance with the attached Warrant to Purchase Stock, and tenders payment of the aggregate Warrant Price for such shares as follows:

- Check in the amount of \$_____ payable to order of the Company enclosed herewith
- Wire transfer of immediately available funds to the Company's account
- Cashless Exercise pursuant to Section 1.2 of the Warrant
- Other [Describe] _____

2. Please issue a certificate or certificates representing the Shares in the name specified below:

Holder's Name

(Address)

3. By its execution below and for the benefit of the Company, Holder hereby restates each of the representations and warranties in Section 4 of the Warrant to Purchase Stock as of the date hereof.

HOLDER:

By: _____

Name: _____

Title: _____

(Date): _____

SCHEDULE 1

Company Capitalization Table

See attached

Schedule 1

CODEX DNA, INC.

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "**Agreement**") is dated as of [insert date], and is between Codex DNA, Inc., a Delaware corporation (the "**Company**"), and [insert name of indemnitee] ("**Indemnitee**").

RECITALS

- A. Indemnitee's service to the Company substantially benefits the Company.
- B. Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.
- C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.
- D. In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.
- E. This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's certificate of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

The parties therefore agree as follows:

1. **Definitions.**

- (a) A "**Change in Control**" shall be deemed to occur upon the earliest to occur after the date of this Agreement of any of the following events:

(i) *Acquisition of Stock by Third Party.* Any Person (as defined below) becomes the Beneficial Owner (as defined below), directly or indirectly, of securities of the Company representing fifteen percent (15%) or more of the combined voting power of the Company's then outstanding securities;

(ii) *Change in Board Composition.* During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Company's board of directors, and any new directors (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in Sections 1(a)(i), 1(a)(iii) or 1(a)(iv)) whose election by the board of directors or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute at least a majority of the members of the Company's board of directors;

(iii) *Corporate Transactions*. The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 50% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the board of directors or other governing body of such surviving entity;

(iv) *Liquidation*. The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and

(v) *Other Events*. Any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or in response to any similar item on any similar schedule or form) promulgated under the Securities Exchange Act of 1934, as amended, whether or not the Company is then subject to such reporting requirement.

For purposes of this Section 1(a), the following terms shall have the following meanings:

(1) "**Person**" shall have the meaning as set forth in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended; *provided, however*, that "**Person**" shall exclude (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.

(2) "**Beneficial Owner**" shall have the meaning given to such term in Rule 13d-3 under the Securities Exchange Act of 1934, as amended; *provided, however*, that "**Beneficial Owner**" shall exclude any Person otherwise becoming a Beneficial Owner by reason of (i) the stockholders of the Company approving a merger of the Company with another entity or (ii) the Company's board of directors approving a sale of securities by the Company to such Person.

(b) "**Corporate Status**" describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.

(c) "**DGCL**" means the General Corporation Law of the State of Delaware.

(d) "**Disinterested Director**" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(e) "**Enterprise**" means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.

(f) "**Expenses**" include all reasonable and actually incurred attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding. Expenses also include (i) Expenses incurred in connection with any appeal resulting from any

Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond or other appeal bond or their equivalent, and (ii) for purposes of Section 12(d), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(g) "**Independent Counsel**" means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "**Independent Counsel**" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

(h) "**Proceeding**" means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, including any appeal therefrom and including without limitation any such Proceeding pending as of the date of this Agreement, in which Indemnitee was, is or will be involved as a party, a potential party, a non-party witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee's part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification or advancement of expenses can be provided under this Agreement.

(i) Reference to "**other enterprises**" shall include employee benefit plans; references to "**fines**" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "**servicing at the request of the Company**" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "**not opposed to the best interests of the Company**" as referred to in this Agreement.

2. **Indemnity in Third-Party Proceedings.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

3. **Indemnity in Proceedings by or in the Right of the Company.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened

to be made, a party to or a participant in any Proceeding by or in the right of the Company to procure a judgment in its favor. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

4. **Indemnification for Expenses of a Party Who is Wholly or Partly Successful.** To the extent that Indemnitee is a party to or a participant in and is successful (on the merits or otherwise) in defense of any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. For purposes of this section, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. **Indemnification for Expenses of a Witness.** To the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified to the extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

6. **Additional Indemnification.**

(a) Notwithstanding any limitation in Sections 2, 3 or 4, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with the Proceeding or any claim, issue or matter therein.

(b) For purposes of Section 6(a), the meaning of the phrase "**to the fullest extent permitted by applicable law**" shall include, but not be limited to:

(i) the fullest extent permitted by the provision of the DGCL that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the DGCL; and

(ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

7. **Exclusions.** Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):

(a) for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Securities Exchange Act of 1934, as amended (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "**Sarbanes-Oxley Act**"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 12(d) or (iv) otherwise required by applicable law; or

(e) if prohibited by applicable law.

8. **Advances of Expenses.** The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding prior to its final disposition, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 90 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company. This Section 8 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding (or any part of any Proceeding) for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding (or any part of any Proceeding) referenced in Section 7(b) or 7(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

9. **Procedures for Notification and Defense of Claim.**

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding. The failure by Indemnitee to notify the Company will not relieve the Company from any liability which it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights, except to the extent that such failure or delay materially prejudices the Company.

(b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect that may be applicable to the Proceeding, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially-reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, which approval shall not be unreasonably withheld, conditioned or delayed, upon the delivery to Indemnitee of written notice of its election to do so. After delivery of such notice, approval of such counsel by Indemnitee and the retention of such counsel by the Company, the Company will not be liable to Indemnitee for any fees or expenses of counsel subsequently incurred by Indemnitee with respect to the same Proceeding. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's separate counsel to the extent (i) the employment of separate counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company or Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iii) the Company is not financially or legally able to perform its indemnification obligations or (iv) the Company shall not have retained, or shall not continue to retain, counsel to defend such Proceeding. The Company shall have the right to conduct such defense as it sees fit in its sole discretion. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.

(d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.

(e) The Company shall not be liable to indemnify Indemnitee for any settlement of any Proceeding (or any part thereof) without the Company's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

(f) The Company shall not settle any Proceeding (or any part thereof) in a manner that imposes any penalty or liability on Indemnitee without Indemnitee's prior written consent, which shall not be unreasonably withheld, conditioned or delayed.

10. Procedures upon Application for Indemnification.

(a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such failure is prejudicial.

(b) Upon written request by Indemnitee for indemnification pursuant to Section 10(a), a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case (i) if a Change in Control shall have occurred, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (ii) if a Change in Control shall not have occurred, (A) by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (B) by a committee of Disinterested Directors

designated by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (C) if there are no such Disinterested Directors or, if such Disinterested Directors so direct, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (D) if so directed by the Company's board of directors, by the stockholders of the Company. If it is determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) actually and reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the extent permitted by applicable law.

(c) In the event the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 10(b), the Independent Counsel shall be selected as provided in this Section 10(c). If a Change in Control shall not have occurred, the Independent Counsel shall be selected by the Company's board of directors, and the Company shall give written notice to Indemnitee advising him or her of the identity of the Independent Counsel so selected. If a Change in Control shall have occurred, the Independent Counsel shall be selected by Indemnitee (unless Indemnitee shall request that such selection be made by the Company's board of directors, in which event the preceding sentence shall apply), and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either event, Indemnitee or the Company, as the case may be, may, within ten days after such written notice of selection shall have been given, deliver to the Company or to Indemnitee, as the case may be, a written objection to such selection; *provided, however*, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 1 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If such written objection is so made and substantiated, the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after the later of (i) submission by Indemnitee of a written request for indemnification pursuant to Section 10(a) hereof and (ii) the final disposition of the Proceeding, the parties have not agreed upon an Independent Counsel, either the Company or Indemnitee may petition a court of competent jurisdiction for resolution of any objection which shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 10(b) hereof. Upon the due commencement of any judicial proceeding or arbitration pursuant to Section 12(a) of this Agreement, the Independent Counsel shall be discharged and relieved of any further responsibility in such capacity (subject to the applicable standards of professional conduct then prevailing).

(d) The Company agrees to pay the reasonable fees and expenses of any Independent Counsel.

11. Presumptions and Effect of Certain Proceedings.

(a) In making a determination with respect to entitlement to indemnification hereunder, the person, persons or entity making such determination shall, to the fullest extent not prohibited by law, presume that Indemnitee is entitled to indemnification under this Agreement, and the Company shall, to the fullest extent not prohibited by law, have the burden of proof to overcome that presumption.

(b) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(c) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

12. Remedies of Indemnitee.

(a) Subject to Section 12(e), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 or 12(d) of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10 of this Agreement within 90 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 12(d) of this Agreement, within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration with respect to his or her entitlement to such indemnification or advancement of Expenses, to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); *provided, however*, that the foregoing clause shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 4 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration in accordance with this Agreement.

(b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders that Indemnitee has not met the applicable standard of conduct, shall create a presumption that Indemnitee has or has not met the applicable standard of conduct. In the event that a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

(c) To the fullest extent not prohibited by law, the Company shall be precluded from asserting in any judicial proceeding or arbitration commenced pursuant to this Section 12 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court or before any such arbitrator that the Company is bound by all the provisions of this Agreement. If a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding or arbitration commenced pursuant to this Section 12, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statements not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) To the extent not prohibited by law, the Company shall indemnify Indemnitee against all Expenses that are incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 90 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 8.

(e) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.

13. **Contribution.** To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.

14. **Non-exclusivity.** The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company's certificate of incorporation or bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. To the extent that a change in Delaware law, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Company's certificate of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

15. **Primary Responsibility.** The Company acknowledges that to the extent Indemnitee is serving as a director on the Company's board of directors at the request or direction of a venture capital fund or other entity and/or certain of its affiliates (collectively, the "**Secondary Indemnitors**"), Indemnitee may have certain rights to indemnification and advancement of expenses provided by such Secondary Indemnitors. The Company agrees that, as between the Company and the Secondary

Indemnitors, the Company is primarily responsible for amounts required to be indemnified or advanced under the Company's certificate of incorporation or bylaws or this Agreement and any obligation of the Secondary Indemnitors to provide indemnification or advancement for the same amounts is secondary to those Company obligations. To the extent not in contravention of any insurance policy or policies providing liability or other insurance for the Company or any director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, the Company waives any right of contribution or subrogation against the Secondary Indemnitors with respect to the liabilities for which the Company is primarily responsible under this Section 15. In the event of any payment by the Secondary Indemnitors of amounts otherwise required to be indemnified or advanced by the Company under the Company's certificate of incorporation or bylaws or this Agreement, the Secondary Indemnitors shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnatee for indemnification or advancement of expenses under the Company's certificate of incorporation or bylaws or this Agreement or, to the extent such subrogation is unavailable and contribution is found to be the applicable remedy, shall have a right of contribution with respect to the amounts paid. The Secondary Indemnitors are express third-party beneficiaries of the terms of this Section 15.

16. **No Duplication of Payments.** The Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnatee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.

17. **Insurance.** To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, Indemnatee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.

18. **Subrogation.** In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnatee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

19. **Services to the Company.** Indemnatee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnatee is duly elected or appointed or until Indemnatee tenders his or her resignation or is removed from such position. Indemnatee may at any time and for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnatee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnatee. Indemnatee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnatee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnatee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's certificate of incorporation or bylaws or the DGCL. No such document shall be subject to any oral modification thereof.

20. **Duration.** This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnatee shall have ceased to serve as a director or officer of the Company or

as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto.

21. **Successors.** This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor, by purchase, merger, consolidation or otherwise, to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, by written agreement, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

22. **Severability.** Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

23. **Enforcement.** The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

24. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided, however*, that this Agreement is a supplement to and in furtherance of the Company's certificate of incorporation and bylaws and applicable law.

25. **Modification and Waiver.** No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.

26. **Notices.** All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:

(a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address as shown on the signature page of this Agreement or in the Company's records, as may be updated in accordance with the provisions hereof; or

(b) if to the Company, to the attention of the Chief Executive Officer or Chief Financial Officer of the Company at 9535 Waples Street, Suite 100, San Diego, CA 92121-2993, or at such other current address as the Company shall have furnished to Indemnitee, with a copy (which shall not constitute notice) to Robert Kornegay, Wilson Sonsini Goodrich & Rosati, P.C., 12235 El Camino Real, San Diego, CA 92130-3002.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), (ii) if sent *via* mail, at the earlier of its receipt or five days after the same has been deposited in a regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent *via* facsimile, upon confirmation of facsimile transfer or, if sent *via* electronic mail, upon confirmation of delivery when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day.

27. **Applicable Law and Consent to Jurisdiction.** This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court of Chancery, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court of Chancery for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, Corporation Service Company, 251 Little Falls Drive, in the City of Wilmington, County of New Castle, Delaware 19808, as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court of Chancery, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court of Chancery has been brought in an improper or inconvenient forum.

28. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

29. **Captions.** The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(signature page follows)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

CODEX DNA, INC

(Signature)

(Print name)

(Title)

[INSERT INDEMNITEE NAME]

(Signature)

(Print name)

(Street address)

(City, State and ZIP)

SGI-DNA, INC.

2019 STOCK PLAN

ADOPTED ON MARCH 08, 2019

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SGI-DNA, INC. 2019 STOCK PLAN

SECTION 1. ESTABLISHMENT AND PURPOSE.

The purpose of this Plan is to attract, incentivize and retain Employees, Outside Directors and Consultants through the grant of Awards. The Plan provides for the direct award or sale of Shares, the grant of Options to purchase Shares and the grant of Restricted Stock Units to acquire Shares. Options granted under the Plan may be ISOs intended to qualify under Code Section 422 or NSOs which are not intended to so qualify.

Capitalized terms are defined in Section 12.

SECTION 2. ADMINISTRATION.

(a) **Committees of the Board of Directors.** The Plan may be administered by one or more Committees. Each Committee shall consist, as required by applicable law, of one or more members of the Board of Directors who have been appointed by the Board of Directors. Each Committee shall have such authority and be responsible for such functions as the Board of Directors has assigned to it. If no Committee has been appointed, the entire Board of Directors shall administer the Plan. Any reference to the Board of Directors in the Plan or an Award Agreement shall be construed as a reference to the Committee (if any) to whom the Board of Directors has assigned a particular function.

(b) **Authority of the Board of Directors.** Subject to the provisions of the Plan, the Board of Directors shall have full authority and discretion to take any actions it deems necessary or advisable for the administration of the Plan. Notwithstanding anything to the contrary in the Plan, with respect to the terms and conditions of awards granted to Participants outside the United States, the Board of Directors may vary from the provisions of the Plan to the extent it determines it necessary and appropriate to do so; provided that it may not vary from those Plan terms requiring stockholder approval pursuant to Section 11(d) below. All decisions, interpretations and other actions of the Board of Directors shall be final and binding on all Participants and all persons deriving their rights from a Participant.

SECTION 3. ELIGIBILITY.

(a) **General Rule.** Employees, Outside Directors and Consultants shall be eligible for the grant of Awards under the Plan. However, only Employees shall be eligible for the grant of ISOs.

(b) **Ten-Percent Stockholders.** A person who owns more than 10% of the total combined voting power of all classes of outstanding stock of the Company, its Parent or any of its Subsidiaries shall not be eligible for the grant of an ISO unless (i) the Exercise Price is at least 110% of the Fair Market Value of a Share on the Date of Grant and (ii) such ISO by its terms is not exercisable after the expiration of five years from the Date of Grant. For purposes of this Subsection (b), in determining stock ownership, the attribution rules of Code Section 424(d) shall be applied.

SECTION 4. STOCK SUBJECT TO PLAN.

(a) **Basic Limitation.** Not more than _____ Shares may be issued under the Plan, subject to Subsection (b) below and Section 9(a).¹ All of these Shares may be issued upon the exercise of ISOs. The Company, during the term of the Plan, shall at all times reserve and keep available sufficient Shares to satisfy the requirements of the Plan. Shares offered under the Plan may be authorized but unissued Shares or treasury Shares.

(b) **Additional Shares.** In the event that Shares previously issued under the Plan are forfeited to or repurchased by the Company due to failure to vest, such Shares shall be added to the number of Shares then available for issuance under the Plan. In the event that Shares that otherwise would have been issuable under the Plan are withheld by the Company in payment of the Purchase Price, Exercise Price or withholding taxes, such Shares shall remain available for issuance under the Plan. In the event that an outstanding Option, Restricted Stock Unit or other right for any reason expires or is canceled, the Shares allocable to the unexercised or unsettled portion of such Option, Restricted Stock Unit or other right shall remain available for issuance under the Plan. To the extent an Award is settled in cash, the cash settlement shall not reduce the number of Shares remaining available for issuance under the Plan. Notwithstanding the foregoing, in the case of ISOs, this Subsection (b) shall be subject to any limitations imposed under Section 422 of the Code and the treasury regulations thereunder.

SECTION 5. TERMS AND CONDITIONS OF AWARDS OR SALES.

(a) **Stock Grant or Purchase Agreement.** Each award of Shares under the Plan shall be evidenced by a Stock Grant Agreement between the Grantee and the Company. Each sale of Shares under the Plan (other than upon exercise of an Option) shall be evidenced by a Stock Purchase Agreement between the Purchaser and the Company. Such award or sale shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions which are not inconsistent with the Plan and which the Board of Directors deems appropriate for inclusion in a Stock Grant Agreement or Stock Purchase Agreement. The provisions of the various Stock Grant Agreements and Stock Purchase Agreements entered into under the Plan need not be identical.

(b) **Duration of Offers and Nontransferability of Rights.** Any right to purchase Shares under the Plan (other than an Option) shall automatically expire if not exercised by the Purchaser within 30 days (or such other period as may be specified in the Award Agreement) after the grant of such right was communicated to the Purchaser by the Company. Such right is not transferable and may be exercised only by the Purchaser to whom such right was granted.

(c) **Purchase Price.** The Board of Directors shall determine the Purchase Price of Shares to be offered under the Plan at its sole discretion. The Purchase Price shall be payable in a form described in Section 8.

¹ Please refer to Exhibit A for a schedule of the initial share reserve and any subsequent increases in the reserve.

SECTION 6. TERMS AND CONDITIONS OF OPTIONS.

(a) **Stock Option Agreement.** Each grant of an Option under the Plan shall be evidenced by a Stock Option Agreement between the Optionee and the Company. The Option shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions that are not inconsistent with the Plan and that the Board of Directors deems appropriate for inclusion in a Stock Option Agreement. The provisions of the various Stock Option Agreements entered into under the Plan need not be identical.

(b) **Number of Shares.** Each Stock Option Agreement shall specify the number of Shares that are subject to the Option and shall provide for the adjustment of such number in accordance with Section 9. The Stock Option Agreement shall also specify whether the Option is an ISO or an NSO.

(c) **Exercise Price.**

(i) **General.** Each Stock Option Agreement shall specify the Exercise Price, which shall be payable in a form described in Section 8. Subject to the remaining provisions of this Subsection (c), the Exercise Price shall be determined by the Board of Directors in its sole discretion.

(ii) **ISOs.** The Exercise Price of an ISO shall not be less than 100% of the Fair Market Value of a Share on the Date of Grant, and a higher percentage may be required by Section 3(b). This Subsection (c)(ii) shall not apply to an ISO granted pursuant to an assumption of, or substitution for, another incentive stock option in a manner that complies with Code Section 424(a).

(iii) **NSOs.** Except as specifically set forth in this Subsection (c)(iii), the Exercise Price of an NSO shall not be less than 100% of the Fair Market Value of a Share on the Date of Grant. This Subsection (c)(iii) shall not apply to an NSO granted to a person who is not a U.S. taxpayer on the Date of Grant or to an NSO that is intended either to be exempt from Code Section 409A as a "short-term deferral" or to comply with the requirements of Code Section 409A. In addition, this Subsection (c)(iii) shall not apply to an NSO granted pursuant to an assumption of, or substitution for, another stock option in a manner that complies with Code Section 409A.

(d) **Vesting and Exercisability.** Each Stock Option Agreement shall specify the date when all or any installment of the Option is to become vested and exercisable. No Option shall be exercisable unless the Optionee (i) has delivered an executed copy of the Stock Option Agreement to the Company or (ii) otherwise agrees to be bound by the terms of the Stock Option Agreement. The Board of Directors shall determine the vesting and exercisability provisions of the Stock Option Agreement at its sole discretion.

(e) **Basic Term.** The Stock Option Agreement shall specify the term of the Option. The term shall not exceed 10 years from the Date of Grant, and in the case of an ISO, a shorter term may be required by Section 3(b). Subject to the preceding sentence, the Board of Directors at its sole discretion shall determine when an Option is to expire.

(f) **Termination of Service (Except by Death).** If an Optionee's Service terminates for any reason other than the Optionee's death, then the Optionee's Options shall expire on the earliest of the following dates:

- (i) The expiration date determined pursuant to Subsection (e) above;
- (ii) The date three months after the termination of the Optionee's Service for any reason other than Disability, or such earlier or later date as the Board of Directors may determine (but in no event earlier than 30 days after the termination of the Optionee's Service); or
- (iii) The date six months after the termination of the Optionee's Service by reason of Disability, or such later date as the Board of Directors may determine.

The Optionee may exercise all or part of the Optionee's Options at any time before the expiration of such Options under the preceding sentence, but only to the extent that such Options had become exercisable before the Optionee's Service terminated (or became exercisable as a result of the termination) and the underlying Shares had vested before the Optionee's Service terminated (or vested as a result of the termination). In the event that the Optionee dies after the termination of the Optionee's Service but before the expiration of the Optionee's Options, all or part of such Options may be exercised (prior to expiration) by the executors or administrators of the Optionee's estate or by any person who has acquired such Options directly from the Optionee by beneficiary designation, bequest or inheritance, but only to the extent that such Options had become exercisable before the Optionee's Service terminated (or became exercisable as a result of the termination) and the underlying Shares had vested before the Optionee's Service terminated (or vested as a result of the termination). In no event will an Option, or the Shares underlying an Option, become vested and/or exercisable after termination of the Optionee's Service unless the Board of Directors takes affirmative action or unless expressly provided in a written agreement between the Company and the Optionee.

(g) **Leaves of Absence.** For purposes of Subsection (f) above, Service shall be deemed to continue while the Optionee is on a bona fide leave of absence approved by the Company in writing.

(h) **Death of Optionee.** If an Optionee dies while the Optionee is in Service, then the Optionee's Options shall expire on the earlier of the following dates:

- (i) The expiration date determined pursuant to Subsection (e) above; or
- (ii) The date 12 months after the Optionee's death, or such earlier or later date as the Board of Directors may determine (but in no event earlier than six months after the Optionee's death).

All or part of the Optionee's Options may be exercised at any time before the expiration of such Options under the preceding sentence by the executors or administrators of the Optionee's estate

or by any person who has acquired such Options directly from the Optionee by beneficiary designation, bequest or inheritance, but only to the extent that such Options had become exercisable before the Optionee's death (or became exercisable as a result of the death) and the underlying Shares had vested before the Optionee's death (or vested as a result of the Optionee's death). In no event will an Option, or the Shares underlying an Option, become vested and/or exercisable after the Optionee's death unless the Board of Directors takes affirmative action or unless expressly provided in a written agreement between the Company and the Optionee.

(i) **Restrictions on Transfer of Options.** An Option shall be transferable by the Optionee only by (i) a beneficiary designation, (ii) a will or (iii) the laws of descent and distribution, except as provided in the next sentence. If the Board of Directors so provides, in a Stock Option Agreement or otherwise, an NSO may be transferable to the extent permitted by Rule 701 under the Securities Act. An ISO may be exercised during the lifetime of the Optionee only by the Optionee or by the Optionee's guardian or legal representative.

(j) **No Rights as a Stockholder.** An Optionee, or a transferee of an Optionee, shall have no rights as a stockholder with respect to any Shares covered by the Optionee's Option until such person submits a notice of exercise, pays the Exercise Price and satisfies all applicable withholding taxes pursuant to the terms of such Option.

(k) **Modification, Extension and Assumption of Options.** Within the limitations of the Plan, and without stockholder approval, the Board of Directors may modify, reprice, extend or assume outstanding Options (including increasing or reducing the Exercise Price), or may accept the cancellation of outstanding options (whether granted by the Company or another issuer) in return for (i) the grant of new options, (ii) a different type of award for the same or a different number of Shares and at the same or a different Exercise Price (if applicable), and/or (iii) cash, or may permit Participants to transfer any outstanding Options granted under the Plan to a financial institution or other person or entity selected by the Board of Directors. The foregoing notwithstanding, no modification of an Option shall, without the consent of the Optionee, impair the Optionee's rights or increase the Optionee's obligations under such Option; provided, however, that a modification of an Option that is otherwise favorable to the Optionee (for example, providing the Optionee with additional time to exercise the Option after termination of employment or providing for additional forms of payment) but causes the Option to lose its tax-favored status (for example, as an ISO) shall not require the consent of the Optionee.

(l) **Company's Right to Cancel Certain Options.** Any other provision of the Plan or a Stock Option Agreement notwithstanding, the Company shall have the right at any time to cancel an Option that was not granted in compliance with Rule 701 under the Securities Act. Prior to canceling such Option, the Company shall give the Optionee not less than 30 days' notice in writing. If the Company elects to cancel such Option, it shall deliver to the Optionee consideration with an aggregate value equal to the excess of (i) the Fair Market Value of the Shares subject to such Option as of the time of the cancellation over (ii) the Exercise Price of such Option. The consideration may be delivered in the form of cash or cash equivalents, in the form of Shares, or a combination of both. If the consideration would be a negative amount, such Option may be cancelled without the delivery of any consideration.

SECTION 7. TERMS AND CONDITIONS OF RESTRICTED STOCK UNITS

(a) **Restricted Stock Unit Agreement.** Each grant of Restricted Stock Units under the Plan shall be evidenced by a Restricted Stock Unit Agreement between the recipient and the Company. Such Restricted Stock Units shall be subject to all applicable terms and conditions of the Plan and may be subject to any other terms and conditions that are not inconsistent with the Plan and which the Board of Directors deems appropriate for inclusion in a Restricted Stock Unit Agreement. The provisions of the various Restricted Stock Unit Agreements entered into under the Plan need not be identical.

(b) **Payment for Restricted Stock Units.** No cash consideration shall be required of the recipient in connection with the grant of Restricted Stock Units.

(c) **Vesting Conditions.** Each Restricted Stock Unit Agreement shall specify the vesting requirements applicable to the Restricted Stock Units subject thereto, which the Board of Directors shall determine in its sole discretion.

(d) **Forfeiture.** Unless a Restricted Stock Unit Agreement provides otherwise, upon termination of the recipient's Service and upon such other times specified in the Restricted Stock Unit Agreement, any unvested Restricted Stock Units shall be forfeited to the Company.

(e) **Voting and Dividend Rights.** The holders of Restricted Stock Units shall have no voting rights. Prior to settlement or forfeiture, any Restricted Stock Unit granted under the Plan may, at the discretion of the Board of Directors, carry with it a right to dividend equivalents. Such right entitles the holder to be credited with an amount equal to all cash dividends paid on one Share while the Restricted Stock Unit is outstanding. Dividend equivalents may be converted into additional Restricted Stock Units. Settlement of dividend equivalents may be made in the form of cash, in the form of Shares, or in a combination of both. Prior to distribution, any dividend equivalents that are not paid shall be subject to the same conditions and restrictions as the Restricted Stock Units to which they attach.

(f) **Form and Time of Settlement of Restricted Stock Units.** Settlement of vested Restricted Stock Units may be made in the form of (i) cash, (ii) Shares or (iii) any combination of both, as determined by the Board of Directors. The actual number of Restricted Stock Units eligible for settlement may be larger or smaller than the number included in the original award, based on predetermined performance factors. Vested Restricted Stock Units shall be settled in such manner and at such time(s) as specified in the Restricted Stock Unit Agreement. Until Restricted Stock Units are settled, the number of Shares represented by such Restricted Stock Units shall be subject to adjustment pursuant to Section 9.

(g) **Death of Recipient.** Any Restricted Stock Units that become distributable after the Participant's death shall be distributed to the Participant's estate or to any person who has acquired such Restricted Stock Units directly from the recipient by beneficiary designation, bequest or inheritance.

(h) **Creditors' Rights.** A holder of Restricted Stock Units shall have no rights other than those of a general creditor of the Company. Restricted Stock Units represent an

unfunded and unsecured obligation of the Company, subject to the terms and conditions of the applicable Restricted Stock Unit Agreement.

(i) **Modification, Extension and Assumption of Restricted Stock Units.** Within the limitations of the Plan, the Board of Directors may modify, extend or assume outstanding restricted stock units (whether granted by the Company or a different issuer). The foregoing notwithstanding, no modification of a Restricted Stock Unit shall, without the consent of the Participant, impair the Participant's rights or increase the Participant's obligations under such Restricted Stock Unit.

(j) **Restrictions on Transfer of Restricted Stock Units.** A Restricted Stock Unit shall be transferable by the Participant only by (i) a beneficiary designation, (ii) a will or (iii) the laws of descent and distribution, except as provided in the next sentence. In addition, if the Board of Directors so provides, in a Restricted Stock Unit Agreement or otherwise, a Restricted Stock Unit shall also be transferable to the extent permitted by Rule 701 under the Securities Act.

SECTION 8. PAYMENT FOR SHARES.

(a) **General Rule.** The entire Purchase Price or Exercise Price of Shares issued under the Plan shall be payable in cash or cash equivalents at the time when such Shares are purchased, except as otherwise provided in this Section 8. In addition, the Board of Directors in its sole discretion may also permit payment through any of the methods described in (b) through (g) below.

(b) **Services Rendered.** Shares may be awarded under the Plan in consideration of services rendered to the Company, a Parent or a Subsidiary prior to the award.

(c) **Promissory Note.** All or a portion of the Purchase Price or Exercise Price (as the case may be) of Shares issued under the Plan may be paid with a promissory note. The Shares shall be pledged as security for payment of the principal amount of the promissory note and interest thereon. The interest rate payable under the terms of the promissory note shall not be less than the minimum rate (if any) required to avoid the imputation of additional interest under the Code. Subject to the foregoing, the Board of Directors in its sole discretion shall specify the term, interest rate, recourse, amortization requirements (if any) and other provisions of such note.

(d) **Surrender of Stock.** All or any part of the Exercise Price may be paid by surrendering, or attesting to the ownership of, Shares that are already owned by the Optionee. Such Shares shall be surrendered to the Company in good form for transfer and shall be valued at their Fair Market Value as of the date when the Option is exercised.

(e) **Cashless Exercise.** All or part of the Exercise Price and any withholding taxes may be paid pursuant to a cashless exercise arrangement (whether through a securities broker or otherwise) established by the Company whereby Shares subject to an Option are sold and all or part of the sale proceeds are delivered to the Company.

(f) **Net Exercise.** An Option may permit exercise through a “net exercise” arrangement pursuant to which the Company will reduce the number of Shares issued upon exercise by the largest whole number of Shares having an aggregate Fair Market Value (determined by the Board of Directors as of the exercise date) that does not exceed the aggregate Exercise Price or the sum of the aggregate Exercise Price and any withholding taxes (with the Company accepting from the Optionee payment of cash or cash equivalents to satisfy any remaining balance of the aggregate Exercise Price and, if applicable, any additional withholding taxes not satisfied through such reduction in Shares); *provided* that to the extent Shares subject to an Option are withheld in this manner, the number of Shares subject to the Option following the net exercise will be reduced by the sum of the number of Shares withheld and the number of Shares delivered to the Optionee as a result of the exercise.

(g) **Other Forms of Payment.** To the extent that an Award Agreement so provides, the Purchase Price or Exercise Price of Shares issued under the Plan may be paid in any other form permitted by the Delaware General Corporation Law, as amended.

SECTION 9. ADJUSTMENT OF SHARES.

(a) **General.** In the event of a subdivision of the outstanding Stock, a declaration of a dividend payable in Shares, a combination or consolidation of the outstanding Stock into a lesser number of Shares, a reclassification, or any other increase or decrease in the number of issued shares of Stock effected without receipt of consideration by the Company, proportionate adjustments shall automatically be made, as applicable, in each of (i) the number and kind of Shares available under Section 4, (ii) the number and kind of Shares covered by each outstanding Option, Award of Restricted Stock Units and any outstanding and unexercised right to purchase Shares that has not yet expired pursuant to Section 5(b), (iii) the Exercise Price under each outstanding Option and the Purchase Price applicable to any unexercised stock purchase right described in clause (ii) above, and (iv) any repurchase price that applies to Shares granted under the Plan pursuant to the terms of a Company repurchase right under the applicable Award Agreement. In the event of a declaration of an extraordinary dividend payable in a form other than Shares in an amount that has a material effect on the Fair Market Value of the Stock, a recapitalization, a spin-off, or a similar occurrence, the Board of Directors at its sole discretion may make appropriate adjustments in one or more of the items listed in clauses (i) through (iv) above; provided, however, that the Board of Directors shall in any event make such adjustments as may be required by Section 25102(o) of the California Corporations Code to the extent the Company is relying on the exemption afforded thereunder with respect to an Award. No fractional Shares shall be issued under the Plan as a result of an adjustment under this Section 9(a), although the Board of Directors in its sole discretion may make a cash payment in lieu of fractional Shares.

(b) **Corporate Transactions.** In the event that the Company is a party to a merger or consolidation, or in the event of a sale of all or substantially all of the Company’s stock or assets, all Shares acquired under the Plan and all Awards outstanding on the effective date of the transaction shall be treated in the manner described in the definitive transaction agreement (or, in the event the transaction does not entail a definitive agreement to which the Company is party, in the manner determined by the Board of Directors in its capacity as

administrator of the Plan, with such determination having final and binding effect on all parties), which agreement or determination need not treat all Awards (or all portions of an Award) in an identical manner. The treatment specified in the transaction agreement or as determined by the Board of Directors may include (without limitation) one or more of the following with respect to each outstanding Award:

(i) The Company, the surviving corporation or a parent thereof may continue or assume the Award or substitute a comparable award for the Award (including, but not limited to, an award to acquire the same consideration paid to the holders of Shares in the transaction). For avoidance of doubt, a comparable award need not be the same type of award as the Award for which it is substituted, and, in the case of an Option, need not have the same tax-status (e.g., an NSO may be substituted for an ISO).

(ii) The cancellation of the Award and a payment to the Participant with respect to each Share subject to the portion of the Award that is vested as of the transaction date equal to the excess of (A) the value, as determined by the Board of Directors in its absolute discretion, of the property (including cash) received by the holder of a share of Stock as a result of the transaction, over (if applicable) (B) the per-Share Exercise Price of the Award (such excess, the "**Spread**"). Such payment shall be made in the form of cash, cash equivalents, or securities of the surviving corporation or its parent having a value equal to the Spread. In addition, any escrow, indemnification, holdback, earn-out or similar provisions in the transaction agreement may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of Stock. Receipt of the payment described in this Subsection (b)(ii) may be conditioned upon the Participant acknowledging such escrow, indemnification, holdback, earn-out or other provisions on a form prescribed by the Company. If the Spread applicable to an Award is zero or a negative number, then the Award may be cancelled without making a payment to the Participant.

(iii) Even if the Spread applicable to an Option is a positive number, the Option may be cancelled without the payment of any consideration; provided that the Optionee shall be notified of such treatment and given an opportunity to exercise the Option (to the extent the Option is vested or becomes vested as of the effective date of the transaction) during a period of not less than five (5) business days preceding the effective date of the transaction, unless (A) a shorter period is required to permit a timely closing of the transaction and (B) such shorter period still offers the Optionee a reasonable opportunity to exercise the Option.

(iv) In the case of an Option: (A) suspension of the Optionee's right to exercise the Option during a limited period of time preceding the closing of the transaction if such suspension is administratively necessary to facilitate the closing of the transaction and/or (B) termination of any right the Optionee has to exercise the Option prior to vesting in the Shares subject to the Option (i.e., "early

exercise”), such that following the closing of the transaction the Option may only be exercised to the extent it is vested.

For the avoidance of doubt, the Board of Directors has discretion to accelerate, in whole or part, the vesting and exercisability of an Award in connection with a corporate transaction covered by this Section 9(b).

Notwithstanding anything to the contrary in this Section 9(b), in the event that the Company is a party to a merger or consolidation, or in the event of a sale of all or substantially all of the Company’s stock or assets, and the successor corporation does not assume or substitute for an Award (or portion thereof), the Participant holding such Award will fully vest in and have the right to exercise the Participant’s outstanding Option (or portion thereof) that is not assumed or substituted for, including Shares as to which such Award would not otherwise be vested or exercisable, all restrictions on any award of Shares and Restricted Stock Units (or portions thereof) not assumed or substituted for will lapse, and, with respect to such Awards with performance-based vesting (or portions thereof) not assumed or substituted for, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, in each case, unless specifically provided otherwise under the applicable Award Agreement or other written agreement between the Participant and the Company or any of its Subsidiaries or Parents, as applicable. In addition, if an Option (or portion thereof) is not assumed or substituted for in connection with a merger or consolidation in which the Company is a party, or in the event of a sale of all or substantially all of the Company’s stock or assets, the Board of Directors, or the Committee to whom the Board of Directors has assigned a particular function in accordance with the Plan will notify the Participant in writing or electronically that such Option (or its applicable portion) will be exercisable for a period of time determined by the Board of Directors in its sole discretion, and the Option (or its applicable portion) will terminate upon the expiration of such period.

For the purposes of the foregoing paragraph, an Award will be considered assumed if, following the merger or consolidation, or in the event of a sale of all or substantially all of the Company’s stock or assets, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to such transaction, the consideration (whether stock, cash, or other securities or property) received in the transaction by holders of Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the transaction is not solely common stock of the successor corporation or its Parent, the Board of Directors may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or upon the payout of a Restricted Stock Unit, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per Share consideration received by holders of Stock in the transaction.

Notwithstanding anything in this subsection to the contrary, and unless otherwise provided in an Award Agreement or other written agreement between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant’s consent; provided, however, a modification to such performance goals only to reflect the

successor corporation's post-transaction corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

(c) **Dissolution or Liquidation.** To the extent not previously exercised or settled, Options, Restricted Stock Units and other rights to purchase Shares shall terminate immediately prior to the liquidation or dissolution of the Company.

(d) **Reservation of Rights.** Except as provided in Section 7(e) or this Section 9, a Participant shall have no rights by reason of (i) any subdivision or consolidation of shares of stock of any class, (ii) the payment of any dividend or (iii) any other increase or decrease in the number of shares of stock of any class. Any issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall not affect, and no adjustment by reason thereof shall be made with respect to, the number or Exercise Price of Shares subject to an Award. The grant of an Award pursuant to the Plan shall not affect in any way the right or power of the Company to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, to merge or consolidate or to dissolve, liquidate, sell or transfer all or any part of its business or assets.

SECTION 10. MISCELLANEOUS PROVISIONS.

(a) **Securities Law Requirements.** Shares shall not be issued under the Plan unless, in the opinion of counsel acceptable to the Board of Directors, the issuance and delivery of such Shares complies with (or is exempt from) all applicable requirements of law, including (without limitation) the Securities Act, the rules and regulations promulgated thereunder, state securities laws and regulations, and the regulations of any stock exchange or other securities market on which the Company's securities may then be traded. The Company shall not be liable for a failure to issue Shares as a result of such requirements. Without limiting the foregoing, the Company may suspend the exercise of some or all outstanding Options for a period of up to 60 days in order to facilitate compliance with Securities Act Rule 701(e).

(b) **No Retention Rights.** Nothing in the Plan or in any right or Award granted under the Plan shall confer upon the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining the Participant) or of the Participant, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without cause.

(c) **Treatment as Compensation.** Any compensation that an individual earns or is deemed to earn under this Plan shall not be considered a part of his or her compensation for purposes of calculating contributions, accruals or benefits under any other plan or program that is maintained or funded by the Company, a Parent or a Subsidiary.

(d) **Governing Law.** The Plan and all awards, sales and grants under the Plan shall be governed by, and construed in accordance with, the laws of the State of Delaware (except its choice-of-law provisions), as such laws are applied to contracts entered into and performed in such State.

(e) **Conditions and Restrictions on Shares.** Shares issued under the Plan shall be subject to such forfeiture conditions, rights of repurchase, rights of first refusal, other

transfer restrictions and such other terms and conditions as the Board of Directors may determine. Such conditions and restrictions shall be set forth in the applicable Award Agreement and shall apply in addition to any restrictions that may apply to holders of Shares generally. In addition, Shares issued under the Plan shall be subject to conditions and restrictions imposed either by applicable law or by Company policy, as adopted from time to time, designed to ensure compliance with applicable law or laws with which the Company determines in its sole discretion to comply including in order to maintain any statutory, regulatory or tax advantage, which (for avoidance of doubt) need not be set forth in the applicable Award Agreement.

(f) **Tax Matters.**

(i) As a condition to the award, grant, issuance, vesting, purchase, exercise, settlement or transfer of any Award, or Shares issued pursuant to any Award, granted under this Plan, the Participant shall make such arrangements as the Board of Directors may require or permit for the satisfaction of any federal, state, local or foreign withholding tax obligations that may arise in connection with such event.

(ii) Unless otherwise expressly set forth in an Award Agreement, it is intended that Awards shall be exempt from Code Section 409A, and any ambiguity in the terms of an Award Agreement and the Plan shall be interpreted consistently with this intent. To the extent an Award is not exempt from Code Section 409A (any such award, a “**409A Award**”), any ambiguity in the terms of such Award and the Plan shall be interpreted in a manner that to the maximum extent permissible supports the Award’s compliance with the requirements of that statute. Notwithstanding anything to the contrary permitted under the Plan, in no event shall a modification of an Award not already subject to Code Section 409A, or any subsequent action taken with respect to such Award, be given effect if such modification or action would cause the Award to become subject to Code Section 409A unless the parties explicitly acknowledge and consent to the modification or action as one having that effect. A 409A Award shall be subject to such additional rules and requirements as specified by the Board of Directors from time to time in order for it to comply with the requirements of Code Section 409A. In this regard, if any amount under a 409A Award is payable upon a “separation from service” to an individual who is considered a “specified employee” (as each term is defined under Code Section 409A), then no such payment shall be made prior to the date that is the earlier of (i) six months and one day after the Participant’s separation from service or (ii) the Participant’s death, but only to the extent such delay is necessary to prevent such payment from being subject to Section 409A(a)(1). In addition, if a transaction subject to Section 9(b) constitutes a payment event with respect to any 409A Award, then the transaction with respect to such award must also constitute a “change in control event” as defined in Treasury Regulation Section 1.409A-3(i)(5) to the extent required by Code Section 409A.

(iii) Neither the Company nor any member of the Board of Directors shall have any liability to a Participant in the event an Award held by the Participant fails to achieve its intended characterization under applicable tax law.

SECTION 11. DURATION AND AMENDMENTS; STOCKHOLDER APPROVAL.

(a) **Term of the Plan.** The Plan, as set forth herein, shall become effective on the date of its adoption by the Board of Directors, subject to approval of the Company's stockholders under Subsection (d) below. The Plan shall terminate automatically 10 years after the later of (i) the date when the Board of Directors adopted the Plan or (ii) the date when the Board of Directors approved the most recent increase in the number of Shares reserved under Section 4 that was also approved by the Company's stockholders. The Plan may be terminated on any earlier date pursuant to Subsection (b) below.

(b) **Right to Amend or Terminate the Plan.** Subject to Subsection (d) below, the Board of Directors may amend, suspend or terminate the Plan at any time and for any reason.

(c) **Effect of Amendment or Termination.** No Shares shall be issued or sold and no Award granted under the Plan after the termination thereof, except upon exercise or settlement of an Award granted under the Plan prior to such termination. Except as expressly provided in Section 6(k) above, the termination of the Plan, or any amendment thereof, shall not affect any Share previously issued or any Award previously granted under the Plan.

(d) **Stockholder Approval.** To the extent required by applicable law, the Plan will be subject to approval of the Company's stockholders within 12 months of its adoption date. An amendment of the Plan will be subject to the approval of the Company's stockholders only to the extent required by applicable laws, regulations or rules.

SECTION 12. DEFINITIONS.

(a) **"Award"** means any award granted under the Plan, including as an Option, an award of Restricted Stock Units or the grant or sale of Shares pursuant to Section 5 of the Plan.

(b) **"Award Agreement"** means a Restricted Stock Unit Agreement, Stock Grant Agreement, Stock Option Agreement or Stock Purchase Agreement or such other agreement evidencing an Award under the Plan.

(c) **"Board of Directors"** means the Board of Directors of the Company, as constituted from time to time.

(d) **"Code"** means the Internal Revenue Code of 1986, as amended.

(e) **"Committee"** means a committee of the Board of Directors, as described in Section 2(a).

(f) **"Company"** means SGI-DNA, Inc., a Delaware corporation.

(g) “**Consultant**” means a person, excluding Employees and Outside Directors, who performs bona fide services for the Company, a Parent or a Subsidiary as a consultant or advisor and who qualifies as a consultant or advisor under Rule 701(c)(1) of the Securities Act or under Instruction A.1.(a)(1) of Form S-8 under the Securities Act.

(h) “**Date of Grant**” means the date of grant specified in the Award Agreement, which date shall be the later of (i) the date on which the Board of Directors resolved to grant the Award or (ii) the first day of the Participant’s Service.

(i) “**Disability**” means that the Optionee is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment.

(j) “**Employee**” means any individual who is a common-law employee of the Company, a Parent or a Subsidiary.

(k) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

(l) “**Exercise Price**” means the amount for which one Share may be purchased upon exercise of an Option, as specified by the Board of Directors in the applicable Stock Option Agreement.

(m) “**Fair Market Value**” means the fair market value of a Share, as determined by the Board of Directors in good faith. Such determination shall be conclusive and binding on all persons.

(n) “**Grantee**” means a person to whom the Board of Directors has awarded Shares under the Plan.

(o) “**ISO**” means an Option that qualifies as an incentive stock option as described in Code Section 422(b). Notwithstanding its designation as an ISO, an Option that does not qualify as an ISO under applicable law shall be treated for all purposes as an NSO.

(p) “**NSO**” means an Option that does not qualify as an incentive stock option as described in Code Section 422(b) or 423(b).

(q) “**Option**” means an ISO or NSO granted under the Plan and entitling the holder to purchase Shares.

(r) “**Optionee**” means a person who holds an Option.

(s) “**Outside Director**” means a member of the Board of Directors who is not an Employee.

(t) “**Parent**” means any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be considered a Parent commencing as of such date.

- (u) **“Participant”** means the holder of an outstanding Award.
- (v) **“Plan”** means this SGI-DNA, Inc. 2019 Stock Plan.
- (w) **“Purchase Price”** means the consideration for which one Share may be acquired under the Plan (other than upon exercise of an Option), as specified by the Board of Directors.
- (x) **“Purchaser”** means a person to whom the Board of Directors has offered the right to purchase Shares under the Plan (other than upon exercise of an Option).
- (y) **“Restricted Stock Unit”** means a bookkeeping entry representing the equivalent of one Share, as awarded under the Plan.
- (z) **“Restricted Stock Unit Agreement”** means the agreement between the Company and the recipient of a Restricted Stock Unit that contains the terms, conditions and restrictions pertaining to such Restricted Stock Unit.
- (aa) **“Securities Act”** means the Securities Act of 1933, as amended.
- (bb) **“Service”** means service as an Employee, Outside Director or Consultant. In case of any dispute as to whether and when Service has terminated, the Board of Directors shall have sole discretion to determine whether such termination has occurred and the effective date of such termination.
- (cc) **“Share”** means one share of Stock, as adjusted in accordance with Section 9 (if applicable).
- (dd) **“Stock”** means the Common Stock of the Company.
- (ae) **“Stock Grant Agreement”** means the agreement between the Company and a Grantee who is awarded Shares under the Plan that contains the terms, conditions and restrictions pertaining to the award of such Shares.
- (ff) **“Stock Option Agreement”** means the agreement between the Company and an Optionee that contains the terms, conditions and restrictions pertaining to the Optionee’s Option.
- (gg) **“Stock Purchase Agreement”** means the agreement between the Company and a Purchaser who purchases Shares under the Plan that contains the terms, conditions and restrictions pertaining to the purchase of such Shares.
- (hh) **“Subsidiary”** means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date.

EXHIBIT A

SCHEDULE OF SHARES RESERVED FOR ISSUANCE UNDER THE PLAN

Date of Board Approval	Date of Stockholder Approval	Number of Shares Added	Cumulative Number of Shares
March 08, 2019		2,500,000	

Codex DNA, Inc.
Amended and Restated 2019 Stock Incentive Plan
Notice of Stock Option Grant

The Optionee has been granted the following option to purchase shares of the Common Stock of Codex DNA, Inc.:

Name of Optionee:	<Name of Employee>
Total Number of Shares:	<# of Shares Approved by BOD>
Type of Option:	Incentive Stock Option (ISO)
Exercise Price per Share:	<Fair Market Value>
Vesting Start Date:	<Employee Hire Date>
Date of Grant:	<Date Approved by BOD>
Date Exercisable:	This option may be exercised with respect to the first 25% of the Shares subject to this option on the 12-month anniversary of the Vesting Start Date set forth above, provided the Optionee remains in continuous service through the First Vesting Date below. This option may be exercised with respect to an additional 1/48th of the Shares subject to this option when the Optionee completes each month of continuous Service thereafter.
First Vesting Date:	<1 Year After Vesting Start Date>
Expiration Date:	<10 Years After Grant Date>. This option expires earlier if the Optionee's Service terminates earlier, as provided in Section 6 of the Stock Option Agreement.

By signing below, the Optionee and the Company agree that this option is granted under, and governed by the terms and conditions of, the Amended and Restated 2019 Stock Incentive Plan and the Stock Option Agreement. Both of these documents are attached to, and made a part of, this Notice of Stock Option Grant. **Section 13 of the Stock Option Agreement includes important acknowledgements of the Optionee.**

[signature page to follow]

Optionee:

Codex DNA, Inc.

By: <Name of Employee>

By: _____
Title: Chief Executive Officer

THE OPTION GRANTED PURSUANT TO THIS AGREEMENT AND THE SHARES ISSUABLE UPON THE EXERCISE THEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR AN OPINION OF COUNSEL, SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

Codex DNA, Inc.
Amended and Restated 2019 Stock Incentive Plan:
Stock Option Agreement

SECTION 1. GRANT OF OPTION.

(a) **Option.** On the terms and conditions set forth in the Notice of Stock Option Grant and this Agreement, the Company grants to the Optionee on the Date of Grant the option to purchase at the Exercise Price the number of Shares set forth in the Notice of Stock Option Grant. The Exercise Price is agreed to be at least 100% of the Fair Market Value per Share on the Date of Grant (110% of Fair Market Value if this option is designated as an ISO in the Notice of Stock Option Grant and Section 3(b) of the Plan applies). This option is intended to be an ISO or an NSO, as provided in the Notice of Stock Option Grant.

(b) **\$100,000 Limitation.** Even if this option is designated as an ISO in the Notice of Stock Option Grant, it shall be deemed to be an NSO to the extent (and only to the extent) required by the \$100,000 annual limitation under Section 422(d) of the Code.

(c) **Stock Plan and Defined Terms.** This option is granted pursuant to the Plan, a copy of which the Optionee acknowledges having received. The provisions of the Plan are incorporated into this Agreement by this reference. Capitalized terms are defined in Section 14 of this Agreement.

SECTION 2. RIGHT TO EXERCISE.

(a) **Exercisability.** Subject to Subsection (b) below and the other conditions set forth in this Agreement, all or part of this option may be exercised prior to its expiration at the time or times set forth in the Notice of Stock Option Grant.

(b) **Stockholder Approval.** Any other provision of this Agreement notwithstanding, no portion of this option shall be exercisable at any time prior to the approval of the Plan by the Company's stockholders.

SECTION 3. NO TRANSFER OR ASSIGNMENT OF OPTION.

Except as otherwise provided in this Agreement, this option and the rights and privileges conferred hereby shall not be sold, pledged or otherwise transferred (whether by operation of law or otherwise) and shall not be subject to sale under execution, attachment, levy or similar process.

SECTION 4. EXERCISE PROCEDURES.

(a) **Notice of Exercise.** The Optionee or the Optionee's representative may exercise this option by giving written notice to the Company pursuant to Section 12(c). The notice shall specify the election to exercise this option, the number of Shares for which it is being exercised and the form of payment. The person exercising this option shall sign the notice. In the event that this option is being exercised by the representative of the Optionee, the notice shall be accompanied by proof (satisfactory to the Company) of the representative's right to exercise this option. The Optionee or the Optionee's representative shall deliver to the Company, at the time of giving the notice, payment in a form permissible under Section 5 for the full amount of the Purchase Price.

(b) **Issuance of Shares.** After receiving a proper notice of exercise, the Company shall cause to be issued one or more certificates evidencing the Shares for which this option has been exercised. Such Shares shall be registered (i) in the name of the person exercising this option, (ii) in the names of such person and his or her spouse as community property or as joint tenants with the right of survivorship or (iii) with the Company's consent, in the name of a revocable trust. The Company shall cause such certificates to be delivered to or upon the order of the person exercising this option.

(c) **Withholding Taxes.** In the event that the Company determines that it is required to withhold any tax as a result of the exercise of this option, the Optionee, as a condition to the exercise of this option, shall make arrangements satisfactory to the Company to enable it to satisfy all withholding requirements. The Optionee shall also make arrangements satisfactory to the Company to enable it to satisfy any withholding requirements that may arise in connection with the disposition of Shares purchased by exercising this option.

SECTION 5. PAYMENT FOR STOCK.

(a) **Cash.** All or part of the Purchase Price may be paid in cash or cash equivalents.

(b) **Surrender of Stock.** At the discretion of the Board of Directors, all or any part of the Purchase Price may be paid by surrendering, or attesting to the ownership of, Shares that are already owned by the Optionee. Such Shares shall be surrendered to the Company in good form for transfer and shall be valued at their Fair Market Value as of the date when this option is exercised.

(c) **Exercise/Sale.** All or part of the Purchase Price and any withholding taxes may be paid by the delivery (on a form prescribed by the Company) of an irrevocable direction to a securities broker approved by the Company to sell Shares and to deliver all or part of the sales proceeds to the Company. However, payment pursuant to this Subsection (c) shall be permitted only if (i) Stock then is publicly traded and (ii) such payment does not violate applicable law.

SECTION 6. TERM AND EXPIRATION.

(a) **Basic Term.** This option shall in any event expire on the expiration date set forth in the Notice of Stock Option Grant, which date is 10 years after the Date of Grant (five years after the Date of Grant if this option is designated as an ISO in the Notice of Stock Option Grant and Section 3(b) of the Plan applies).

(b) **Termination of Service (Except by Death).** If the Optionee's Service terminates for any reason other than death, then this option shall expire on the earliest of the following occasions:

- (i) The expiration date determined pursuant to Subsection (a) above;
- (ii) The date 90 days after the termination of the Optionee's Service for any reason other than Disability; or
- (iii) The date six months after the termination of the Optionee's Service by reason of Disability.

The Optionee may exercise all or part of this option at any time before its expiration under the preceding sentence, but only to the extent that this option had become exercisable before the Optionee's Service terminated. When the Optionee's Service terminates, this option shall expire immediately with respect to the number of Shares for which this option is not yet exercisable. In the event that the Optionee dies after termination of Service but before the expiration of this option, all or part of this option may be exercised (prior to expiration) by the executors or administrators of the Optionee's estate or by any person who has acquired this option directly from the Optionee by beneficiary designation, bequest or inheritance, but only to the extent that this option had become exercisable before the Optionee's Service terminated.

(c) **Death of the Optionee.** If the Optionee dies while in Service, then this option shall expire on the earlier of the following dates:

- (i) The expiration date determined pursuant to Subsection (a) above; or
- (ii) The date 12 months after the Optionee's death.

All or part of this option may be exercised at any time before its expiration under the preceding sentence by the executors or administrators of the Optionee's estate or by any person who has

acquired this option directly from the Optionee by beneficiary designation, bequest or inheritance, but only to the extent that this option had become exercisable before the Optionee's death. When the Optionee dies, this option shall expire immediately with respect to the number of Shares for which this option is not yet exercisable.

(d) **Part-Time Employment and Leaves of Absence.** If the Optionee commences working on a part-time basis, then the Company may adjust the vesting schedule set forth in the Notice of Stock Option Grant. If the Optionee goes on a leave of absence, then the Company may adjust the vesting schedule set forth in the Notice of Stock Option Grant in accordance with the Company's leave of absence policy or the terms of such leave. Except as provided in the preceding sentence, Service shall be deemed to continue for any purpose under this Agreement while the Optionee is on a *bona fide* leave of absence, if (i) such leave was approved by the Company in writing and (ii) continued crediting of Service for such purpose is expressly required by the terms of such leave or by applicable law (as determined by the Company). Service shall be deemed to terminate when such leave ends, unless the Optionee immediately returns to active work.

(e) **Notice Concerning ISO Treatment.** Even if this option is designated as an ISO in the Notice of Stock Option Grant, it ceases to qualify for favorable tax treatment as an ISO to the extent that it is exercised:

(i) More than three months after the date when the Optionee ceases to be an Employee for any reason other than death or permanent and total disability (as defined in Section 22(e)(3) of the Code);

(ii) More than 12 months after the date when the Optionee ceases to be an Employee by reason of permanent and total disability (as defined in Section 22(e)(3) of the Code); or

(iii) More than three months after the date when the Optionee has been on a leave of absence for 90 days, unless the Optionee's reemployment rights following such leave were guaranteed by statute or by contract.

SECTION 7. RIGHT OF FIRST REFUSAL.

(a) **Right of First Refusal.** In the event that the Optionee proposes to sell, pledge or otherwise transfer to a third party any Shares acquired under this Agreement, or any interest in such Shares, the Company shall have the Right of First Refusal with respect to all (and not less than all) of such Shares. If the Optionee desires to transfer Shares acquired under this Agreement, the Optionee shall give a written Transfer Notice to the Company describing fully the proposed transfer, including the number of Shares proposed to be transferred, the proposed transfer price, the name and address of the proposed Transferee and proof satisfactory to the Company that the proposed sale or transfer will not violate any applicable federal, State or foreign securities laws. The Transfer Notice shall be signed both by the Optionee and by the proposed Transferee and must constitute a binding commitment of both parties to the transfer of the Shares. The Company shall have the right to purchase all, and not less than all, of the Shares

on the terms of the proposal described in the Transfer Notice (subject, however, to any change in such terms permitted under Subsection (b) below) by delivery of a notice of exercise of the Right of First Refusal within 30 days after the date when the Transfer Notice was received by the Company.

(b) **Transfer of Shares.** If the Company fails to exercise its Right of First Refusal within 30 days after the date when it received the Transfer Notice, the Optionee may, not later than 90 days following receipt of the Transfer Notice by the Company, conclude a transfer of the Shares subject to the Transfer Notice on the terms and conditions described in the Transfer Notice, provided that any such sale is made in compliance with applicable federal, State and foreign securities laws and not in violation of any other contractual restrictions to which the Optionee is bound. Any proposed transfer on terms and conditions different from those described in the Transfer Notice, as well as any subsequent proposed transfer by the Optionee, shall again be subject to the Right of First Refusal and shall require compliance with the procedure described in Subsection (a) above. If the Company exercises its Right of First Refusal, the parties shall consummate the sale of the Shares on the terms set forth in the Transfer Notice within 60 days after the date when the Company received the Transfer Notice (or within such longer period as may have been specified in the Transfer Notice); provided, however, that in the event the Transfer Notice provided that payment for the Shares was to be made in a form other than cash or cash equivalents paid at the time of transfer, the Company shall have the option of paying for the Shares with cash or cash equivalents equal to the present value of the consideration described in the Transfer Notice.

(c) **Additional or Exchanged Securities and Property.** In the event of a merger or consolidation of the Company with or into another entity, any other corporate reorganization, a stock split, the declaration of a stock dividend, the declaration of an extraordinary dividend payable in a form other than stock, a spin-off, an adjustment in conversion ratio, a recapitalization or a similar transaction affecting the Company's outstanding securities, any securities or other property (including cash or cash equivalents) that are by reason of such transaction exchanged for, or distributed with respect to, any Shares subject to this Section 7 shall immediately be subject to the Right of First Refusal. Appropriate adjustments to reflect the exchange or distribution of such securities or property shall be made to the number and/or class of the Shares subject to this Section 7.

(d) **Termination of Right of First Refusal.** Any other provision of this Section 7 notwithstanding, in the event that the Stock is readily tradable on an established securities market when the Optionee desires to transfer Shares, the Company shall have no Right of First Refusal, and the Optionee shall have no obligation to comply with the procedures prescribed by Subsections (a) and (b) above.

(e) **Permitted Transfers.** This Section 7 shall not apply to (i) a transfer by beneficiary designation, will or intestate succession or (ii) a transfer to one or more members of the Optionee's Immediate Family or to a trust established by the Optionee for the benefit of the Optionee and/or one or more members of the Optionee's Immediate Family, provided in either case that the Transferee agrees in writing on a form prescribed by the Company to be bound by

all provisions of this Agreement. If the Optionee transfers any Shares acquired under this Agreement, either under this Subsection (e) or after the Company has failed to exercise the Right of First Refusal, then this Agreement shall apply to the Transferee to the same extent as to the Optionee.

(f) **Termination of Rights as Stockholder.** If the Company makes available, at the time and place and in the amount and form provided in this Agreement, the consideration for the Shares to be purchased in accordance with this Section 7, then after such time the person from whom such Shares are to be purchased shall no longer have any rights as a holder of such Shares (other than the right to receive payment of such consideration in accordance with this Agreement). Such Shares shall be deemed to have been purchased in accordance with the applicable provisions hereof, whether or not the certificate(s) therefor have been delivered as required by this Agreement.

(g) **Assignment of Right of First Refusal.** The Board of Directors may freely assign the Company's Right of First Refusal, in whole or in part. Any person who accepts an assignment of the Right of First Refusal from the Company shall assume all of the Company's rights and obligations under this Section 7.

SECTION 8. LEGALITY OF INITIAL ISSUANCE.

No Shares shall be issued upon the exercise of this option unless and until the Company has determined that:

(a) It and the Optionee have taken any actions required to register the Shares under the Securities Act or to perfect an exemption from the registration requirements thereof;

(b) Any applicable listing requirement of any stock exchange or other securities market on which Stock is listed has been satisfied;
and

(c) Any other applicable provision of federal, State or foreign law has been satisfied.

SECTION 9. NO REGISTRATION RIGHTS.

The Company may, but shall not be obligated to, register or qualify the sale of Shares under the Securities Act or any other applicable law. The Company shall not be obligated to take any affirmative action in order to cause the sale of Shares under this Agreement to comply with any law.

SECTION 10. RESTRICTIONS ON TRANSFER OF SHARES.

(a) **Securities Law Restrictions.** Regardless of whether the offering and sale of Shares under the Plan have been registered under the Securities Act or have been registered or qualified under the securities laws of any State, the Company at its discretion may impose restrictions upon the sale, pledge or other transfer of such Shares (including the placement of

appropriate legends on stock certificates or the imposition of stop-transfer instructions) if, in the judgment of the Company, such restrictions are necessary or desirable in order to achieve compliance with the Securities Act, the securities laws of any State or any other law.

(b) **Market Stand-Off.** In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the Securities Act, including the Company's initial public offering, the Optionee or a Transferee shall not directly or indirectly sell, make any short sale of, loan, hypothecate, pledge, offer, grant or sell any option or other contract for the purchase of, purchase any option or other contract for the sale of, or otherwise dispose of or transfer, or agree to engage in any of the foregoing transactions with respect to, any Shares acquired under this Agreement without the prior written consent of the Company or its managing underwriter. Such restriction (the "Market Stand-Off") shall be in effect for such period of time following the date of the final prospectus for the offering as may be requested by the Company or such underwriter. In no event, however, shall such period exceed 180 days plus such additional period as may reasonably be requested by the Company or such underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports or (ii) analyst recommendations and opinions, including (without limitation) the restrictions set forth in Rule 2711(f)(4) of the National Association of Securities Dealers and Rule 472(f)(4) of the New York Stock Exchange, as amended, or any similar successor rules. The Market Stand-Off shall in any event terminate two years after the date of the Company's initial public offering. In the event of the declaration of a stock dividend, a spin-off, a stock split, an adjustment in conversion ratio, a recapitalization or a similar transaction affecting the Company's outstanding securities without receipt of consideration, any new, substituted or additional securities which are by reason of such transaction distributed with respect to any Shares subject to the Market Stand-Off, or into which such Shares thereby become convertible, shall immediately be subject to the Market Stand-Off. In order to enforce the Market Stand-Off, the Company may impose stop-transfer instructions with respect to the Shares acquired under this Agreement until the end of the applicable stand-off period. The Company's underwriters shall be beneficiaries of the agreement set forth in this Subsection (b). This Subsection (b) shall not apply to Shares registered in the public offering under the Securities Act.

(c) **Investment Intent at Grant.** The Optionee represents and agrees that the Shares to be acquired upon exercising this option will be acquired for investment, and not with a view to the sale or distribution thereof.

(d) **Investment Intent at Exercise.** In the event that the sale of Shares under the Plan is not registered under the Securities Act but an exemption is available that requires an investment representation or other representation, the Optionee shall represent and agree at the time of exercise that the Shares being acquired upon exercising this option are being acquired for investment, and not with a view to the sale or distribution thereof, and shall make such other representations as are deemed necessary or appropriate by the Company and its counsel.

(e) **Legends.** All certificates evidencing Shares purchased under this Agreement shall bear the following legend:

“THE SHARES REPRESENTED HEREBY MAY NOT BE SOLD, ASSIGNED, TRANSFERRED, ENCUMBERED OR IN ANY MANNER DISPOSED OF, EXCEPT IN COMPLIANCE WITH THE TERMS OF A WRITTEN AGREEMENT BETWEEN THE COMPANY AND THE REGISTERED HOLDER OF THE SHARES (OR THE PREDECESSOR IN INTEREST TO THE SHARES). SUCH AGREEMENT GRANTS TO THE COMPANY CERTAIN RIGHTS OF FIRST REFUSAL UPON AN ATTEMPTED TRANSFER OF THE SHARES. THE SECRETARY OF THE COMPANY WILL UPON WRITTEN REQUEST FURNISH A COPY OF SUCH AGREEMENT TO THE HOLDER HEREOF WITHOUT CHARGE.”

All certificates evidencing Shares purchased under this Agreement in an unregistered transaction shall bear the following legend (and such other restrictive legends as are required or deemed advisable under the provisions of any applicable law):

“THE SHARES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR AN OPINION OF COUNSEL, SATISFACTORY TO THE COMPANY AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.”

(f) **Removal of Legends.** If, in the opinion of the Company and its counsel, any legend placed on a stock certificate representing Shares sold under this Agreement is no longer required, the holder of such certificate shall be entitled to exchange such certificate for a certificate representing the same number of Shares but without such legend.

(g) **Administration.** Any determination by the Company and its counsel in connection with any of the matters set forth in this Section 10 shall be conclusive and binding on the Optionee and all other persons.

SECTION 11. ADJUSTMENT OF SHARES.

In the event of any transaction described in Section 8(a) of the Plan, the terms of this option (including, without limitation, the number and kind of Shares subject to this option and the Exercise Price) shall be adjusted as set forth in Section 8(a) of the Plan. In the event that the Company is a party to a merger or consolidation or in the event of a sale of all or substantially all of the Company's stock or assets, this option shall be subject to the treatment provided by the Board of Directors in its sole discretion, as provided in Section 8(b) of the Plan.

SECTION 12. MISCELLANEOUS PROVISIONS.

(a) **Rights as a Stockholder.** Neither the Optionee nor the Optionee's representative shall have any rights as a stockholder with respect to any Shares subject to this option until the Optionee or the Optionee's representative becomes entitled to receive such Shares by filing a notice of exercise and paying the Purchase Price pursuant to Sections 4 and 5.

(b) **No Retention Rights.** Nothing in this option or in the Plan shall confer upon the Optionee any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company (or any Parent or Subsidiary employing or retaining the Optionee) or of the Optionee, which rights are hereby expressly reserved by each, to terminate his or her Service at any time and for any reason, with or without cause.

(c) **Notice.** Any notice required by the terms of this Agreement shall be given in writing. It shall be deemed effective upon (i) personal delivery, (ii) deposit with the United States Postal Service, by registered or certified mail, with postage and fees prepaid or (iii) deposit with Federal Express Corporation, with shipping charges prepaid. Notice shall be addressed to the Company at its principal executive office and to the Optionee at the address that he or she most recently provided to the Company in accordance with this Subsection (c).

(d) **Modifications and Waivers.** No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Optionee and by an authorized officer of the Company (other than the Optionee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(e) **Entire Agreement.** The Notice of Stock Option Grant, this Agreement and the Plan constitute the entire contract between the parties hereto with regard to the subject matter hereof. They supersede any other agreements, representations or understandings (whether oral or written and whether express or implied) that relate to the subject matter hereof.

(f) **Choice of Law.** This Agreement shall be governed by, and construed in accordance with, the laws of the State of Delaware, as such laws are applied to contracts entered into and performed in such State.

SECTION 13. ACKNOWLEDGEMENTS OF THE OPTIONEE.

(a) **Tax Consequences.** The Optionee agrees that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes the Optionee's tax liabilities. The Optionee shall not make any claim against the Company or its Board of Directors, officers or employees related to tax liabilities arising from this option or the Optionee's other compensation. In particular, the Optionee acknowledges that this option is exempt from Section 409A of the Code only if the Exercise Price is at least equal to the Fair Market Value per Share on the Date of Grant. Since Shares are not traded on an

established securities market, the determination of their Fair Market Value is made by the Board of Directors or by an independent valuation firm retained by the Company. The Optionee acknowledges that there is no guarantee in either case that the Internal Revenue Service will agree with the valuation, and the Optionee shall not make any claim against the Company or its Board of Directors, officers or employees in the event that the Internal Revenue Service asserts that the valuation was too low.

(b) **Electronic Delivery of Documents.** The Optionee agrees to accept by email all documents relating to the Company, the Plan or this option and all other documents that the Company is required to deliver to its security holders (including, without limitation, disclosures that may be required by the Securities and Exchange Commission). The Optionee also agrees that the Company may deliver these documents by posting them on a website maintained by the Company or by a third party under contract with the Company. If the Company posts these documents on a website, it shall notify the Optionee by email of their availability. The Optionee acknowledges that he or she may incur costs in connection with electronic delivery, including the cost of accessing the internet and printing fees, and that an interruption of internet access may interfere with his or her ability to access the documents. This consent shall remain in effect until this option expires or until the Optionee gives the Company written notice that it should deliver paper documents.

(c) **No Notice of Expiration Date.** The Optionee agrees that the Company and its officers, employees, attorneys and agents do not have any obligation to notify him or her prior to the expiration of this option pursuant to Section 6, regardless of whether this option will expire at the end of its full term or on an earlier date related to the termination of the Optionee's Service. The Optionee further agrees that he or she has the sole responsibility for monitoring the expiration of this option and for exercising this option, if at all, before it expires. This Subsection (c) shall supersede any contrary representation that may have been made, orally or in writing, by the Company or by an officer, employee, attorney or agent of the Company.

SECTION 14. DEFINITIONS.

(a) **"Agreement"** shall mean this Stock Option Agreement.

(b) **"Board of Directors"** shall mean the Board of Directors of the Company, as constituted from time to time or, if a Committee has been appointed, such Committee.

(c) **"Code"** shall mean the Internal Revenue Code of 1986, as amended.

(d) **"Committee"** shall mean a committee of the Board of Directors, as described in Section 2 of the Plan.

(e) **"Company"** shall mean Codex DNA, Inc., a Delaware corporation.

(f) **"Consultant"** shall mean a person who performs bona fide services for the Company, a Parent or a Subsidiary as a consultant or advisor, excluding Employees and Outside Directors.

(g) “**Date of Grant**” shall mean the date of grant specified in the Notice of Stock Option Grant, which date shall be the later of (i) the date on which the Board of Directors resolved to grant this option or (ii) the first day of the Optionee’s Service.

(h) “**Disability**” shall mean that the Optionee is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment.

(i) “**Employee**” shall mean any individual who is a common law employee of the Company, a Parent or a Subsidiary.

(j) “**Exercise Price**” shall mean the amount for which one Share may be purchased upon exercise of this option, as specified in the Notice of Stock Option Grant.

(k) “**Fair Market Value**” shall mean the fair market value of a Share, as determined by the Board of Directors in good faith. Such determination shall be conclusive and binding on all persons.

(l) “**Immediate Family**” shall mean any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law and shall include adoptive relationships.

(m) “**ISO**” shall mean an employee incentive stock option described in Section 422(b) of the Code.

(n) “**Notice of Stock Option Grant**” shall mean the document so entitled to which this Agreement is attached.

(o) “**NSO**” shall mean a stock option not described in Section 422(b) or 423(b) of the Code.

(p) “**Optionee**” shall mean the person named in the Notice of Stock Option Grant.

(q) “**Outside Director**” shall mean a member of the Board of Directors who is not an Employee.

(r) “**Parent**” shall mean any corporation (other than the Company) in an unbroken chain of corporations ending with the Company, if each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

(s) “**Plan**” shall mean the Synthetic Genomics, Inc. Amended and Restated 2005 Stock Incentive Plan, as in effect on the Date of Grant.

(t) “**Purchase Price**” shall mean the Exercise Price multiplied by the number of Shares with respect to which this option is being exercised.

- (u) “**Right of First Refusal**” shall mean the Company’s right of first refusal described in Section 7.
- (v) “**Securities Act**” shall mean the Securities Act of 1933, as amended.
- (w) “**Service**” shall mean service as an Employee, Outside Director or Consultant.
- (x) “**Share**” shall mean one share of Stock, as adjusted in accordance with Section 8 of the Plan (if applicable).
- (y) “**Stock**” shall mean the Common Stock of the Company.

(z) “**Subsidiary**” shall mean any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company, if each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

- (aa) “**Transferee**” shall mean any person to whom the Optionee has directly or indirectly transferred any Share acquired under this Agreement.
- (bb) “**Transfer Notice**” shall mean the notice of a proposed transfer of Shares described in Section 7.

[END OF DOCUMENT]

CODEX DNA, INC.
2021 EQUITY INCENTIVE PLAN

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock and Restricted Stock Units.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, or Restricted Stock Units.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company, except that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board will not be considered a Change in Control; or

(ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this clause (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(f), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(g) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(h) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or by the compensation committee of the Board, in accordance with Section 4 hereof.

(i) "Common Stock" means the common stock of the Company.

(j) "Company" means Codex DNA, Inc., a Delaware corporation, or any successor thereto.

(k) “Consultant” means any natural person, including an advisor, engaged by the Company or a Parent or Subsidiary to render bona fide services to such entity, provided the services (i) are not in connection with the offer or sale of securities in a capitalraising transaction, and (ii) do not directly promote or maintain a market for the Company’s securities.

(l) “Director” means a member of the Board.

(m) “Disability” means total and permanent disability as defined in Code Section 22(e)(3), provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(n) “Employee” means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director’s fee by the Company will be sufficient to constitute “employment” by the Company.

(o) “Exchange Act” means the Securities Exchange Act of 1934, as amended.

(p) “Exchange Program” means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have higher or lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced or increased. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(q) “Fair Market Value” means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(r) "Incentive Stock Option" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Code Section 422 and the regulations promulgated thereunder.

(s) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(t) "Option" means a stock option granted pursuant to the Plan.

(u) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(v) "Participant" means the holder of an outstanding Award.

(w) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(x) "Plan" means this 2021 Equity Incentive Plan.

(y) "Restricted Stock" means Shares issued pursuant to an Award of Restricted Stock under Section 8 of the Plan, or issued pursuant to the early exercise of an Option.

(z) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(aa) "Service Provider" means an Employee, Director or Consultant.

(bb) "Share" means a share of the Common Stock, as adjusted in accordance with Section 13 of the Plan.

(cc) "Stock Appreciation Right" means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.

(dd) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Code Section 424(f).

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is 4,300,000 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an Exchange Program, or, with respect to Restricted Stock or Restricted Stock Units, is forfeited to or repurchased by the Company due to the failure to vest, the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, only Shares actually issued pursuant to a Stock Appreciation Right will cease to be available under the Plan; all remaining Shares under Stock Appreciation Rights will remain available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock or Restricted Stock Units are repurchased by the Company or are forfeited to the Company due to the failure to vest, such Shares will become available for future grant or sale under the Plan. Shares used to pay the exercise price of an Award or to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 13, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Code Section 422 and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to Section 3(b).

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which Committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder;

(iv) to approve forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or for qualifying for favorable tax treatment under applicable foreign laws;

(ix) to modify or amend each Award (subject to Section 18(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to Section 6(d));

(x) to allow Participants to satisfy withholding tax obligations in a manner prescribed in Section 14;

(xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to such Participant under an Award; and

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, and Restricted Stock Units may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Grant of Options. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Options in such amounts as the Administrator, in its sole discretion, will determine.

(b) Option Agreement. Each Award of an Option will be evidenced by an Award Agreement that will specify the exercise price, the term of the Option, the number of Shares subject to the Option, the exercise restrictions, if any, applicable to the Option, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(c) Limitations. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. Notwithstanding such designation, however, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand dollars (\$100,000), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(c), Incentive Stock Options will be taken into account in the order in which they were granted, the Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted, and calculation will be performed in accordance with Code Section 422 and Treasury Regulations promulgated thereunder.

(d) Term of Option. The term of each Option will be stated in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(e) Option Exercise Price and Consideration.

(i) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option will be determined by the Administrator, but will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an Employee who owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(e)(i), Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Code Section 424(a).

(ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check; (3) promissory note, to the extent permitted by Applicable Laws, (4) other Shares, provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided further that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) by net exercise, (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, or (8) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator will consider if acceptance of such consideration may be reasonably expected to benefit the Company.

(f) Exercise of Option.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable tax withholding). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within thirty (30) days of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the

extent that the Option is vested on the date of termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within six (6) months of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent the Option is vested on the date of termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within six (6) months following the Participant's death, or within such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested on the date of death, by the Participant's designated beneficiary, provided such beneficiary has been designated prior to the Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

7. Stock Appreciation Rights.

(a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of Shares subject to any Award of Stock Appreciation Rights.

(c) Exercise Price and Other Terms. The per Share exercise price for the Shares that will determine the amount of the payment to be received upon exercise of a Stock Appreciation Right as set forth in Section 7(f) will be determined by the Administrator and will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. Otherwise, the Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan.

(d) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) relating to the maximum term and Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.

(f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

- (i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times
- (ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

(c) Transferability. Except as provided in this Section 8 or as the Administrator determines, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction or at such

other time as the Administrator may determine. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares, unless the Administrator provides otherwise. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

9. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

10. Compliance With Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A.

11. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following the first (1st) day of such leave, any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Limited Transferability of Awards.

(a) Unless determined otherwise by the Administrator, Awards may not be sold, pledged, assigned, hypothecated, or otherwise transferred in any manner other than by will or by the laws of descent and distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award may only be transferred (i) by will, (ii) by the laws of descent and distribution, or (iii) as permitted by Rule 701 of the Securities Act of 1933, as amended (the "Securities Act").

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act, an Option, or prior to exercise, the Shares subject to the Option, may not be pledged, hypothecated or otherwise transferred or disposed of, in any manner, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than to (i) persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act) through gifts or domestic relations orders, or (ii) to an executor or guardian of the Participant upon the death or disability of the Participant. Notwithstanding the foregoing sentence, the Administrator, in its sole discretion, may determine to permit transfers to the Company or in connection with a Change in Control or other acquisition transactions involving the Company to the extent permitted by Rule 12h-1(f).

13. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of shares of stock that may be delivered under the Plan and/or the number, class, and price of shares of stock covered by each outstanding Award; provided, however, that the Administrator will make such adjustments to an Award required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger of the Company with or into another corporation or other entity or a Change in Control, each outstanding Award will be treated as the Administrator determines (subject to the provisions of the following paragraph) without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any combination of the foregoing. In taking any of the actions permitted under this subsection 13(c), the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

In the event that the successor corporation does not assume or substitute for the Award (or portion thereof), the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights, including Shares as to which such

Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock and Restricted Stock Units will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right is not assumed or substituted in the event of a merger or Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subsection 13(c), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 13(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 13(c) to the contrary, if a payment under an Award Agreement is subject to Code Section 409A and if the change in control definition contained in the Award Agreement does not comply with the definition of "change of control" for purposes of a distribution under Code Section 409A, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Code Section 409A without triggering any penalties applicable under Code Section 409A.

14. Tax Withholding.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal,

state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld, (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the statutory amount required to be withheld, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, or (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum federal, state or local marginal income tax rates applicable to the Participant with respect to the Award on the date that the amount of tax to be withheld is to be determined. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

15. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

16. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

17. Term of Plan. Subject to Section 21 of the Plan, the Plan will become effective upon its adoption by the Board. Unless sooner terminated under Section 18, it will continue in effect for a term of ten (10) years from the later of (a) the effective date of the Plan, or (b) the earlier of the most recent Board or stockholder approval of an increase in the number of Shares reserved for issuance under the Plan.

18. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

19. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

20. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

21. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

22. Information to Participants. Beginning on the earlier of (i) the date that the aggregate number of Participants under this Plan is five hundred (500) or more and the Company is relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act and (ii) the date that the Company is required to deliver information to Participants pursuant to Rule 701 under the Securities Act, and until such time as the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, is no longer relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act or is no longer required to deliver information to Participants pursuant to Rule 701 under the Securities Act, the Company shall provide to each Participant the information described in paragraphs (e)(3), (4), and (5) of Rule 701 under the Securities Act not less frequently than every six (6) months with the financial statements being not more than 180 days old and with such information provided either by physical or electronic delivery to the Participants or by written notice to the Participants of the availability of the information on an Internet site that may be password-protected and of any password needed to access the information. The Company may request that Participants agree to keep the information to be provided pursuant to this section confidential. If a Participant does not agree to keep the information to be provided pursuant to this

section confidential, then the Company will not be required to provide the information unless otherwise required pursuant to Rule 12h-1(f)(1) under the Exchange Act or Rule 701 of the Securities Act.

CODEX DNA, INC.
2021 EQUITY INCENTIVE PLAN
STOCK OPTION AGREEMENT

Unless otherwise defined herein, the terms defined in the 2021 Equity Incentive Plan (the "Plan") shall have the same defined meanings in this Stock Option Agreement (the "Option Agreement").

I. NOTICE OF STOCK OPTION GRANT

Name:

Address:

The undersigned Participant has been granted an Option to purchase Common Stock of the Company, subject to the terms and conditions of the Plan and this Option Agreement, as follows:

Date of Grant: _____

Vesting Commencement Date: _____

Exercise Price per Share: \$ _____

Total Number of Shares Granted: _____

Total Exercise Price: \$ _____

Type of Option: _____ Incentive Stock Option
_____ Nonstatutory Stock Option

Term/Expiration Date: _____

Vesting Schedule:

This Option shall be exercisable, in whole or in part, according to the following vesting schedule:

[Twenty-five percent (25%) of the Shares subject to the Option shall vest on the one (1) year anniversary of the Vesting Commencement Date, and one forty-eighth (1/48th) of the Shares subject to the Option shall vest each month thereafter on the same day of the month as the Vesting Commencement Date (and if there is no corresponding day, on the last day of the month), subject to Participant continuing to be a Service Provider through each such date.]

Termination Period:

This Option shall be exercisable for three (3) months after Participant ceases to be a Service Provider, unless such termination is due to Participant's death or Disability, in which case this Option shall be exercisable for twelve (12) months after Participant ceases to be a Service Provider. Notwithstanding the foregoing sentence, in no event may this Option be exercised after the Term/Expiration Date as provided above and this Option may be subject to earlier termination as provided in Section 13 of the Plan.

II. AGREEMENT

1. Grant of Option. The Administrator of the Company hereby grants to the Participant named in the Notice of Stock Option Grant in Part I of this Option Agreement ("Participant"), an option (the "Option") to purchase the number of Shares set forth in the Notice of Stock Option Grant, at the exercise price per Share set forth in the Notice of Stock Option Grant (the "Exercise Price"), and subject to the terms and conditions of the Plan, which is incorporated herein by reference. Subject to Section 18 of the Plan, in the event of a conflict between the terms and conditions of the Plan and this Option Agreement, the terms and conditions of the Plan shall prevail.

If designated in the Notice of Stock Option Grant as an Incentive Stock Option ("ISO"), this Option is intended to qualify as an Incentive Stock Option as defined in Section 422 of the Code. Nevertheless, to the extent that it exceeds the \$100,000 rule of Code Section 422(d), this Option shall be treated as a Nonstatutory Stock Option ("NSO"). Further, if for any reason this Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a NSO granted under the Plan. In no event shall the Administrator, the Company or any Parent or Subsidiary or any of their respective employees or directors have any liability to Participant (or any other person) due to the failure of the Option to qualify for any reason as an ISO.

2. Exercise of Option.

(a) Right to Exercise. This Option shall be exercisable during its term in accordance with the Vesting Schedule set out in the Notice of Stock Option Grant and with the applicable provisions of the Plan and this Option Agreement.

(b) Method of Exercise. This Option shall be exercisable by delivery of an exercise notice in the form attached as Exhibit A (the "Exercise Notice") or in a manner and pursuant to such procedures as the Administrator may determine, which shall state the election to exercise the Option, the number of Shares with respect to which the Option is being exercised (the "Exercised Shares"), and such other representations and agreements as may be required by the Company. The Exercise Notice shall be accompanied by payment of the aggregate Exercise Price as to all Exercised Shares, together with any applicable tax withholding. This Option shall be deemed to be exercised upon receipt by the Company of such fully executed Exercise Notice accompanied by the aggregate Exercise Price, together with any applicable tax withholding.

No Shares shall be issued pursuant to the exercise of an Option unless such issuance and such exercise comply with Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which the Option is exercised with respect to such Shares.

3. Participant's Representations. In the event the Shares have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), at the time this Option is exercised, Participant shall, if required by the Company, concurrently with the exercise of all or any portion of this Option, deliver to the Company his or her Investment Representation Statement in the form attached hereto as Exhibit B.

4. Lock-Up Period. Participant hereby agrees that Participant shall not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any Common Stock (or other securities) of the Company or enter into any swap, hedging or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any Common Stock (or other securities) of the Company held by Participant (other than those included in the registration) for a period specified by the representative of the underwriters of Common Stock (or other securities) of the Company not to exceed one hundred and eighty (180) days following the effective date of any registration statement of the Company filed under the Securities Act (or such other period as may be requested by the Company or the underwriters to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NYSE Rule 472(f)(4), or any successor provisions or amendments thereto).

Participant agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriter which are consistent with the foregoing or which are necessary to give further effect thereto. In addition, if requested by the Company or the representative of the underwriters of Common Stock (or other securities) of the Company, Participant shall provide, within ten (10) days of such request, such information as may be required by the Company or such representative in connection with the completion of any public offering of the Company's securities pursuant to a registration statement filed under the Securities Act. The obligations described in this Section 4 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a Commission Rule 145 transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of said one hundred and eighty (180) day (or other) period. Participant agrees that any transferee of the Option or shares acquired pursuant to the Option shall be bound by this Section 4.

5. Method of Payment. Payment of the aggregate Exercise Price shall be by any of the following, or a combination thereof, at the election of the Participant:

- (a) cash;
- (b) check;

(c) consideration received by the Company under a formal cashless exercise program adopted by the Company in connection with the Plan; or

(d) surrender of other Shares which (i) shall be valued at its Fair Market Value on the date of exercise, and (ii) must be owned free and clear of any liens, claims, encumbrances or security interests, if accepting such Shares, in the sole discretion of the Administrator, shall not result in any adverse accounting consequences to the Company.

6. Restrictions on Exercise. This Option may not be exercised until such time as the Plan has been approved by the stockholders of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such shares would constitute a violation of any Applicable Law.

7. Non-Transferability of Option.

(a) This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by Participant. The terms of the Plan and this Option Agreement shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration of Options under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act (the "Reliance End Date"), Participant shall not transfer this Option or, prior to exercise, the Shares subject to this Option, in any manner other than (i) to persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act) through gifts or domestic relations orders, or (ii) to an executor or guardian of Participant upon the death or disability of Participant. Until the Reliance End Date, the Options and, prior to exercise, the Shares subject to this Option, may not be pledged, hypothecated or otherwise transferred or disposed of, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than as permitted in clauses (i) and (ii) of this paragraph.

8. Term of Option. This Option may be exercised only within the term set out in the Notice of Stock Option Grant, and may be exercised during such term only in accordance with the Plan and the terms of this Option Agreement.

9. Tax Obligations.

(a) Tax Withholding. Participant agrees to make appropriate arrangements with the Company (or the Parent or Subsidiary employing or retaining Participant) for the satisfaction of all Federal, state, local and foreign income and employment tax withholding requirements applicable to the Option exercise. Participant acknowledges and agrees that the Company may refuse to honor

the exercise and refuse to deliver the Shares if such withholding amounts are not delivered at the time of exercise.

(b) Notice of Disqualifying Disposition of ISO Shares. If the Option granted to Participant herein is an ISO, and if Participant sells or otherwise disposes of any of the Shares acquired pursuant to the ISO on or before the later of (i) the date two (2) years after the Date of Grant, or (ii) the date one (1) year after the date of exercise, Participant shall immediately notify the Company in writing of such disposition. Participant agrees that Participant may be subject to income tax withholding by the Company on the compensation income recognized by Participant.

(c) Code Section 409A. Under Code Section 409A, an Option that vests after December 31, 2004 (or that vested on or prior to such date but which was materially modified after October 3, 2004) that was granted with a per Share exercise price that is determined by the Internal Revenue Service (the "IRS") to be less than the Fair Market Value of a Share on the date of grant (a "discount option") may be considered "deferred compensation." An Option that is a "discount option" may result in (i) income recognition by Participant prior to the exercise of the Option, (ii) an additional twenty percent (20%) federal income tax, and (iii) potential penalty and interest charges. The "discount option" may also result in additional state income, penalty and interest tax to the Participant. Participant acknowledges that the Company cannot and has not guaranteed that the IRS will agree that the per Share exercise price of this Option equals or exceeds the Fair Market Value of a Share on the date of grant in a later examination. Participant agrees that if the IRS determines that the Option was granted with a per Share exercise price that was less than the Fair Market Value of a Share on the date of grant, Participant shall be solely responsible for Participant's costs related to such a determination.

10. Entire Agreement; Governing Law. The Plan is incorporated herein by reference. The Plan and this Option Agreement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant. This Option Agreement is governed by the internal substantive laws but not the choice of law rules of California.

11. No Guarantee of Continued Service. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF SHARES PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS A SERVICE PROVIDER AT THE WILL OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR RETAINING PARTICIPANT) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS OPTION OR ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS A SERVICE PROVIDER FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR THE PARENT OR SUBSIDIARY EMPLOYING OR

RETAINING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS A SERVICE PROVIDER AT ANY TIME, WITH OR WITHOUT CAUSE.

Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof, and hereby accepts this Option subject to all of the terms and provisions thereof. Participant has reviewed the Plan and this Option in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Option and fully understands all provisions of the Option. Participant hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Administrator upon any questions arising under the Plan or this Option. Participant further agrees to notify the Company upon any change in the residence address indicated below.

PARTICIPANT

CODEX DNA, INC.

Signature

By

Print Name

Print Name

Title

Residence Address

EXHIBIT A
2021 EQUITY INCENTIVE PLAN
EXERCISE NOTICE

Codex DNA, Inc.
9535 Waples Street, Suite 100
San Diego, CA

Attention: Chief Executive Officer and President

1. Exercise of Option. Effective as of today, _____, _____, the undersigned (“Participant”) hereby elects to exercise Participant’s option (the “Option”) to purchase _____ shares of the Common Stock (the “Shares”) of Codex DNA, Inc. (the “Company”) under and pursuant to the 2021 Equity Incentive Plan (the “Plan”) and the Stock Option Agreement dated _____, _____ (the “Option Agreement”).

2. Delivery of Payment. Participant herewith delivers to the Company the full purchase price of the Shares, as set forth in the Option Agreement, and any and all withholding taxes due in connection with the exercise of the Option.

3. Representations of Participant. Participant acknowledges that Participant has received, read and understood the Plan and the Option Agreement and agrees to abide by and be bound by their terms and conditions.

4. Rights as Stockholder. Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Common Stock subject to an Award, notwithstanding the exercise of the Option. The Shares shall be issued to Participant as soon as practicable after the Option is exercised in accordance with the Option Agreement. No adjustment shall be made for a dividend or other right for which the record date is prior to the date of issuance except as provided in Section 13 of the Plan.

5. Company’s Right of First Refusal. Before any Shares held by Participant or any transferee (either being sometimes referred to herein as the “Holder”) may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 5 (the “Right of First Refusal”).

(a) Notice of Proposed Transfer. The Holder of the Shares shall deliver to the Company a written notice (the “Notice”) stating: (i) the Holder’s bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee (“Proposed Transferee”); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the bona fide cash price or other consideration for which the Holder proposes to transfer the

Shares (the “Offered Price”), and the Holder shall offer the Shares at the Offered Price to the Company or its assignee(s).

(b) Exercise of Right of First Refusal. At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the purchase price determined in accordance with subsection (c) below.

(c) Purchase Price. The purchase price (“Purchase Price”) for the Shares purchased by the Company or its assignee(s) under this Section 5 shall be the Offered Price. If the Offered Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in good faith.

(d) Payment. Payment of the Purchase Price shall be made, at the option of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company (or, in the case of repurchase by an assignee, to the assignee), or by any combination thereof within thirty (30) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(e) Holder’s Right to Transfer. If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 5, then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee at the Offered Price or at a higher price, *provided* that such sale or other transfer is consummated within one hundred and twenty (120) days after the date of the Notice, that any such sale or other transfer is effected in accordance with any applicable securities laws and that the Proposed Transferee agrees in writing that the provisions of this Section 5 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(f) Exception for Certain Family Transfers. Anything to the contrary contained in this Section 5 notwithstanding, the transfer of any or all of the Shares during the Participant’s lifetime or on the Participant’s death by will or intestacy to the Participant’s immediate family or a trust for the benefit of the Participant’s immediate family shall be exempt from the provisions of this Section 5. “Immediate Family” as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 5, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 5.

(g) Termination of Right of First Refusal. The Right of First Refusal shall terminate as to any Shares upon the earlier of (i) the first sale of Common Stock of the Company to the general public, or (ii) a Change in Control in which the successor corporation has equity securities that are publicly traded.

6. Tax Consultation. Participant understands that Participant may suffer adverse tax consequences as a result of Participant's purchase or disposition of the Shares. Participant represents that Participant has consulted with any tax consultants Participant deems advisable in connection with the purchase or disposition of the Shares and that Participant is not relying on the Company for any tax advice.

7. Restrictive Legends and Stop-Transfer Orders.

(a) Legends. Participant understands and agrees that the Company shall cause the legends set forth below or legends substantially equivalent thereto, to be placed upon any certificate(s) evidencing ownership of the Shares together with any other legends that may be required by the Company or by state or federal securities laws:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER AND A RIGHT OF FIRST REFUSAL HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE EXERCISE NOTICE BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS AND RIGHT OF FIRST REFUSAL ARE BINDING ON TRANSFEREES OF THESE SHARES.

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER FOR A PERIOD OF TIME FOLLOWING THE EFFECTIVE DATE OF THE UNDERWRITTEN PUBLIC OFFERING OF THE COMPANY'S SECURITIES SET FORTH IN AN AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES AND MAY NOT BE SOLD OR OTHERWISE DISPOSED OF BY THE HOLDER PRIOR TO THE EXPIRATION OF SUCH PERIOD WITHOUT THE CONSENT OF THE COMPANY OR THE MANAGING UNDERWRITER.

(b) Stop-Transfer Notices. Participant agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) Refusal to Transfer. The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Exercise Notice or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

8. Successors and Assigns. The Company may assign any of its rights under this Exercise Notice to single or multiple assignees, and this Exercise Notice shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer herein set forth, this Exercise Notice shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns.

9. Interpretation. Any dispute regarding the interpretation of this Exercise Notice shall be submitted by Participant or by the Company forthwith to the Administrator, which shall review such dispute at its next regular meeting. The resolution of such a dispute by the Administrator shall be final and binding on all parties.

10. Governing Law; Severability. This Exercise Notice is governed by the internal substantive laws, but not the choice of law rules, of California. In the event that any provision hereof becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, this Exercise Notice shall continue in full force and effect.

11. Entire Agreement. The Plan and Option Agreement are incorporated herein by reference. This Exercise Notice, the Plan, the Option Agreement and the Investment Representation Statement constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to the Participant's interest except by means of a writing signed by the Company and Participant.

Submitted by:

PARTICIPANT

Signature

Print Name

Address:

Accepted by:

CODEX DNA, INC.

By

Print Name

Title

Address:

9535 Waples Street, Suite 100
San Diego, CA

Date Received

EXHIBIT B

INVESTMENT REPRESENTATION STATEMENT

PARTICIPANT :
COMPANY : CODEX DNA, INC.
SECURITY : COMMON STOCK
AMOUNT :
DATE :

In connection with the purchase of the above-listed Securities, the undersigned Participant represents to the Company the following:

(a) Participant is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Securities. Participant is acquiring these Securities for investment for Participant's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933, as amended (the "Securities Act").

(b) Participant acknowledges and understands that the Securities constitute "restricted securities" under the Securities Act and have not been registered under the Securities Act in reliance upon a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Participant's investment intent as expressed herein. In this connection, Participant understands that, in the view of the Securities and Exchange Commission, the statutory basis for such exemption may be unavailable if Participant's representation was predicated solely upon a present intention to hold these Securities for the minimum capital gains period specified under tax statutes, for a deferred sale, for or until an increase or decrease in the market price of the Securities, or for a period of one (1) year or any other fixed period in the future. Participant further understands that the Securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Participant further acknowledges and understands that the Company is under no obligation to register the Securities. Participant understands that the certificate evidencing the Securities shall be imprinted with any legend required under applicable state securities laws.

(c) Participant is familiar with the provisions of Rule 701 and Rule 144, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly from the issuer thereof, in a non-public offering subject to the satisfaction of certain conditions. Rule 701 provides that if the issuer qualifies under Rule 701 at the time of the grant of the Option to Participant, the exercise shall be exempt from registration under the Securities Act. In the event the Company becomes subject to the reporting requirements of

Section 13 or 15(d) of the Securities Exchange Act of 1934, ninety (90) days thereafter (or such longer period as any market stand-off agreement may require) the Securities exempt under Rule 701 may be resold, subject to the satisfaction of the applicable conditions specified by Rule 144, including in the case of affiliates (1) the availability of certain public information about the Company, (2) the amount of Securities being sold during any three (3) month period not exceeding specified limitations, (3) the resale being made in an unsolicited "broker's transaction", transactions directly with a "market maker" or "riskless principal transactions" (as those terms are defined under the Securities Exchange Act of 1934) and (4) the timely filing of a Form 144, if applicable.

In the event that the Company does not qualify under Rule 701 at the time of grant of the Option, then the Securities may be resold in certain limited circumstances subject to the provisions of Rule 144, which may require (i) the availability of current public information about the Company; (ii) the resale to occur more than a specified period after the purchase and full payment (within the meaning of Rule 144) for the Securities; and (iii) in the case of the sale of Securities by an affiliate, the satisfaction of the conditions set forth in sections (2), (3) and (4) of the paragraph immediately above.

(d) Participant further understands that in the event all of the applicable requirements of Rule 701 or 144 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rules 144 or 701 shall have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk. Participant understands that no assurances can be given that any such other registration exemption shall be available in such event.

PARTICIPANT

Signature

Print Name

Date

CODEX DNA, INC.

2021 STOCK INCENTIVE PLAN

(Adopted on May 26, 2021; effective as of one business day immediately prior to the Registration Date)

1. Purposes of the Plan; Award Types.

(a) Purposes of the Plan. The purposes of this Plan are to attract and retain personnel for positions with the Company Group, to provide additional incentive to Employees, Directors, and Consultants (collectively, "Service Providers"), and to promote the success of the Company's business.

(b) Award Types. The Plan permits the grant of Incentive Stock Options to any ISO Employee and the grant of Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, and Performance Awards to any Service Provider.

2. Definitions. The following definitions are used in this Plan:

(a) "Administrator" means Administrator as defined in Section 4(a).

(b) "Applicable Laws" means the legal and regulatory requirements relating to the administration of equity-based awards, including but not limited to the related issuance of Shares under U.S. federal and state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and, only to the extent applicable with respect to an Award or Awards, the tax, securities, exchange control, and other laws of any jurisdictions other than the United States where Awards are, or will be, granted under the Plan. Reference to a section of an Applicable Law or regulation related to that section shall include such section or regulation, any valid regulation issued under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

(c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, or Performance Awards.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms applicable to an Award granted under the Plan. The Award Agreement is subject to the terms of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the

stock of the Company that, with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company; provided, that for this subsection, the acquisition of additional stock by any one Person, who prior to such acquisition is considered to own more than 50% of the total voting power of the stock of the Company will not be considered a Change in Control and provided, further, that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board also will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of 50% or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this Section 2(f)(i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of the Company which occurs on the date a majority of members of the Board is replaced during any 12-month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the appointment or election. For purposes of this Section 2(f)(ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such Person or Persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, that for this Section 2(f)(iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets:

(1) a transfer to an entity controlled by the Company's stockholders immediately after the transfer, or

(2) a transfer of assets by the Company to:

(A) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's

stock,

(B) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company,

(C) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of

the Company, or

(D) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in Section 2(f)(iii)(2)(A) to Section 2(f)(iii)(2)(C).

For this definition, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(f), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company. For the avoidance of doubt, wholly-owned subsidiaries of the Company shall not be considered “Persons” for purposes of this Section 2(f).

(iv) A transaction will not be a Change in Control:

(1) unless the transaction qualifies as a change in control event within the meaning of Code Section 409A; or

(2) if its primary purpose is to (1) change the jurisdiction of the Company’s incorporation, or (2) create a holding company owned in substantially the same proportions by the persons who held the Company’s securities immediately before such transaction.

(g) “Code” means the U.S. Internal Revenue Code of 1986, as amended. Reference to a section of the Code or regulation related to that section shall include such section or regulation, any valid regulation issued or other official applicable guidance of general or direct applicability promulgated under such section or regulation, and any comparable provision of any future legislation, regulation or official guidance of general or direct applicability amending, supplementing or superseding such section or regulation.

(h) “Committee” means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board.

(i) “Common Stock” means the common stock of the Company.

(j) “Company” means Codex DNA, Inc., a Delaware corporation, or any of its successors.

(k) “Company Group” means the Company, any Parent or Subsidiary, and any entity that, from time to time and at the time of any determination, directly or indirectly, is in control of, is controlled by or is under common control with the Company.

(l) “Consultant” means any natural person engaged by a member of the Company Group to render bona fide services to such entity, provided the services (i) are not in connection with the offer or sale of securities in a capital raising transaction, and (ii) do not directly promote or maintain a market for the Company’s securities. A Consultant must be a person to whom the issuance of Shares registered on Form S-8 under the Securities Act is permitted.

(m) “Director” means a member of the Board.

(n) “Disability” means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(o) “Employee” means any person, including Officers and Directors, providing services as an employee to the Company or any member of the Company Group. However, with respect to Incentive Stock Options, an Employee must be employed by the Company or any Parent or Subsidiary of the Company (such an Employee, an “ISO Employee”). Notwithstanding, Options awarded to individuals not providing services to the Company or a Subsidiary of the Company should be carefully structured to comply with the payment timing rule of Code Section 409A. Neither service as a Director nor payment of a director’s fee by the Company will constitute “employment” by the Company.

(p) “Exchange Act” means the U.S. Securities Exchange Act of 1934.

(q) “Exchange Program” means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower Exercise Prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the Exercise Price of an outstanding Award is increased or reduced. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(r) “Exercise Price” means the price payable per share to exercise an Award.

(s) “Expiration Date” means the last possible day on which an Option or Stock Appreciation Right may be exercised. Any exercise must be completed before midnight U.S. Pacific Time between the Expiration Date and the following date; provided, however, that any broker-assisted cashless exercise of an Option granted hereunder must be completed by the close of market trading on the Expiration Date.

(t) “Fair Market Value” means, as of any date, the value of a Share, determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the New York Stock Exchange, the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market of The NASDAQ Stock Market, the Fair Market Value will be the closing sales price for a Share (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported by such source as the Administrator determines to be reliable. If the determination date for the Fair Market Value occurs on a non-Trading Day (i.e., a weekend or

holiday), the Fair Market Value will be such price on the immediately preceding Trading Day, unless otherwise determined by the Administrator;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date on the last Trading Day such bids and asks were reported), as reported by such source as the Administrator determines to be reliable;

(iii) For any Awards granted on the Registration Date, the Fair Market Value will be the initial price to the public set forth in the final prospectus included within the registration statement on Form S-1 filed with the United States Securities and Exchange Commission for the initial public offering of the Common Stock; or

(iv) Absent an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

Notwithstanding the foregoing, if the determination date for the Fair Market Value occurs on a weekend, holiday or other day other than a Trading Day, the Fair Market Value will be the price as determined under subsections (t)(i) or (t)(ii) above on the immediately preceding Trading Day, unless otherwise determined by the Administrator. In addition, for purposes of determining the fair market value of shares for any reason other than the determination of the Exercise Price of Options or Stock Appreciation Rights, fair market value will be determined by the Administrator in a manner compliant with Applicable Laws and applied consistently for such purpose. Note that the determination of fair market value for purposes of tax withholding may be made in the Administrator's sole discretion subject to Applicable Laws and is not required to be consistent with the determination of Fair Market Value for other purposes.

(u) "Fiscal Year" means a fiscal year of the Company.

(v) "Grant Date" means Grant Date as defined in Section 4(c).

(w) "Incentive Stock Option" means an Option that is intended to qualify and does qualify as an incentive stock option within the meaning of Code Section 422.

(x) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(y) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(z) "Option" means a stock option to acquire Shares granted under Section 6.

(aa) "Outside Director" means a Director who is not an Employee.

(bb) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(cc) "Participant" means the holder of an outstanding Award.

(dd) "Performance Awards" means an Award which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be cash- or stock-denominated and may be settled for cash, Shares or other securities or a combination of the foregoing under Section 10.

(ee) "Performance Period" means Performance Period as defined in Section 10(a).

(ff) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock is subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(gg) "Plan" means this 2021 Stock Incentive Plan, as may be amended from time to time.

(hh) "Registration Date" means the effective date of the first Registration Statement.

(ii) "Registration Statement" means a registration statement filed by the Company and declared effective under Section 12(b) of the Exchange Act, with respect to any class of the Company's securities.

(jj) "Restricted Stock" means Shares issued under an Award granted under Section 8 or issued as a result of the early exercise of an Option.

(kk) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value, granted under Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(ll) "Securities Act" means U.S. Securities Act of 1933.

(mm) "Service Provider" means an Employee, Director or Consultant.

(nn) "Share" means a share of the Common Stock as adjusted in accordance with Section 13 of the Plan.

(oo) "Stock Appreciation Right" means an Award granted under Section 7.

(pp) "Subsidiary," means a "subsidiary corporation" as defined in Code Section 424(f), in relation to the Company.

(qq) "Tax Withholdings" means tax, social insurance and social security liability or premium obligations in connection with the Awards, including, without limitation, (i) all federal, state, and local income, employment and any other taxes (including the Participant's U.S. Federal Insurance Contributions Act (FICA) obligation) that are required to be withheld by the Company or

a member of the Company Group, (ii) the Participant's and, to the extent required by the Company, the fringe benefit tax liability of the Company or a member of the Company Group, if any, associated with the grant, vesting, or exercise of an Award or sale of Shares issued under the Award, and (iii) any other taxes or social insurance or social security liabilities or premium the responsibility for which the Participant has, or has agreed to bear, with respect to such Award, the Shares subject to, or other amounts or property payable under, an Award, or otherwise associated with or related to participation in the Plan and with respect to which the Company or the applicable member of the Company Group has either agreed to withhold or has an obligation to withhold.

(rr) "Ten Percent Owner" means Ten Percent Owner as defined in Section 6(b)(i).

(ss) "Trading Day." means a day on which the primary stock exchange or national market system (or other trading platform, as applicable) on which the Common Stock trades is open for trading.

(tt) "Transaction" means Transaction as defined in Section 14(a).

3. Shares Subject to the Plan.

(a) Allocation of Shares to Plan. The maximum aggregate number of Shares that may be issued under the Plan is:

(i) 10,505,000 Shares; plus

(ii) (1) any Shares that, as of the day immediately prior to the Registration Date, have been reserved but not issued pursuant to any awards granted under the Company's 2021 Equity Incentive Plan, and are not subject to any awards thereunder, plus (2) any Shares subject to stock options, restricted stock units, or similar awards granted under the Company's 2019 Stock Plan or the 2021 Equity Incentive Plan that, on or after the Registration Date, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by the Company for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of Shares to be added to the Plan pursuant to the foregoing clauses (1) and (2) equal to 7,379,911 Shares; plus

(iii) any additional Shares that become available for issuance under the Plan under Sections 3(b) and 3(c).

The Shares may be authorized but unissued Common Stock or Common Stock issued and then reacquired by the Company.

(b) Automatic Share Reserve Increase. The number of Shares available for issuance under the Plan will be increased on the first day of each Fiscal Year beginning with the 2022 Fiscal Year, in an amount equal to the least of:

(i) 15,750,000 Shares;

(ii) 5% of the total number of shares of all classes of common stock of the Company outstanding on the last day of the immediately preceding Fiscal Year; and

(iii) a lesser number of Shares determined by the Administrator.

(c) Share Reserve Return.

(i) Options and Stock Appreciation Rights. If an Option or Stock Appreciation Right expires or becomes unexercisable without having been exercised in full or is surrendered under an Exchange Program, the unissued Shares subject to the Option or Stock Appreciation Right will become available for future issuance under the Plan.

(ii) Stock Appreciation Rights. Only Shares actually issued pursuant to a Stock Appreciation Right (i.e., the net Shares issued) will cease to be available under the Plan; all remaining Shares originally subject to the Stock Appreciation Right will remain available for future issuance under the Plan.

(iii) Full-Value Awards. Shares issued pursuant to Awards of Restricted Stock, Restricted Stock Units, or stock-settled Performance Awards that are reacquired by the Company due to failure to vest or are forfeited to the Company will become available for future issuance under the Plan.

(iv) Withheld Shares. Shares used to pay the Exercise Price of an Award or to satisfy Tax Withholdings related to an Award will become available for future issuance under the Plan.

(v) Cash-Settled Awards. If any portion of an Award under the Plan is paid to a Participant in cash rather than Shares, that cash payment will not reduce the number of Shares available for issuance under the Plan.

(d) Incentive Stock Options. The maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a) plus, to the extent allowable under Code Section 422, any Shares that become available for issuance under the Plan under Sections 3(b) and 3(c).

(e) Adjustment. The numbers provided in Sections 3(a), 3(b), and 3(d) will be adjusted as a result of changes in capitalization and any other adjustments under Section 13.

(f) Substitute Awards. If the Committee grants Awards in substitution for equity compensation awards outstanding under a plan maintained by an entity acquired by or becomes a part of any member of the Company group, the grant of those substitute Awards will not decrease the number of Shares available for issuance under the Plan.

(g) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) The Plan will be administered by the Board or a Committee (the "Administrator"). Different Administrators may administer the Plan with respect to different groups of Service Providers. The Board may retain the authority to concurrently administer the Plan with a Committee and may revoke the delegation of some or all authority previously delegated.

(ii) To the extent permitted by Applicable Laws, the Board or a Committee may delegate to one or more subcommittees of the Board or a Committee or officers the authority to grant Awards to Employees of the Company or any of its Subsidiaries, provided that the delegation must comply with any limitations on the authority required by Applicable Laws, including the total number of Shares that may be subject to the Awards granted by such officer(s). This delegation may be revoked at any time by the Board or Committee.

(b) Powers of the Administrator. Subject to the terms of the Plan, any limitations on delegations specified by the Board, and any requirements imposed by Applicable Laws, the Administrator will have the authority, in its sole discretion, to make any determinations and perform any actions deemed necessary or advisable to administer the Plan including:

(i) to determine the Fair Market Value;

(ii) to approve forms of Award Agreements for use under the Plan;

(iii) to select the Service Providers to whom Awards may be granted and grant Awards to such Service Providers;

(iv) to determine the number of Shares to be covered by each Award granted;

(v) to determine the terms and conditions, consistent with the Plan, of any Award granted. Such terms and conditions may include, but are not limited to, the Exercise Price, the time(s) when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating to an Award;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe and interpret the Plan and make any decisions necessary to administer the Plan, including but not limited to determining whether and when a Change in Control has occurred;

(viii) to establish, amend and rescind rules and regulations and adopt sub-plans relating to the Plan, including rules, regulations and sub-plans for the purposes of facilitating compliance with applicable non-U.S. laws, easing the administration of the Plan and/or obtaining

tax-favorable treatment for Awards granted to Service Providers located outside the U.S., in each case as the Administrator may deem necessary or advisable;

(ix) to interpret, modify or amend each Award (subject to Section 18), including extending the Expiration Date and the post-termination exercisability period of such modified or amended Awards;

(x) to allow Participants to satisfy tax withholding obligations in any manner permitted by Section 15;

(xi) to delegate ministerial duties to any of the Company's employees;

(xii) to authorize any person to take any steps and execute, on behalf of the Company, any documents required for an Award previously granted by the Administrator to be effective;

(xiii) to temporarily suspend the exercisability of an Award if the Administrator deems such suspension to be necessary or appropriate for administrative purposes, provided that, unless prohibited by Applicable Laws, such suspension shall be lifted in all cases not less than 10 Trading Days before the last date that the Award may be exercised;

(xiv) to allow Participants to defer the receipt of the payment of cash or the delivery of Shares otherwise due to any such Participants under an Award; and

(xv) to make any determinations necessary or appropriate under Section 13.

(c) Grant Date. The grant date of an Award ("Grant Date") will be the date that the Administrator makes the determination granting such Award or may be a later date if such later date is designated by the Administrator on the date of the determination or under an automatic grant policy. Notice of the determination will be provided to each Participant within a reasonable time after the Grant Date.

(d) Waiver. The Administrator may waive any terms, conditions or restrictions.

(e) Fractional Shares. Except as otherwise provided by the Administrator, any fractional Shares that result from the adjustment of Awards will be canceled. Any fractional Shares that result from vesting percentages will be accumulated and vested on the date that an accumulated full Share is vested.

(f) Electronic Delivery. The Company may deliver by e-mail or other electronic means (including posting on a website maintained by the Company or by a third party under contract with the Company or another member of the Company Group) all documents relating to the Plan or any Award and all other documents that the Company is required to deliver to its security holders (including prospectuses, annual reports and proxy statements).

(g) Choice of Law; Choice of Forum. The Plan, all Awards and all determinations made and actions taken under the Plan, to the extent not otherwise governed by the laws of the

United States, will be governed by the laws of the State of Delaware without giving effect to principles of conflicts of law. For purposes of litigating any dispute that arises under this Plan, a Participant's acceptance of an Award is his or her consent to the jurisdiction of the State of Delaware, and agreement that any such litigation will be conducted in Delaware Court of Chancery, or the federal courts for the United States for the District of Delaware, and no other courts, regardless of where a Participant's services are performed.

(h) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units and Performance Awards may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Stock Option Award Agreement. Each Option will be evidenced by an Award Agreement that will specify the number of Shares subject to the Option, per share Exercise Price, its Expiration Date, and such other terms and conditions as the Administrator determines. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. An Option not designated as an Incentive Stock Option is a Nonstatutory Stock Option.

(b) Exercise Price. The Exercise Price for the Shares to be issued upon exercise of an Option will be determined by the Administrator and stated in the Award Agreement, subject to the following:

(i) In the case of an Incentive Stock Option:

(1) granted to an ISO Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary (a "Ten Percent Owner"), the Exercise Price for the Shares to be issued will be no less than 110% of the Fair Market Value per Share on the date of grant; and

(2) granted to any ISO Employee other than a Ten Percent Owner, the Exercise Price for the Shares to be issued will be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option, the Exercise Price for the Shares to be issued will be no less than 100% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with an Exercise Price of less than 100% of the Fair Market Value per Share on the date of grant (i) pursuant

to a transaction described in, and in a manner consistent with, Section 424(a) of the Code or (ii) to a Service Provider that is not a U.S. taxpayer.

(c) Form of Consideration. The Administrator will determine the acceptable form(s) of consideration for exercising an Option. Unless the Administrator determines otherwise, the consideration may consist of any one or more or combination of the following, to the extent permitted by Applicable Laws:

(i) cash;

(ii) check or wire transfer;

(iii) promissory note, if and to the extent approved by the Company;

(iv) other Shares that have a fair market value on the date of surrender equal to the aggregate Exercise Price of the Shares as to which such Option will be exercised. To the extent not prohibited by the Administrator, this shall include the ability to tender Shares to exercise the Option and then use the Shares received on exercise to exercise the Option with respect to additional Shares;

(v) consideration received by the Company under a cashless exercise arrangement (whether through a broker or otherwise) implemented by the Company for the exercise of Options that has been approved by the Administrator, if and to the extent permitted by the Company with respect to a particular Award;

(vi) consideration received by the Company under a net exercise program under which Shares are withheld from otherwise deliverable Shares that has been approved by the Administrator, if and to the extent permitted by the Company with respect to a particular Award; and

(vii) any other consideration or method of payment to issue Shares (provided that other forms of considerations may be approved only by the Administrator).

The Administrator has the power to remove or limit any of the above forms of consideration for exercising an Option except for the payment of cash at any time in its sole discretion.

(d) Term of Option. The term of each Option will be determined by the Administrator and stated in the Award Agreement, provided that, in the case of an Incentive Stock Option: (i) granted to a Ten Percent Owner, the Option may not be exercisable after the expiration of 5 years from the date such Option is granted, or such shorter term as may be provided in the Award Agreement, and (ii) granted to an ISO Employee other than a Ten Percent Owner, the Option may not be exercisable after the expiration of 10 years from the date such Option is granted term, or such shorter term as may be provided in the Award Agreement.

(e) Incentive Stock Option Limitations.

(i) To the extent that the aggregate fair market value of the shares with respect to which incentive stock options under Code Section 422(b) are exercisable for the first time

by a Participant during any calendar year (under all plans and agreements of the Company Group) exceeds \$100,000, the incentive stock options whose value exceeds \$100,000 will be treated as nonstatutory stock options. Incentive stock options will be considered in the order in which they were granted. For this purpose, the fair market value of the shares subject to an option will be determined as of the grant date of each option.

(ii) If an Option is designated in the Administrator action that granted it as an Incentive Stock Option but the terms of the Option do not comply with Sections 6(b) and 6(d), then the Option will not qualify as an Incentive Stock Option.

(f) Exercise of Option. An Option is exercised when the Company receives: (i) a notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Option and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable tax withholdings). Shares issued upon exercise of an Option will be issued in the name of the Participant. Until the Shares are issued (as evidenced by the entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, despite the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. An Option may not be exercised for a fraction of a Share. Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan (except as provided in Section 3(c)) and for purchase under the Option, by the number of Shares as to which the Option is exercised.

(i) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon such cessation as the result of the Participant's death or Disability, the Participant may exercise his or her Option within 30 days of such cessation, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement or Section 6(d), as applicable) to the extent that the Option is vested on the date of cessation. Unless otherwise provided by the Administrator or set forth in the Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if on the date of such cessation the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan immediately. If after such cessation the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(ii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within 6 months of cessation, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement or Section 6(d), as applicable) to the extent the Option is vested on the date of cessation. Unless otherwise provided by the Administrator or set forth in the Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if on the date of cessation the Participant is not vested as to his

or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan immediately. If after such cessation the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within 6 months following the Participant's death, or within such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement or Section 6(d), as applicable) to the extent that the Option is vested on the date of death, by the Participant's designated beneficiary, provided the Administrator has permitted the designation of a beneficiary and provided such beneficiary has been designated prior to the Participant's death in a form (if any) acceptable to the Administrator. If the Administrator has not permitted the designation of the beneficiary or if no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. If the Option is exercised pursuant to this Section 6(f)(iii), Participant's designated beneficiary or personal representative shall be subject to the terms of this Plan and the Award Agreement, including but not limited to the restrictions on transferability and forfeitability applicable to the Service Provider. Unless otherwise provided by the Administrator or set forth in the Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan immediately. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(g) Expiration of Options. Subject to Section 6(d), an Option's Expiration Date will be set forth in the Award Agreement. An Option may expire before its expiration date under the Plan (including pursuant to Sections 6(f), 13, 14, or 16(d)) or under the Award Agreement.

(h) Tolling of Expiration. If exercising an Option prior to its expiration is not permitted because of Applicable Laws, other than the rules of any stock exchange or quotation system on which the Common Stock is listed or quoted, the Option will remain exercisable until 30 days after the first date on which exercise no longer would be prevented by such provisions; provided, however, that this tolling of expiration shall not apply if and to the extent the holder of such Option is a United States taxpayer and the tolling would result in a violation of Section 409A such that the Option would be subject to additional taxation or interest under Section 409A. If this would result in the Option remaining exercisable past its Expiration Date, then unless earlier terminated pursuant to Section 14, the Option will remain exercisable only until the end of the later of (x) the first day on which its exercise would not be prevented by Section 19(a) and (y) its Expiration Date.

7. Stock Appreciation Rights.

(a) Stock Appreciation Right Award Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the number of Shares subject to the

Stock Appreciation Right, its per share Exercise Price, its Expiration Date, and such other terms and conditions as the Administrator determines.

(b) Exercise Price. The Exercise Price of a Stock Appreciation Right will be determined by the Administrator, provided that in the case of a Stock Appreciation Right granted to a U.S. taxpayer, the Exercise Price will be no less than 100% of the Fair Market Value of a Share on the date of grant.

(c) Payment of Stock Appreciation Right Amount. Payment upon Stock Appreciation Right exercise may be made in cash, in Shares (which, on the date of exercise, have an aggregate Fair Market Value equal to the amount of payment to be made under the Award), or any combination of cash and Shares, with the determination of form of payment made by the Administrator. When a Participant exercises a Stock Appreciation Right, he or she will be entitled to receive a payment from the Company equal to:

- (i) the excess, if any, between the fair market value on the date of exercise over the Exercise Price multiplied by
- (ii) the number of Shares with respect to which the Stock Appreciation Right is exercised.

(d) Exercise of Stock Appreciation Right. A Stock Appreciation Right is exercised when the Company receives a notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Stock Appreciation Right. Shares issued upon exercise of a Stock Appreciation Right will be issued in the name of the Participant. Until the Shares are issued (as evidenced by the entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to a Stock Appreciation Right, despite the exercise of the Stock Appreciation Right. The Company will issue (or cause to be issued) such Shares promptly after the Stock Appreciation Right is exercised. A Stock Appreciation Right may not be exercised for a fraction of a Share. Exercising a Stock Appreciation Right in any manner will decrease (x) the number of Shares thereafter available under the Stock Appreciation Right by the number of Shares as to which the Stock Appreciation Right is exercised and (y) the number of Shares thereafter available under the Plan by the number of Shares issued upon such exercise.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right's Expiration Date will be set forth in the Award Agreement. A Stock Appreciation Right may expire before its expiration date under the Plan (including pursuant to Sections 13, 14, or 16(d)) or under the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) relating to the maximum term and Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.

(f) Tolling of Expiration. If exercising a Stock Appreciation Right prior to its expiration is not permitted because of Applicable Laws, other than the rules of any stock exchange or quotation system on which the Common Stock is listed or quoted, the Stock Appreciation Right will remain exercisable until 30 days after the first date on which exercise no longer would be prevented by such provisions; provided, however, that this tolling of expiration shall not apply if and

to the extent the holder of such Stock Appreciation Right is a United States taxpayer and the tolling would result in a violation of Section 409A such that the Stock Appreciation Right would be subject to additional taxation or interest under Section 409A. If this would result in the Stock Appreciation Right remaining exercisable past its Expiration Date, then unless earlier terminated pursuant to Section 14, the Stock Appreciation Right will remain exercisable only until the end of the later of (x) the first day on which its exercise would not be prevented by Section 19(a) and (y) its Expiration Date.

8. Restricted Stock.

(a) Restricted Stock Award Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the number of Shares subject to the Award of Restricted Stock and such other terms and conditions as the Administrator determines. For the avoidance of doubt, Restricted Stock may be granted without any Period of Restriction (e.g., vested stock bonuses). Unless the Administrator determines otherwise, Shares of Restricted Stock will be held in escrow while unvested.

(b) Restrictions.

(i) Except as provided in this Section 8(b) or the Award Agreement, while unvested, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated.

(ii) While unvested, Service Providers holding Shares of Restricted Stock may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(iii) Service Providers holding a Share covered by an Award of Restricted Stock will not be entitled to receive dividends and other distributions paid with respect to such Shares while such Shares are unvested, unless the Administrator provides otherwise. If the Administrator provides that dividends and distributions will be received and any such dividends or distributions are paid in cash they will be subject to the same provisions regarding forfeitability as the Shares with respect to which they were paid and if such dividend or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares with respect to which they were paid and, unless the Administrator determines otherwise, the Company will hold such dividends until the restrictions on the Shares with respect to which they were paid have lapsed.

(iv) Except as otherwise provided in this Section 8(b) or an Award Agreement, a Share covered by each Award of Restricted Stock made under the Plan will be released from escrow when practicable after the last day of the applicable Period of Restriction.

(v) The Administrator may impose, prior to grant, or remove any restrictions on Shares covered by an Award of Restricted Stock.

9. Restricted Stock Units.

(a) Restricted Stock Unit Award Agreement. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify the number of Restricted Stock Units subject to the Award of Restricted Stock Units and such other terms and conditions as the Administrator determines.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria, if any, that, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit, or individual goals (that may include continued employment or service) or any other basis determined by the Administrator in its sole discretion.

(c) Earning Restricted Stock Units. Upon meeting any applicable vesting criteria, the Participant will have earned the Restricted Stock Units and will be paid as determined in Section 9(d). The Administrator may reduce or waive any criteria that must be met to earn the Restricted Stock Units.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made at the time(s) set forth in the Award Agreement and determined by the Administrator. Unless otherwise provided in the Award Agreement, the Administrator may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

10. Performance Awards.

(a) Award Agreement. Each Performance Award will be evidenced by an Award Agreement that will specify any time period during which any performance objectives or other vesting provisions, if any, will be measured ("Performance Period"), and such other terms and conditions as the Administrator determines.

(b) Objectives or Vesting Provisions and Other Terms. The Administrator will set objectives or vesting provisions that, depending on the extent to which the objectives or vesting provisions are met, will determine the value of the payout for the Performance Awards. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit, or individual goals (that may include continued employment or service) or any other basis determined by the Administrator in its sole discretion.

(c) Form and Timing of Payment. Payment of earned Performance Awards will be made at the time(s) specified in the Award Agreement. Payment with respect to earned Performance Awards will be made in cash, in Shares of equivalent value, or any combination of cash and Shares, with the determination of form of payment made by the Administrator at the time of payment or, in the discretion of the Administrator, at the time of grant.

(d) Value of Performance Awards. Each Performance Award's threshold, target, and maximum payout values will be established by the Administrator on or before the Grant Date.

(e) Earning Performance Awards. After an applicable Performance Period has ended, the holder of a Performance Award will be entitled to receive a payout for the Performance Award earned by the Participant over the Performance Period. The Administrator may reduce or waive any performance objectives or other vesting provisions for such Performance Award.

11. Leaves of Absence/ Reduced or Part-time Work Schedule/Transfer Between Locations/Change of Status.

(a) Leaves of Absence/ Reduced or Part-time Work Schedule/Transfer Between Locations. Unless the Administrator provides otherwise or as otherwise required by Applicable Laws, vesting of Awards granted hereunder will be adjusted or suspended during any unpaid leave of absence in accordance with the Company's leave of absence policy in effect at the time of such leave. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or within the Company Group. In addition, unless the Administrator provides otherwise or as otherwise required by Applicable Laws, if, after the date of grant of a Participant's Award, the Participant commences working on a part-time or reduced work schedule basis, the vesting of such Award will be adjusted in accordance with the Company's reduced work schedule/ part-time policy then in effect. Adjustments or suspensions of vesting pursuant to this Section shall be accomplished in a manner that is exempt from or complies with the requirements of Code Section 409A and the regulations and guidance thereunder.

(b) Employment Status. A Participant will not cease to be a Service Provider in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company (or member of the Company Group) or between the Company or any member of the Company Group.

(c) Incentive Stock Options. With respect to Incentive Stock Options, no such leave may exceed 3 months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then 6 months following the first day of such leave any Incentive Stock Option held by a Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Transferability of Awards. Unless determined otherwise by the Administrator, or otherwise required by Applicable Laws, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, the Award will be limited by any additional terms and conditions imposed by the Administrator. Any unauthorized transfer of an Award will be void.

13. Adjustments; Dissolution or Liquidation.

(a) Adjustments. If any extraordinary dividend or other extraordinary distribution (whether in cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification,

repurchase, or exchange of Shares or other securities of the Company, other change in the corporate structure of the Company affecting the Shares, or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any of its successors) affecting the Shares occurs (including a Change in Control), the Administrator, to prevent diminution or enlargement of the benefits or potential benefits intended to be provided under the Plan, will adjust the number and class of shares that may be delivered under the Plan and/or the number, class, and price of shares covered by each outstanding Award, and the numerical Share limits in Section 3. Notwithstanding the foregoing, the conversion of any convertible securities of the Company and ordinary course repurchases of Shares or other securities of the Company will not be treated as an event that will require adjustment.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant, at such time prior to the effective date of such proposed transaction as the Administrator determines. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

14. Change in Control or Merger.

(a) Administrator Discretion. If a Change in Control or a merger of the Company with or into another corporation or other entity occurs (each, a "Transaction"), each outstanding Award will be treated as the Administrator determines (subject to the provisions of this Section), without a Participant's consent, including that such Award be continued by the successor corporation or a Parent or Subsidiary of the successor corporation (or an affiliate thereof) or that the vesting of any such Awards may accelerate automatically upon consummation of a Transaction.

(b) Identical Treatment Not Required. The Administrator need not take the same action or actions with respect to all Awards or portions thereof or with respect to all Participants. The Administrator may take different actions with respect to the vested and unvested portions of an Award. The Administrator will not be required to treat all Awards similarly in the Transaction.

(c) Continuation. An Award will be considered continued if, following the Change in Control or merger:

(i) the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Transaction, the consideration (whether stock, cash, or other securities or property) received in the Transaction by holders of Shares for each Share held on the effective date of the Transaction (and if holders were offered a choice of consideration, the type of consideration received by the holders of a majority of the outstanding Shares) and the Award otherwise is continued in accordance with its terms (including vesting criteria, subject to Section 14(c)(iii) below and Section 13(a)); provided that if the consideration received in the Transaction is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon exercising an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, or Performance Award, for each Share subject to such Award, to be solely common stock of the successor

corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the Transaction; or

(ii) the Award is terminated in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the Transaction. Any such cash or property may be subjected to any escrow applicable to holders of Common Stock in the Change in Control. If as of the date of the occurrence of the Transaction the Administrator determines that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment. The amount of cash or property can be subjected to vesting and paid to the Participant over the original vesting schedule of the Award.

(iii) Notwithstanding anything in this Section 14(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent, in all cases, unless specifically provided otherwise under the applicable Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Transaction corporate structure will not invalidate an otherwise valid Award assumption.

(d) Modification. The Administrator will have authority to modify Awards in connection with a Change in Control or merger:

(i) in a manner that causes the Awards to lose their tax-preferred status;

(ii) to terminate any right a Participant has to exercise an Option prior to vesting in the Shares subject to the Option (i.e., "early exercise"), so that following the closing of the Transaction the Option may only be exercised only to the extent it is vested;

(iii) to reduce the Exercise Price subject to the Award in a manner that is disproportionate to the increase in the number of Shares subject to the Award, as long as the amount that would be received upon exercise of the Award immediately before and immediately following the closing of the Transaction is equivalent and the adjustment complies with U.S. Treasury Regulation Section 1.409A-1(b)(v)(D); and

(iv) to suspend a Participant's right to exercise an Option during a limited period of time preceding and or following the closing of the Transaction without Participant consent if such suspension is administratively necessary or advisable to permit the closing of the Transaction.

(e) Non-Continuation. If the successor corporation does not continue an Award (or some portion of such Award), the Participant will fully vest in (and have the right to exercise) 100% of the then-unvested Shares subject to his or her outstanding Options and Stock Appreciation Rights, all restrictions on 100% of the Participant's outstanding Restricted Stock and Restricted Stock Units will lapse, and, regarding 100% of Participant's outstanding Awards with

performance-based vesting, all performance goals or other vesting criteria will be treated as achieved at 100% of target levels and all other terms and conditions met, in all cases, unless specifically provided otherwise under the applicable Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable. In no event will vesting of an Award accelerate as to more than 100% of the Award. Unless specifically provided otherwise under the applicable Award Agreement or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, if Options or Stock Appreciation Rights are not continued when a Change in Control or a merger of the Company with or into another corporation or other entity occurs, the Administrator will notify the Participant in writing or electronically that the Participant's vested Options or Stock Appreciation Rights (after considering the foregoing vesting acceleration, if any) will be exercisable for a period of time determined by the Administrator in its sole discretion and all of the Participant's Options or Stock Appreciation Rights will terminate upon the expiration of such period (whether vested or unvested).

(f) Outside Director Grants.

(i) With respect to Awards granted to an Outside Director, in the event of a Change in Control, the Participant will fully vest in and have the right to exercise outstanding Options and/or Stock Appreciation Rights as to all of the Shares underlying such Award, including those Shares which otherwise would not be vested or exercisable, all restrictions on other outstanding Awards will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, unless specifically provided otherwise under the applicable Award Agreement, a Company policy related to Director compensation, or other written agreement authorized by the Administrator between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, that specifically references this default rule.

(ii) No Outside Director may be paid, issued or granted, in any Fiscal Year, cash retainer fees and equity awards (including any Awards issued under this Plan) with an aggregate value greater than \$750,000, increased to \$1,000,000 in connection with his or her initial service (with the value of each equity award based on its grant date fair value (determined in accordance with U.S. generally accepted accounting principles)). Any cash compensation paid or Awards granted to an individual for his or her services as an Employee, or for his or her services as a Consultant (other than as an Outside Director), will not count for purposes of the limitation under this Section 14(f)(ii).

15. Tax Matters.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash under an Award (or exercise thereof) or such earlier time as any Tax Withholding are due, the Company may deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy any Tax Withholding with respect to such Award or Shares subject to an Award (including upon exercise of an Award).

(b) Withholding Arrangements. The Administrator, in its sole discretion and under such procedures as it may specify from time to time, may elect to satisfy such Tax Withholding, in whole or in part (including in combination) by (without limitation) (i) requiring the Participant to pay cash, check or other cash equivalents, (ii) withholding otherwise deliverable cash (including cash from the sale of Shares issued to the Participant) or Shares having a fair market value equal to the amount required to be withheld or such greater amount (including up to a maximum statutory amount) as the Administrator may determine or permit if such amount does not result in unfavorable financial accounting treatment, as the Administrator determines in its sole discretion, (iii) forcing the sale of Shares issued pursuant to an Award (or exercise thereof) having a fair market value equal to the minimum statutory amount applicable in a Participant's jurisdiction or a greater amount as the Administrator may determine or permit if such greater amount would not result in unfavorable financial accounting treatment, as the Administrator determines in its sole discretion, (iv) requiring the Participant to deliver to the Company already-owned Shares having a fair market value equal to the minimum statutory amount required to be withheld or a greater amount as the Administrator may determine or permit if such greater amount would not result in unfavorable financial accounting treatment, as the Administrator determines in its sole discretion, (v) requiring the Participant to engage in a cashless exercise transaction (whether through a broker or otherwise) implemented by the Company in connection with the Plan, (vi) having the Company or a Parent or Subsidiary withhold from wages or any other cash amount due or to become due to the Participant and payable by the Company or any Parent or Subsidiary, or (vii) such other consideration and method of payment for the meeting of Tax Withholding as the Administrator may determine to the extent permitted by Applicable Laws, provided that, in all instances, the satisfaction of the Tax Withholding will not result in any adverse accounting consequence to the Company, as the Administrator may determine in its sole discretion. The fair market value of the Shares to be withheld or delivered will be determined as of the date the amount of tax to be withheld is calculated or such other date as Administrator determines is applicable or appropriate with respect to the Tax Withholding calculation.

(c) Compliance With Code Section 409A. Unless the Administrator determines that compliance with Code Section 409A is not necessary, it is intended that Awards will be designed and operated so that they are either exempt or excepted from the application of Code Section 409A or comply with any requirements necessary to avoid the imposition of additional tax under Code Section 409A(a)(1)(B) so that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A and the Plan and each Award Agreement will be interpreted consistent with this intent. This Section 15(c) is not a guarantee to any Participant of the consequences of his or her Awards. In no event will the Company have any responsibility, liability or obligation to reimburse, indemnify or hold harmless Participant for any taxes that may be imposed or other costs that may be incurred, as a result of Section 409A.

16. Other Terms.

(a) No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right regarding continuing the Participant's relationship as a Service Provider with the Company or member of the Company Group, nor will they interfere with the

Participant's right, or the Participant's employer's right, to terminate such relationship at any time free from any liability or claim under the Plan.

(b) Interpretation and Rules of Construction. The words "include," "includes" and "including" when used herein shall be deemed in each case to be followed by the words "without limitation."

(c) Plan Governs. In the event of a conflict between the terms and conditions of the Plan and the terms and conditions of any Grant Agreement, the terms and conditions of the Plan will prevail.

(d) Forfeiture Events.

(i) All Awards granted under the Plan will be subject to recoupment under any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Laws. In addition, the Administrator may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Administrator determines necessary or appropriate, including without limitation to any reacquisition right regarding previously acquired Shares or other cash or property. Unless this Section 16(d)(i) is specifically mentioned and waived in an Award Agreement or other document, no recovery of compensation under a clawback policy or otherwise will be an event that triggers or contributes to any right of a Participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company or a member of the Company Group.

(ii) The Administrator may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Such events may include, but will not be limited to, termination of such Participant's status as Service Provider for cause or any specified action or inaction by a Participant that would constitute cause for termination of such Participant's status as a Service Provider.

17. Term of Plan. Subject to Section 20, the Plan will become effective upon the later to occur of (a) its adoption by the Board, or (b) the business day immediately prior to the Registration Date. The Plan will continue in effect until terminated under Section 18, but (i) no Incentive Stock Options may be granted after 10 years from the earlier of the Board or stockholder approval of the Plan and (ii) Section 3(b) relating to automatic share reserve increase will operate only until the tenth anniversary of the earlier of the Board or stockholder approval of the Plan.

18. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Administrator, in its sole discretion, may amend, alter, suspend or terminate the Plan or any part thereof, at any time and for any reason.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary or desirable to comply with Applicable Laws.

(c) Consent of Participants Generally Required. Subject to Section 18(d) below, no amendment, alteration, suspension or termination of the Plan or an Award under it will materially impair the rights of any Participant without a signed, written agreement authorized by the Administrator between the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it regarding Awards granted under the Plan prior to such termination.

(d) Exceptions to Consent Requirement.

(i) A Participant's rights will not be deemed to have been impaired by any amendment, alteration, suspension or termination if the Administrator, in its sole discretion, determines that the amendment, alteration, suspension or termination taken as a whole, does not materially impair the Participant's rights; and

(ii) Subject to any limitations of Applicable Laws, the Administrator may amend the terms of any one or more Awards without the affected Participant's consent even if it does materially impair the Participant's right if such amendment is done:

(1) in a manner specified by the Plan;

(2) to maintain the qualified status of the Award as an Incentive Stock Option under Code Section 422;

(3) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award only because it impairs the qualified status of the Award as an Incentive Stock Option under Code Section 422;

(4) to clarify the manner of exemption from Code Section 409A or compliance with any requirements necessary to avoid the imposition of additional tax or interest under Code Section 409A(a)(1)(B); or

(5) to comply with other Applicable Laws.

19. Conditions Upon Issuance of Shares.

(a) Legal Compliance. The Company will make good faith efforts to comply with all Applicable Laws related to the issuance of Shares. Shares will not be issued pursuant to an Award, including without limitation upon exercise or vesting thereof, as applicable, unless the issuance and delivery of such Shares and exercise or vesting of the Award, as applicable, will comply with Applicable Laws. If required by the Administrator, issuance will be further subject to the approval of counsel for the Company with respect to such compliance. If the Company determines it to be impossible or impractical to obtain authority from any regulatory body having jurisdiction or to complete or comply with the requirements of any Applicable Laws, registration or other qualification of the Shares under any state, federal or foreign law or under the rules and

regulations of the U.S. Securities and Exchange Commission, the stock exchange on which Shares of the same class are then listed, or any other governmental or regulatory body, which authority, registration, qualification or rule compliance is deemed by the Company's counsel to be necessary or advisable for the issuance and sale of any Shares hereunder, the Company will be relieved of any liability regarding the failure to issue or sell such Shares as to which such authority, registration, qualification or rule compliance was not obtained and the Administrator reserves the authority, without the consent of a Participant, to terminate or cancel Awards with or without consideration in such a situation.

(b) Investment Representations. As a condition to the exercise or vesting of an Award, the Company may require the person exercising such Award to represent and warrant during any such exercise or vesting that the Shares are being purchased only for investment and with no present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

(c) Failure to Accept Award. If a Participant has not accepted an Award to the extent such acceptance has been requested or required by the Company or has not taken all administrative and other steps (e.g., setting up an account with a broker designated by the Company) necessary for the Company to issue Shares upon the vesting, exercise, or settlement of the Award prior to the first date the Shares subject to such Award are scheduled to vest, then the portion of the Award scheduled to vest on such date will be cancelled on such date and such Shares subject to the Award immediately will revert to the Plan for no additional consideration unless otherwise provided by the Administrator.

20. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within 12 months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

CODEX DNA, INC.

2021 EMPLOYEE STOCK PURCHASE PLAN

1. Purpose. The purpose of the Plan is to provide employees of the Company and its Designated Companies with an opportunity to purchase Common Stock through accumulated Contributions. The Company intends for the Plan to have two components: a component that is intended to qualify as an "employee stock purchase plan" under Section 423 of the Code (the "423 Component") and a component that is not intended to qualify as an "employee stock purchase plan" under Section 423 of the Code (the "Non-423 Component"). The provisions of the 423 Component, accordingly, will be construed so as to extend and limit Plan participation in a uniform and nondiscriminatory basis consistent with the requirements of Section 423 of the Code. An option to purchase shares of Common Stock under the Non-423 Component will be granted pursuant to rules, procedures, or sub-plans adopted by the Administrator designed to achieve tax, securities laws, or other objectives for Eligible Employees and the Company. Except as otherwise provided herein, the Non-423 Component will operate and be administered in the same manner as the 423 Component.

2. Definitions.

(a) "Administrator" means the Board or any Committee designated by the Board to administer the Plan pursuant to Section 14.

(b) "Affiliate" means any entity, other than a Subsidiary, in which the Company has an equity or other ownership interest.

(c) "Applicable Laws" means the requirements relating to the administration of equity-based awards, including but not limited to the related issuance of shares of Common Stock, under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where options are, or will be, granted under the Plan.

(d) "Board" means the Board of Directors of the Company.

(e) "Change in Control" means the occurrence of any of the following events:

(i) A change in the ownership of the Company that occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection, the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company's voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of fifty percent (50%) or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event will not be considered a Change in Control under this subsection (i). For this purpose, indirect beneficial ownership will include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(e), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its primary purpose is to change the jurisdiction of the Company's incorporation, or (ii) its primary purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(f) "Code" means the U.S. Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or U.S. Treasury Regulation thereunder will include such section or regulation, any valid regulation or other official applicable guidance promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

(g) "Committee" means a committee of the Board appointed in accordance with Section 14 hereof.

(h) "Common Stock" means the common stock of the Company.

(i) "Company" means Codex DNA, Inc., a Delaware corporation, or any successor thereto.

(j) "Compensation" includes an Eligible Employee's base straight time gross earnings but excludes payments for commissions, incentive compensation, bonuses, payments for overtime and shift premium, equity compensation income, and other similar compensation. The Administrator, in its discretion, may, on a uniform and nondiscriminatory basis, establish a different definition of Compensation for a subsequent Offering Period.

(k) "Contributions" means the payroll deductions and other additional payments that the Company may permit to be made by a Participant to fund the exercise of options granted pursuant to the Plan.

(l) "Designated Company," means any Subsidiary or Affiliate of the Company that has been designated by the Administrator from time to time in its sole discretion as eligible to participate in the Plan. For purposes of the 423 Component, only the Company and its Subsidiaries may be Designated Companies; provided, however that at any given time, a Subsidiary that is a Designated Company under the 423 Component will not be a Designated Company under the Non-423 Component.

(m) "Director" means a member of the Board.

(n) "Eligible Employee" means any individual who is a common law employee providing services to the Company or a Designated Company and is customarily employed for at least twenty (20) hours per week and more than five (5) months in any calendar year by the Employer, or any lesser number of hours per week and/or number of months in any calendar year established by the Administrator (if required under Applicable Law) for purposes of any separate Offering or for Eligible Employees participating in the Non-423 Component. For purposes of the Plan, the employment relationship will be treated as continuing intact while the individual is on sick leave or other leave of absence that the Employer approves or is legally protected under Applicable Laws with respect to the Participant's participation in the Plan. Where the period of leave exceeds three (3) months and the individual's right to reemployment is not guaranteed either by statute or by contract, the employment relationship will be deemed to have terminated three (3) months and one (1) day following the commencement of such leave. The Administrator, in its discretion, from time to time may, prior to an Enrollment Date for all options to be granted on such Enrollment Date in an Offering, determine (for each Offering under the 423 Component, on a uniform and nondiscriminatory basis or as otherwise permitted by U.S. Treasury Regulation Section 1.423-2) that the definition of Eligible Employee will or will not include an individual if he or she: (i) has not completed at least two (2) years of service since his or her last hire date (or such lesser period of time as may be determined by the Administrator in its discretion); (ii) customarily works not more than twenty (20) hours per week (or such lesser period of time as may be determined by the Administrator in its discretion); (iii) customarily works not more than five (5) months per calendar year (or such lesser period of time as may be determined by the Administrator in its discretion); (iv) is a highly compensated employee within the meaning of Section 414(q) of the Code; or (v) is a highly compensated employee within the meaning of Section 414(q) of the Code with compensation above a certain level or is an officer or subject to the disclosure requirements of Section 16(a) of the Exchange Act, provided the exclusion is applied with respect to each Offering under the 423 Component in an identical manner to all highly compensated individuals of the Employer whose employees are participating in that Offering. Each exclusion will be applied with respect to an Offering in a manner complying with U.S. Treasury Regulation Section 1.423-2(e)(2)(ii). Such exclusions may be applied with respect to an Offering under the Non-423 Component without regard to the limitations of U.S. Treasury Regulation Section 1.423-2.

(o) "Employer" means the employer of the applicable Eligible Employee(s).

(p) "Enrollment Date" means the first Trading Day of an Offering Period.

(q) "Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended, including the rules and regulations promulgated thereunder.

(r) "Exercise Date" means the last Trading Day of the Purchase Period. Notwithstanding the foregoing, in the event that an Offering Period is terminated prior to its expiration pursuant to Section 20(a), the Administrator, in its sole discretion, may determine that any Purchase Period also terminating under such Offering Period will terminate without options being exercised on the Exercise Date that otherwise would have occurred on the last Trading Day of such Purchase Period.

(s) "Fair Market Value" means, as of any date, and unless otherwise determined by the Administrator the value of a share of Common Stock determined as follows:

(i) The Fair Market Value will be the closing sales price for Common Stock as quoted on any established stock exchange or national market system (including without limitation the New York Stock Exchange, the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market) on which the Common Stock is listed on the date of determination (or the closing bid, if no sales were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable. If the determination date for the Fair Market Value occurs on a non-Trading Day (i.e., a weekend or holiday), the Fair Market Value will be such price on the immediately preceding Trading Day, unless otherwise determined by the Administrator. In the absence of an established market for the Common Stock, the Fair Market Value thereof will be determined in good faith by the Administrator.

The determination of fair market value for purposes of tax withholding may be made in the Administrator's discretion subject to Applicable Laws and is not required to be consistent with the determination of Fair Market Value for other purposes.

(t) "Fiscal Year" means a fiscal year of the Company.

(u) "New Exercise Date" means a new Exercise Date if the Administrator shortens any Offering Period then in progress.

(v) "Offering" means an offer under the Plan of an option that may be exercised during an Offering Period as further described in Section 4. For purposes of the Plan, the Administrator may designate separate Offerings under the Plan (the terms of which need not be identical) in which Eligible Employees of one or more Employers will participate, even if the dates of the applicable Offering Periods of each such Offering are identical and the provisions of the Plan will separately apply to each Offering. To the extent permitted by U.S. Treasury Regulation Section 1.423-2(a)(1), the terms of each Offering need not be identical provided that the terms of the Plan and an Offering together satisfy U.S. Treasury Regulation Section 1.423-2(a)(2) and (a)(3).

(w) "Offering Periods" means a period beginning on such date as may be determined by the Administrator in its discretion and ending on such Exercise Date as may be determined by the Administrator in its discretion, in each case on a uniform and nondiscriminatory basis. The duration and timing of Offering Periods may be changed pursuant to Sections 4, 20, and 30.

(x) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(y) "Participant" means an Eligible Employee that participates in the Plan.

(z) "Plan" means this Codex DNA, Inc. 2021 Employee Stock Purchase Plan.

(aa) "Purchase Period" means the period, as determined by the Administrator in its discretion on a uniform and nondiscriminatory basis, during an Offering Period that commences on the Offering Period's Enrollment Date and ends on the next Exercise Date, except that if the Administrator determines that more than one Purchase Period should occur within an Offering Period, subsequent Purchase Periods within such Offering Period commence after one Exercise Date and end with the next Exercise Date at such time or times as the Administrator determines prior to the commencement of the Offering Period.

(bb) "Purchase Price" means an amount equal to eighty-five percent (85%) of the Fair Market Value on the Enrollment Date or on the Exercise Date, whichever is lower; provided, however, that the Purchase Price may be determined for subsequent Offering Periods by the Administrator subject to compliance with Section 423 of the Code (or any successor rule or provision or any other Applicable Law, regulation or stock exchange rule) or pursuant to Section 20.

(cc) "Section 409A" means Section 409A of the Code and the regulations and guidance thereunder, as may be amended or modified from time to time.

(dd) "Subsidiary," means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

(ee) "Trading Day," means a day that the primary stock exchange (or national market system, or other trading platform, as applicable) upon which the Common Stock is listed is open for trading.

(ff) "U.S. Treasury Regulations" means the Treasury Regulations of the Code. Reference to a specific Treasury Regulation or Section of the Code will include such Treasury Regulation or Section, any valid regulation promulgated under such Section, and any comparable provision of any future legislation or regulation amending, supplementing, or superseding such Section or regulation.

3. Eligibility.

(a) Offering Periods. Any Eligible Employee on a given Enrollment Date will be eligible to participate in the Plan, subject to the requirements of Section 5.

(b) Non-U.S. Employees. Eligible Employees who are citizens or residents of a non-U.S. jurisdiction (without regard to whether they also are citizens or residents of the United States or resident aliens (within the meaning of Section 7701(b)(1)(A) of the Code)) may be excluded from participation in the Plan or an Offering if the participation of such Eligible Employees is prohibited under the laws of the applicable jurisdiction or if complying with the laws of the applicable jurisdiction would cause the Plan or an Offering to violate Section 423 of the Code. In the case of the Non-423 Component, Eligible Employees may be excluded from participation in the Plan or an Offering if the Administrator determines that participation of such Eligible Employees is not advisable or practicable.

(c) Limitations. Any provisions of the Plan to the contrary notwithstanding, no Eligible Employee will be granted an option under the Plan (i) to the extent that, immediately after the grant, such Eligible Employee (or any other person whose stock would be attributed to such Eligible Employee pursuant to Section 424(d) of the Code) would own capital stock of the Company or any Parent or Subsidiary of the Company and/or hold outstanding options to purchase such stock possessing five percent (5%) or more of

the total combined voting power or value of all classes of the capital stock of the Company or of any Parent or Subsidiary of the Company, or (ii) to the extent that his or her rights to purchase stock under all employee stock purchase plans (as defined in Section 423 of the Code) of the Company or any Parent or Subsidiary of the Company accrues at a rate, which exceeds twenty-five thousand dollars (\$25,000) worth of stock (determined at the Fair Market Value of the stock at the time such option is granted) for each calendar year in which such option is outstanding at any time, as determined in accordance with Section 423 of the Code and the regulations thereunder.

4. Offering Periods. Offering Periods will expire on the earliest to occur of (i) the completion of the purchase of Shares on the last Exercise Date occurring within twenty-seven (27) months of the applicable Enrollment Date on which the option to purchase Shares was granted, or (ii) such shorter period as may be established by the Administrator from time to time, in its discretion and on a uniform and nondiscriminatory basis, prior to an Enrollment Date for all options to be granted on such Enrollment Date.

5. Participation. An Eligible Employee may participate in the Plan pursuant to Section 3(a) by (i) submitting to the Company's stock administration office (or its designee) a properly completed subscription agreement authorizing Contributions in the form provided by the Administrator for such purpose, or (ii) following an electronic or other enrollment procedure determined by the Administrator, in either case on or before a date determined by the Administrator prior to an applicable Enrollment Date.

6. Contributions.

(a) At the time a Participant enrolls in the Plan pursuant to Section 5, he or she will elect to have Contributions (in the form of payroll deductions or otherwise, to the extent permitted by the Administrator) made on each pay day during the Offering Period in an amount that the Administrator may establish from time to time, in its discretion and on a uniform and nondiscriminatory basis, for all options to be granted on any Enrollment Date (for illustrative purposes, should a pay day occur on an Exercise Date, a Participant will have any Contributions made on such day applied to his or her account under the then-current Purchase Period or Offering Period). The Administrator, in its sole discretion, may permit all Participants in a specified Offering to contribute amounts to the Plan through payment by cash, check or other means set forth in the subscription agreement prior to each Exercise Date of each Purchase Period. A Participant's subscription agreement will remain in effect for successive Offering Periods unless terminated as provided in Section 10 hereof.

(b) In the event Contributions are made in the form of payroll deductions, such payroll deductions for a Participant will commence on the first pay day following the Enrollment Date and will end on the last pay day on or prior to the last Exercise Date of such Offering Period to which such authorization is applicable, unless sooner terminated by the Participant as provided in Section 10 hereof.

(c) All Contributions made for a Participant will be credited to his or her account under the Plan and Contributions will be made in whole percentages of his or her Compensation only. A Participant may not make any additional payments into such account.

(d) A Participant may discontinue his or her participation in the Plan as provided under Section 10.

(e) Unless otherwise determined by the Administrator:

(i) During any Purchase Period, a Participant may not increase the rate of his or her Contributions and may only decrease the rate of his or her Contributions one (1) time and such decrease may be to a Contribution rate of zero percent (0%); and

(ii) During any Offering Period, a Participant may increase or decrease the rate of his or her Contributions to become effective as of the beginning of the next Purchase Period occurring in such Offering Period, provided that a Participant may not increase the rate of his or her Contributions in excess of the rate of his or her Contributions in effect as of the Enrollment Date of the applicable Offering Period.

Any such increase or decrease in a Participant's rate of Contributions requires the Participant to (i) properly complete and submit to the Company's stock administration office (or its designee) a new subscription agreement authorizing the change in Contribution rate in the form provided by the Administrator for such purpose, or (ii) follow an electronic or other procedure prescribed by the Administrator, in either case, on or before a date determined by the Administrator prior to an applicable Exercise Date or, with respect to increases or decreases in a Participant's rate of Contributions applicable to a future Offering Period, on or before the Enrollment Date of such Offering Period. If a Participant has not followed such procedures to change the rate of Contributions, the rate of his or her Contributions will continue at the originally elected rate throughout the Purchase Period and future Offering Periods and Purchase Periods (unless the Participant's participation is terminated as provided in Sections 10 or 11). The Administrator may, in its sole discretion, amend the nature and/or number of Contribution rate changes that may be made by Participants during any Offering Period or Purchase Period and may establish other conditions or limitations as it deems appropriate for Plan administration. Except as otherwise provided in this subsection (e), any change in the rate of Contributions made pursuant to this Section 6(e) will be effective as of the first (1st) full payroll period following five (5) business days after the date on which the change is made by the Participant (unless the Administrator, in its sole discretion, elects to process a given change in payroll deduction rate more quickly).

(f) Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3(d), a Participant's Contributions may be decreased to zero percent (0%) at any time during a Purchase Period. Subject to Section 423(b)(8) of the Code and Section 3(d) hereof, Contributions will recommence at the rate originally elected by the Participant effective: (i) in the event of a limitation described in Section 3(d)(i), as of the beginning of the next Offering Period where Section 3(d)(i) no longer applies, and, (ii) and in the event of a limitation described in Section 3(d)(ii), as of the beginning of the first Purchase Period scheduled to end in the following calendar year, unless terminated by the Participant as provided in Section 10.

(g) Notwithstanding any provisions to the contrary in the Plan, the Administrator may allow Participants to participate in the Plan via cash contributions instead of payroll deductions if (i) payroll deductions are not permitted or advisable under Applicable Law; (ii) the Administrator determines that cash contributions are permissible for Participants participating in the 423 Component; and/or (iii) the Participants are participating in the Non-423 Component.

(h) At the time the option is exercised, in whole or in part, or at the time some or all of the Common Stock issued under the Plan is disposed of (or at any other time that a taxable event related to the Plan occurs), the Participant must make adequate provision for the Company's or Employer's federal, state, local or any other tax liability payable to any authority including taxes imposed by jurisdictions outside of the U.S., national insurance, social security, or other tax withholding obligations, if any, which arise upon the exercise of the option or the disposition of the Common Stock (or any other time that a taxable event related to the Plan occurs). At any time, the Company or the Employer may, but will not be obligated to, withhold from the Participant's compensation the amount necessary for the Company or the Employer to meet applicable withholding obligations, including any withholding required to make available to the Company or the Employer any tax deductions or benefits attributable to the sale or early disposition of

Common Stock by the Eligible Employee. In addition, the Company or the Employer may, but will not be obligated to, withhold from the proceeds of the sale of Common Stock or use any other method of withholding the Company or the Employer deems appropriate to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f).

7. Grant of Option. On the Enrollment Date of each Offering Period, each Eligible Employee participating in such Offering Period will be granted an option to purchase on each Exercise Date during such Offering Period (at the applicable Purchase Price) up to a number of shares of Common Stock determined by dividing such Eligible Employee's Contributions accumulated prior to such Exercise Date and retained in the Eligible Employee's account as of the Exercise Date by the applicable Purchase Price; provided that in no event will an Eligible Employee be permitted to purchase during each Purchase Period more than a fixed number of shares of Common Stock (subject to any adjustment pursuant to Section 19) in an amount that the Administrator may establish from time to time, in its discretion and on a uniform and nondiscriminatory basis, for all options to be granted on any Enrollment Date and provided further that such purchase will be subject to the limitations set forth in Sections 3(d) and 13. The Eligible Employee may accept the grant of such option with respect to any Offering Period under the Plan, by electing to participate in the Plan in accordance with the requirements of Section 5. The Administrator may, for future Offering Periods, increase or decrease, in its absolute discretion, the maximum number of shares of Common Stock that an Eligible Employee may purchase during each Purchase Period and/or Offering Period, as applicable. Exercise of the option will occur as provided in Section 8, unless the Participant has withdrawn pursuant to Section 10. The option will expire on the last day of the Offering Period.

8. Exercise of Option.

(a) Unless a Participant withdraws from the Plan as provided in Section 10, his or her option for the purchase of shares of Common Stock will be exercised automatically on each Exercise Date, and the maximum number of full shares of Common Stock subject to the option will be purchased for such Participant at the applicable Purchase Price with the accumulated Contributions from his or her account. No fractional shares of Common Stock will be purchased; any Contributions accumulated in a Participant's account, which are not sufficient to purchase a full share will be retained in the Participant's account for the subsequent Purchase Period or Offering Period, as applicable, subject to earlier withdrawal by the Participant as provided in Section 10. Any other funds left over in a Participant's account after the Exercise Date will be returned to the Participant. During a Participant's lifetime, a Participant's option to purchase shares of Common Stock hereunder is exercisable only by him or her.

(b) If the Administrator determines that, on a given Exercise Date, the number of shares of Common Stock with respect to which options are to be exercised may exceed (i) the number of shares of Common Stock that were available for sale under the Plan on the Enrollment Date of the applicable Offering Period, or (ii) the number of shares of Common Stock available for sale under the Plan on such Exercise Date, the Administrator may in its sole discretion (x) provide that the Company will make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as will be practicable and as it will determine in its sole discretion to be equitable among all Participants exercising options to purchase Common Stock on such Exercise Date, and continue all Offering Periods then in effect or (y) provide that the Company will make a pro rata allocation of the shares of Common Stock available for purchase on such Enrollment Date or Exercise Date, as applicable, in as uniform a manner as will be practicable and as it will determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Exercise Date, and terminate any or all Offering Periods then in effect pursuant to Section 20. The Company may make a pro rata allocation of the shares of Common Stock available on the Enrollment Date of any applicable Offering Period pursuant to the

preceding sentence, notwithstanding any authorization of additional shares for issuance under the Plan by the Company's stockholders subsequent to such Enrollment Date.

9. Delivery. As soon as reasonably practicable after each Exercise Date on which a purchase of shares of Common Stock occurs, the Company will arrange the delivery to each Participant of the shares of Common Stock purchased upon exercise of his or her option in a form determined by the Administrator (in its sole discretion) and pursuant to rules established by the Administrator. The Company may permit or require that shares be deposited directly with a broker designated by the Company or to a designated agent of the Company, and the Company may utilize electronic or automated methods of share transfer. The Company may require that shares of Common Stock be retained with such broker or agent for a designated period of time and/or may establish other procedures to permit tracking of disqualifying dispositions of such shares. No Participant will have any voting, dividend, or other stockholder rights with respect to shares of Common Stock subject to any option granted under the Plan until such shares of Common Stock have been purchased and delivered to the Participant as provided in this Section 9.

10. Withdrawal.

(a) A Participant may withdraw all but not less than all the Contributions credited to his or her account and not yet used to exercise his or her option under the Plan at any time by (i) submitting to the Company's stock administration office (or its designee) a written notice of withdrawal in the form determined by the Administrator for such purpose (which may be similar to the form attached hereto as Exhibit B), or (ii) following an electronic or other withdrawal procedure determined by the Administrator. The Administrator may set forth a deadline of when a withdrawal must occur to be effective prior to a given Exercise Date in accordance with policies it may approve from time to time. All of the Participant's Contributions credited to his or her account will be paid to such Participant as soon as administratively practicable after receipt of notice of withdrawal and such Participant's option for the Offering Period will be automatically terminated, and no further Contributions for the purchase of shares of Common Stock will be made for such Offering Period. If a Participant withdraws from an Offering Period, Contributions will not resume at the beginning of the succeeding Offering Period, unless the Participant re-enrolls in the Plan in accordance with the provisions of Section 5.

(b) A Participant's withdrawal from an Offering Period will not have any effect on his or her eligibility to participate in any similar plan that may hereafter be adopted by the Company or in succeeding Offering Periods that commence after the termination of the Offering Period from which the Participant withdraws.

11. Termination of Employment. Upon a Participant's ceasing to be an Eligible Employee, for any reason, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to such Participant's account during the Offering Period but not yet used to purchase shares of Common Stock under the Plan will be returned to such Participant or, in the case of his or her death, to the person or persons entitled thereto under Section 15, and such Participant's option will be automatically terminated. Unless determined otherwise by the Administrator in a manner that, with respect to an Offering under the 423 Component, is permitted by, and compliant with, Code Section 423, a Participant whose employment transfers between entities through a termination with an immediate rehire (with no break in service) by the Company or a Designated Company will not be treated as terminated under the Plan; however, if a Participant transfers from an Offering under the 423 Component to the Non-423 Component, the exercise of the option will be qualified under the 423 Component only to the extent it complies with Section 423 of the Code; further, no Participant will be deemed to switch from an Offering under the Non-423 Component to an Offering under the 423 Component or vice versa unless (and then only

to the extent) such switch would not cause the 423 Component or any option thereunder to fail to comply with Code Section 423.

12. Interest. No interest will accrue on the Contributions of a participant in the Plan, except as may be required by Applicable Law, as determined by the Company, and if so required by the laws of a particular jurisdiction, will apply to all Participants in the relevant Offering under the 423 Component, except to the extent otherwise permitted by U.S. Treasury Regulation Section 1.423-2(f).

13. Stock.

(a) Subject to adjustment upon changes in capitalization of the Company as provided in Section 19 hereof, the maximum number of shares of Common Stock that will be made available for sale under the Plan will be 1,050,000 shares of Common Stock, plus the number of shares of Common Stock to be added to the Plan pursuant to the next sentence. The number of shares of Common Stock available for issuance under the Plan will be increased on the first day of each Fiscal Year beginning for the Fiscal Year following the Fiscal Year in which the first Enrollment Date (if any) occurs equal to the least of (i) 3,150,000 shares of Common Stock; (ii) one percent (1%) of the outstanding shares of all classes of the Company's common stock on the last day of the immediately preceding Fiscal Year; or (iii) an amount determined by the Administrator.

(b) Until the shares of Common Stock are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), a Participant will have only the rights of an unsecured creditor with respect to such shares, and no right to vote or receive dividends or any other rights as a stockholder will exist with respect to such shares.

(c) Shares of Common Stock to be delivered to a Participant under the Plan will be registered in the name of the Participant or, if so required under Applicable Laws, in the name of the Participant and his or her spouse.

14. Administration. The Plan will be administered by the Board or a Committee appointed by the Board, which Committee will be constituted to comply with Applicable Laws. The Administrator will have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to delegate ministerial duties to any of the Company's employees, to designate separate Offerings under the Plan, to designate Subsidiaries and Affiliates as participating in the 423 Component or Non-423 Component, to determine eligibility, to adjudicate all disputed claims filed under the Plan and to establish such procedures that it deems necessary or advisable for the administration of the Plan (including, without limitation, to adopt such rules, procedures, sub-plans, and appendices to the enrollment agreement as are necessary or appropriate to permit the participation in the Plan by employees who are foreign nationals or employed outside the U.S., the terms of which rules, procedures, sub-plans, and appendices may take precedence over other provisions of this Plan, with the exception of Section 13(a) hereof, but unless otherwise superseded by the terms of such rules, procedures, sub-plan or appendix, the provisions of this Plan will govern the operation of such sub-plan or appendix). Unless otherwise determined by the Administrator, the Eligible Employees eligible to participate in each sub-plan will participate in a separate Offering under the 423 Component, or if the terms would not qualify under the 423 Component, in the Non-423 Component, in either case unless such designation would cause the 423 Component to violate the requirements of Section 423 of the Code. Without limiting the generality of the foregoing, the Administrator is specifically authorized to adopt rules and procedures regarding eligibility to participate, the definition of Compensation, handling of Contributions, making of Contributions to the Plan (including, without limitation, in forms other than payroll deductions), establishment of bank or trust accounts to hold Contributions,

payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of stock certificates that vary with applicable local requirements. The Administrator also is authorized to determine that, to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f), the terms of an option granted under the Plan or an Offering to citizens or residents of a non-U.S. jurisdiction will be less favorable than the terms of options granted under the Plan or the same Offering to employees resident solely in the U.S. Every finding, decision, and determination made by the Administrator will, to the full extent permitted by law, be final and binding upon all parties.

15. Designation of Beneficiary.

(a) If permitted by the Administrator, a Participant may file a designation of a beneficiary who is to receive any shares of Common Stock and cash, if any, from the Participant's account under the Plan in the event of such Participant's death subsequent to an Exercise Date on which the option is exercised but prior to delivery to such Participant of such shares and cash. In addition, if permitted by the Administrator, a Participant may file a designation of a beneficiary who is to receive any cash from the Participant's account under the Plan in the event of such Participant's death prior to exercise of the option. If a Participant is married and the designated beneficiary is not the spouse, spousal consent will be required for such designation to be effective.

(b) Such designation of beneficiary may be changed by the Participant at any time by notice in a form determined by the Administrator. In the event of the death of a Participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such Participant's death, the Company will deliver such shares and/or cash to the executor or administrator of the estate of the Participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the Participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

(c) All beneficiary designations will be in such form and manner as the Administrator may designate from time to time. Notwithstanding Sections 15(a) and (b) above, the Company and/or the Administrator may decide not to permit such designations by Participants in non-U.S. jurisdictions to the extent permitted by U.S. Treasury Regulation Section 1.423-2(f).

16. Transferability. Neither Contributions credited to a Participant's account nor any rights with regard to the exercise of an option or to receive shares of Common Stock under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 15 hereof) by the Participant. Any such attempt at assignment, transfer, pledge or other disposition will be without effect, except that the Company may treat such act as an election to withdraw funds from an Offering Period in accordance with Section 10 hereof.

17. Use of Funds. The Company may use all Contributions received or held by it under the Plan for any corporate purpose, and the Company will not be obligated to segregate such Contributions except under Offerings or for Participants in the Non-423 Component for which Applicable Laws require that Contributions to the Plan by Participants be segregated from the Company's general corporate funds and/or deposited with an independent third party, provided that, if such segregation or deposit with an independent third party is required by Applicable Laws, it will apply to all Participants in the relevant Offering under the 423 Component, except to the extent otherwise permitted by U.S. Treasury Regulation

Section 1.423-2(f). Until shares of Common Stock are issued, Participants will have only the rights of an unsecured creditor with respect to such shares.

18. Reports. Individual accounts will be maintained for each Participant in the Plan. Statements of account will be given to participating Eligible Employees at least annually, which statements will set forth the amounts of Contributions, the Purchase Price, the number of shares of Common Stock purchased and the remaining cash balance, if any.

19. Adjustments, Dissolution, Liquidation, Merger, or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Common Stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of Common Stock or other securities of the Company, or other change in the corporate structure of the Company affecting the Common Stock occurs (other than any ordinary dividends or other ordinary distributions), the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will, in such manner as it may deem equitable, adjust the number and class of Common Stock that may be delivered under the Plan, the Purchase Price per share, the class and the number of shares of Common Stock covered by each option under the Plan that has not yet been exercised, and the numerical limits of Sections 7 and 13.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, any Offering Period then in progress will be shortened by setting a New Exercise Date, and will terminate immediately prior to the consummation of such proposed dissolution or liquidation, unless provided otherwise by the Administrator. The New Exercise Date will be before the date of the Company's proposed dissolution or liquidation. The Administrator will notify each Participant in writing or electronically, prior to the New Exercise Date, that the Exercise Date for the Participant's option has been changed to the New Exercise Date and that the Participant's option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant has withdrawn from the Offering Period as provided in Section 10 hereof.

(c) Merger or Change in Control. In the event of a merger or Change in Control, each outstanding option will be assumed or an equivalent option substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the option, the Offering Period with respect to which such option relates will be shortened by setting a New Exercise Date on which such Offering Period will end. The New Exercise Date will occur before the date of the Company's proposed merger or Change in Control. The Administrator will notify each Participant in writing or electronically prior to the New Exercise Date, that the Exercise Date for the Participant's option has been changed to the New Exercise Date and that the Participant's option will be exercised automatically on the New Exercise Date, unless prior to such date the Participant has withdrawn from the Offering Period as provided in Section 10 hereof.

20. Amendment or Termination.

(a) The Administrator, in its sole discretion, may amend, suspend, or terminate the Plan, or any part thereof, at any time and for any reason. If the Plan is terminated, the Administrator, in its discretion, may elect to terminate all outstanding Offering Periods either immediately or upon completion of the purchase of shares of Common Stock on the next Exercise Date (which may be sooner than originally scheduled, if determined by the Administrator in its discretion), or may elect to permit Offering Periods to expire in accordance with their terms (and subject to any adjustment pursuant to Section 19). If the Offering

Periods are terminated prior to expiration, all amounts then credited to Participants' accounts that have not been used to purchase shares of Common Stock will be returned to the Participants (without interest thereon, except as otherwise required under Applicable Laws, as further set forth in Section 12 hereof) as soon as administratively practicable.

(b) Without stockholder consent and without limiting Section 20(a), the Administrator will be entitled to change the Offering Periods or Purchase Periods, designate separate Offerings, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit Contributions in excess of the amount designated by a Participant in order to adjust for delays or mistakes in the Company's processing of properly completed Contribution elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with Contribution amounts, and establish such other limitations or procedures as the Administrator determines in its sole discretion advisable that are consistent with the Plan.

(c) In the event the Administrator determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Administrator may, in its discretion and, to the extent necessary or desirable, modify, amend or terminate the Plan to reduce or eliminate such accounting consequence including, but not limited to:

(i) amending the Plan to conform with the safe harbor definition under the Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto), including with respect to an Offering Period underway at the time;

(ii) altering the Purchase Price for any Offering Period or Purchase Period including an Offering Period or Purchase Period underway at the time of the change in Purchase Price;

(iii) shortening any Offering Period or Purchase Period by setting a New Exercise Date, including an Offering Period or Purchase Period underway at the time of the Administrator action;

(iv) reducing the maximum percentage of Compensation a Participant may elect to set aside as Contributions; and

(v) reducing the maximum number of shares of Common Stock a Participant may purchase during any Offering Period or Purchase Period.

Such modifications or amendments will not require stockholder approval or the consent of any Participants.

21. Notices. All notices or other communications by a Participant to the Company under or in connection with the Plan will be deemed to have been duly given when received in the form and manner specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

22. Conditions Upon Issuance of Shares. Shares of Common Stock will not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares of Common Stock pursuant thereto will comply with all applicable provisions of law, domestic or foreign, including, without limitation, the U.S. Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares of

Common Stock may then be listed, and will be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

23. Section 409A. The Plan is intended to be exempt from the application of Section 409A, and, to the extent not exempt, is intended to comply with Section 409A and any ambiguities herein will be interpreted to so be exempt from, or comply with, Section 409A. In furtherance of the foregoing and notwithstanding any provision in the Plan to the contrary, if the Administrator determines that an option granted under the Plan may be subject to Section 409A or that any provision in the Plan would cause an option under the Plan to be subject to Section 409A, the Administrator may amend the terms of the Plan and/or of an outstanding option granted under the Plan, or take such other action the Administrator determines is necessary or appropriate, in each case, without the Participant's consent, to exempt any outstanding option or future option that may be granted under the Plan from or to allow any such options to comply with Section 409A, but only to the extent any such amendments or action by the Administrator would not violate Section 409A. Notwithstanding the foregoing, the Company and any of its Parent or Subsidiaries will have no obligation to reimburse, indemnify, or hold harmless a Participant or any other party if the option to purchase Common Stock under the Plan that is intended to be exempt from or compliant with Section 409A is not so exempt or compliant or for any action taken by the Administrator with respect thereto. The Company makes no representation that the option to purchase Common Stock under the Plan is compliant with Section 409A.

24. Term of Plan. The Plan will become effective upon the earlier to occur of its adoption by the Board or its approval by the stockholders of the Company. It will continue in effect for a term of twenty (20) years, unless sooner terminated under Section 20.

25. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

26. Governing Law. The Plan will be governed by, and construed in accordance with, the laws of the State of California (except its choice-of-law provisions).

27. No Right to Employment. Participation in the Plan by a Participant will not be construed as giving a Participant the right to be retained as an employee of the Company or a Subsidiary or Affiliate, as applicable. Furthermore, the Company or a Subsidiary or Affiliate may dismiss a Participant from employment at any time, free from any liability or any claim under the Plan.

28. Severability. If any provision of the Plan is or becomes or is deemed to be invalid, illegal, or unenforceable for any reason in any jurisdiction or as to any Participant, such invalidity, illegality or unenforceability will not affect the remaining parts of the Plan, and the Plan will be construed and enforced as to such jurisdiction or Participant as if the invalid, illegal or unenforceable provision had not been included.

29. Compliance with Applicable Laws. The terms of this Plan are intended to comply with all Applicable Laws and will be construed accordingly.

30. Automatic Transfer to Low Price Offering Period. To the extent permitted by Applicable Laws, if the Fair Market Value on any Exercise Date in an Offering Period is lower than the Fair Market Value on the Enrollment Date of such Offering Period, then all Participants in such Offering Period automatically will be withdrawn from such Offering Period immediately after the exercise of their option on such Exercise Date and automatically re-enrolled in the immediately following Offering Period as of the first day thereof.

EXHIBIT A

CODEX DNA, INC.

2021 EMPLOYEE STOCK PURCHASE PLAN

SUBSCRIPTION AGREEMENT

____ Original Application

Offering Date: _____

____ Change in Payroll Deduction Rate

1. _____ hereby elects to participate in the Codex DNA, Inc. 2021 Employee Stock Purchase Plan (the "Plan") and subscribes to purchase shares of the Company's Common Stock in accordance with this Subscription Agreement and the Plan. Any capitalized terms not specifically defined in this Subscription Agreement will have the meaning ascribed to them under the Plan.

2. I hereby authorize and consent to payroll deductions from each paycheck in the amount of ____% of my Compensation; a decrease in rate may be to zero percent (0%) during the Offering Period in accordance with the Plan. (Please note that no fractional percentages are permitted.)

3. I understand that, subject to the terms and conditions of the Plan:

(a) The last day upon which such deduction will be made with respect to any Purchase Period will be the last pay day on or prior to the last Exercise Date of such Offering Period (for illustrative purposes, should a pay day occur on an Exercise Date, a Participant will have any Contributions made on such day applied to his or her account under the then-current Purchase Period or Offering Period);

(b) During any Purchase Period, I am permitted to decrease the rate of my Contributions only one (1) time, and such decrease may be to zero percent (0%); and

(c) During any Offering Period, I am permitted to increase or decrease the rate of my Contributions to become effective beginning on the next occurring Purchase Period of that Offering Period, provided that I may not increase the rate of my Contributions in excess of the rate of my Contributions in effect as of the Enrollment Date of such Offering Period.

4. I understand that said payroll deductions will be accumulated for the purchase of shares of Common Stock at the applicable Purchase Price determined in accordance with the Plan. I understand that if I do not withdraw from an Offering Period, any accumulated payroll deductions will be used to automatically exercise my option and purchase Common Stock under the Plan. I further understand that if I am outside of the U.S., my payroll deductions will be converted to U.S. dollars at an exchange rate selected by the Company on the purchase date.

5. I have received a copy of the complete Plan and its accompanying prospectus. I understand that my participation in the Plan is in all respects subject to the terms of the Plan.

6. Shares of Common Stock purchased for me under the Plan should be issued in the name(s) of _____ (Eligible Employee or Eligible Employee and spouse only).

7. If I am a U.S. taxpayer, I understand that if I dispose of any shares received by me pursuant to the Plan within two (2) years after the Offering Date (the first day of the Offering Period during which I

purchased such shares) or one (1) year after the Exercise Date, I will be treated for federal income tax purposes as having received ordinary income at the time of such disposition in an amount equal to the excess of the fair market value of the shares at the time such shares were purchased by me over the price that I paid for the shares. I hereby agree to notify the Company in writing within thirty (30) days after the date of any disposition of my shares and I will make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the disposition of the Common Stock. The Company may, but will not be obligated to, withhold from my compensation the amount necessary to meet any applicable withholding obligation including any withholding necessary to make available to the Company any tax deductions or benefits attributable to sale or early disposition of Common Stock by me. If I dispose of such shares at any time after the expiration of the two (2)-year and one (1)-year holding periods, I understand that I will be treated for federal income tax purposes as having received income only at the time of such disposition, and that such income will be taxed as ordinary income only to the extent of an amount equal to the lesser of (a) the excess of the fair market value of the shares at the time of such disposition over the purchase price which I paid for the shares, or (b) 15% of the fair market value of the shares on the first day of the Offering Period. The remainder of the gain, if any, recognized on such disposition will be taxed as capital gain.

8. For employees that may be subject to tax in non U.S. jurisdictions, I acknowledge and agree that, regardless of any action taken by the Company or any Designated Company with respect to any or all income tax, social security, social insurances, National Insurance Contributions, payroll tax, fringe benefit, or other tax-related items related to my participation in the Plan and legally applicable to me including, without limitation, in connection with the grant of such options, the purchase or sale of shares of Common Stock acquired under the Plan and/or the receipt of any dividends on such shares ("Tax-Related Items"), the ultimate liability for all Tax-Related Items is and remains my responsibility and may exceed the amount actually withheld by the Company or a Designated Company. Furthermore, I acknowledge that the Company and/or any Designated Company (a) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the options under the Plan and (b) do not commit to and are under no obligation to structure the terms of the grant of options or any aspect of my participation in the Plan to reduce or eliminate my liability for Tax-Related Items or achieve any particular tax result. Further, if I have become subject to tax in more than one jurisdiction between the date of my enrollment and the date of any relevant taxable or tax withholding event, as applicable, I acknowledge that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

Prior to the purchase of shares of Common Stock under the Plan or any other relevant taxable or tax withholding event, as applicable, I agree to make adequate arrangements satisfactory to the Company and/or the applicable Designated Company to satisfy all Tax-Related Items. In this regard, I authorize the Company and/or the applicable Designated Company, or their respective agents, at their discretion, to satisfy any applicable withholding obligations with regard to all Tax-Related Items by one or a combination of the following: (a) withholding from my wages or Compensation paid to me by the Company and/or the applicable Designated Company; or (b) withholding from proceeds of the sale of the shares of Common Stock purchased under the Plan either through a voluntary sale or through a mandatory sale arranged by the Company (on my behalf pursuant to this authorization). Depending on the withholding method, the Company may withhold or account for Tax-Related Items by considering applicable maximum withholding rates, in which case I will receive a refund of any over-withheld amount in cash and will have no entitlement to the Common Stock equivalent.

Finally, I agree to pay to the Company or the applicable Designated Company any amount of Tax-Related Items that the Company or the applicable Designated Company may be required to withhold as a result of my participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to purchase shares of Common Stock under the Plan on my behalf and/or refuse to issue or deliver the shares or the proceeds of the sale of shares if I fail to comply with my obligations in connection with the Tax-Related Items.

9. By electing to participate in the Plan, I acknowledge, understand and agree that:

- (a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent provided for in the Plan;
- (b) all decisions with respect to future grants under the Plan, if applicable, will be at the sole discretion of the Company;
- (c) the grant of options under the Plan will not create a right to employment or be interpreted as forming or amending an employment or service contract with the Company, or any Designated Company, and will not interfere with the ability of the Company or any Designated Company, as applicable, to terminate my employment (if any);
- (d) I am voluntarily participating in the Plan;
- (e) the options granted under the Plan and the shares of Common Stock underlying such options, and the income and value of same, are not intended to replace any pension rights or compensation;
- (f) the options granted under the Plan and the shares of Common Stock underlying such options, and the income and value of same, are not part of my normal or expected compensation for any purpose, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments;
- (g) the future value of the shares of Common Stock offered under the Plan is unknown, indeterminable and cannot be predicted with certainty;
- (h) the shares of Common Stock that I acquire under the Plan may increase or decrease in value, even below the Purchase Price;
- (i) no claim or entitlement to compensation or damages will arise from the forfeiture of options granted to me under the Plan as a result of the termination of my status as an Eligible Employee (for any reason whatsoever, and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where I am employed or the terms of my employment agreement, if any) and, in consideration of the grant of options under the Plan to which I am otherwise not entitled, I irrevocably agree never to institute a claim against the Company, or any Designated Company, waive my ability, if any, to bring such claim, and release the Company, and any Designated Company from any such claim that may arise; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, I will be deemed irrevocably to have agreed to not to pursue such claim and agree to execute any and all documents necessary to request dismissal or withdrawal of such claim; and

(j) in the event of the termination of my status as an Eligible Employee (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where I am employed or the terms of my employment agreement, if any), my right to participate in the Plan and any options granted to me under the Plan, if any, will terminate effective as of the date that I am no longer actively employed by the Company or one of its Designated Companies and, in any event, will not be extended by any notice period mandated under the employment laws in the jurisdiction in which I am employed or the terms of my employment agreement, if any (e.g., active employment would not include a period of "garden leave" or similar period pursuant to the employment laws in the jurisdiction in which I am employed or the terms of my employment agreement, if any); the Company will have the exclusive discretion to determine when I am no longer actively employed for purposes of my participation in the Plan (including whether I may still be considered to be actively employed while on a leave of absence).

10. I understand that the Company and/or any Designated Company may collect, where permissible under applicable law certain personal information about me, including, but not limited to, my name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of Common Stock or directorships held in the Company, details of all options granted under the Plan or any other entitlement to shares of Common Stock awarded, canceled, exercised, vested, unvested or outstanding in my favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan. I understand that Company may transfer my Data to the United States, which is not considered by the European Commission to have data protection laws equivalent to the laws in my country. I understand that the Company will transfer my Data to its designated broker, or such other stock plan service provider as may be selected by the Company in the future, which is assisting the Company with the implementation, administration and management of the Plan. I understand that the recipients of the Data may be located in the United States or elsewhere, and that a recipient's country of operation (e.g., the United States) may have different, including less stringent, data privacy laws that the European Commission or my jurisdiction does not consider to be equivalent to the protections in my country. I understand that I may request a list with the names and addresses of any potential recipients of the Data by contacting my local human resources representative. I authorize the Company, the Company's designated broker and any other possible recipients which may assist the Company with implementing, administering and managing the Plan to receive, possess, use, retain and transfer the Data, in electronic or other form, for the sole purpose of implementing, administering and managing my participation in the Plan. I understand that Data will be held only as long as is necessary to implement, administer and manage my participation in the Plan. I understand that that I may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing my local human resources representative. Further, I understand that I am providing the consents herein on a purely voluntary basis. If I do not consent, or if I later seek to revoke my consent, my employment status or career with the Company or any Designated Company will not be adversely affected; the only adverse consequence of refusing or withdrawing my consent is that the Company would not be able to grant me options under the Plan or other equity awards, or administer or maintain such awards. Therefore, I understand that refusing or withdrawing my consent may affect my ability to participate in the Plan. For more information on the consequences of my refusal to consent or withdrawal of consent, I understand that I may contact my local human resources representative.

If I am an employee outside the U.S., I understand that in accordance with applicable law, I have the right to access, and to request a copy of, the Data held about me. I also understand that I have the right to discontinue the collection, processing, or use of my Data, or supplement, correct, or request deletion of my Data. To exercise my rights, I may contact my local human resources representative.

I hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of my personal data as described herein and any other Plan materials by and among, as applicable, the Company and its Subsidiaries for the exclusive purpose of implementing, administering and managing my participation in the Plan. I understand that my consent will be sought and obtained for any processing or transfer of my data for any purpose other than as described in the enrollment form and any other plan materials.

11. If I have received the Subscription Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control, subject to applicable laws.

12. The provisions of the Subscription Agreement and these appendices are severable and if any one or more provisions are determined to be illegal or otherwise unenforceable, in whole or in part, the remaining provisions will nevertheless be binding and enforceable.

13. Notwithstanding any provisions in this Subscription Agreement, I understand that if I am working or resident in a country other than the United States, my participation in the Plan will also be subject to the additional terms and conditions set forth on Appendix A and any special terms and conditions for my country set forth on Appendix A. Moreover, if I relocate to one of the countries included in Appendix A, the special terms and conditions for such country will apply to me to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. Appendix A constitutes part of this Subscription Agreement and the provisions of this Subscription Agreement govern each Appendix (to the extent not superseded or supplemented by the terms and conditions set forth in the applicable Appendix).

14. I hereby agree to be bound by the terms of the Plan. The effectiveness of this Subscription Agreement is dependent upon my eligibility to participate in the Plan.

Employee's Social
Security Number
(for U.S.-based employees):
Employee's Address:

I UNDERSTAND THAT THIS SUBSCRIPTION AGREEMENT WILL REMAIN IN EFFECT THROUGHOUT SUCCESSIVE OFFERING PERIODS UNLESS TERMINATED BY ME.

Dated: _____

Signature of Employee

EXHIBIT B

CODEX DNA, INC.

2021 EMPLOYEE STOCK PURCHASE PLAN

NOTICE OF WITHDRAWAL

Unless otherwise defined herein, the terms defined in the Codex DNA, Inc. 2021 Employee Stock Purchase Plan (the "Plan") will have the same defined meanings in this Notice of Withdrawal.

The undersigned Participant in the Offering Period of the Plan that began on _____, _____ (the "Offering Date") hereby notifies the Company that he or she hereby withdraws from the Offering Period. He or she hereby directs the Company to pay to the undersigned as promptly as practicable all the payroll deductions credited to his or her account with respect to such Offering Period. The undersigned understands and agrees that his or her option for such Offering Period will be terminated automatically. The undersigned understands further that no further payroll deductions will be made for the purchase of shares in the current Offering Period and the undersigned will be eligible to participate in succeeding Offering Periods only by delivering to the Company a new Subscription Agreement.

Name and Address of Participant:

Signature:

Date:

May 19, 2021

CONFIDENTIAL

Todd R. Nelson

Re: Confirmatory Employment Letter

Dear Todd:

This letter agreement (the “**Agreement**”) is entered into between Todd R. Nelson (“**you**”) and Codex DNA, Inc. (the “**Company**”) effective as of May 19, 2021 (the “**Effective Date**”), to confirm the terms and conditions of your employment with the Company as of the Effective Date. This Agreement supersedes and replaces any and all employment terms, compensation, or benefits you may have had or to which you may have been entitled prior to the Effective Date.

1. Title; Position. Your position will continue to be Chief Executive Officer and you will continue to report to the Company’s Board of Directors. This is a full-time position. While you render services to the Company, you agree that you will not engage in any other employment, consulting, or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this Agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.

2. Cash Compensation. Your current annual base salary is \$618,000, payable in accordance with the Company’s standard payroll schedule. You are eligible to earn an annual cash bonus with a target value of 50% of your base salary, based on achieving performance objectives established by the Company’s Board of Directors or its designated committee (the Board of Directors or its designated committee, together, the “**Committee**”) in its sole discretion and payable upon achievement of those objectives as determined by the Committee. If any portion of such bonus is earned, it will be paid when practicable after the Committee determines it has been earned, subject to you remaining employed with the Company through the payment date. Your annual bonus opportunity will be subject to review and adjustment based upon the Company’s normal performance review practices.

3. Employee Benefits. As a regular employee of the Company, you will continue to be eligible to participate in a number of Company-sponsored benefits. In addition, you will continue to be entitled to paid vacation in accordance with the Company’s vacation policy, as in effect from time to time. The Company reserves the right to modify, amend, suspend, or terminate the benefit plans, programs, and policies it offers to its employees at any time.

4. Equity Awards. You will be eligible to receive awards of stock options, restricted stock units, or other equity awards pursuant to any plans or arrangements the Company may have in effect from time to time. The Committee will determine in its discretion whether you will be granted any such equity awards and the terms of any such award in accordance with the terms of any applicable plan or arrangement that may be in effect from time to time.

5. Severance. You will be eligible to enter into a Change in Control Severance Agreement (the “**Severance Agreement**”) applicable to you based on your position within the Company. The Severance Agreement will specify the severance payments and benefits you may become entitled to receive in connection with certain qualifying terminations of your employment with the Company. These

protections will supersede all other severance payments and benefits to which you otherwise may be entitled, or may become entitled in the future, under any plan, program, or policy that the Company may have in effect from time to time. For purposes of clarification, any severance benefits or arrangements that may have applied to you before the Effective Date no longer will apply and you will have no rights or entitlements under any such plans, programs, agreements, or arrangements.

6. Proprietary Information. Like all Company employees, you were required, as a condition of your employment with the Company, to sign the Company's standard Employee Nondisclosure and Invention Assignment Agreement (the "**Nondisclosure Agreement**") and your acceptance of this Agreement confirms that the terms of the Nondisclosure Agreement you previously signed with the Company still apply. The Company respects the right of every employer to protect its confidential and proprietary information. You therefore agree to continue to abide by the Company's strict policy that prohibits any employee from using, disclosing, or bringing with them from any prior employer any confidential information, trade secrets, proprietary materials, or processes of such former employers. You hereby represent that you have returned all property and confidential information belonging to any prior employers.

7. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will continue to be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this Agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation, and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and a duly authorized officer of the Company (other than you).

8. Withholding Taxes. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

9. Protected Activity Not Prohibited. Nothing in this Agreement or in any other agreement between you and the Company, as applicable, will in any way limit or prohibit you from engaging for a lawful purpose in any Protected Activity. For purposes of this Agreement, "**Protected Activity**" means filing a charge, complaint, or report with, or otherwise communicating, cooperating, or participating in any investigation or proceeding that may be conducted by, any state, federal, or local governmental agency or commission, including the U.S. Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board (the "**Government Agencies**"). You understand that in connection with such Protected Activity, you are permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company. Notwithstanding the foregoing, you agree to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information under the Nondisclosure Agreement to any parties other than the Government Agencies. You further understand that "**Protected Activity**" does not include the disclosure of any Company attorney-client privileged communications. Any language in the Nondisclosure Agreement regarding your right to engage in Protected Activity that conflicts with, or is contrary to, this paragraph is superseded by this Agreement. In addition, pursuant to the Defend Trade Secrets Act of 2016, you are notified that an individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made in confidence to a federal, state, or local government official (directly or indirectly) or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (ii) is made in a complaint or other document

filed in a lawsuit or other proceeding, if (and only if) such filing is made under seal. In addition, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the individual's attorney and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

10. Interpretation, Amendment, and Enforcement. This Agreement along with the Nondisclosure Agreement and the Severance Agreement constitute the complete agreement between you and the Company, contain all of the terms of your employment with the Company and supersede any prior agreements, representations, or understandings (whether written, oral, or implied) between you and the Company. This Agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance, or validity of this Agreement or arising out of, related to, or in any way connected with, this Agreement, your employment with the Company, or any other relationship between you and the Company (the "**Disputes**") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

To confirm the current terms and conditions of your employment, please sign and date in the spaces indicated and return this Agreement to the Company.

Sincerely,

Codex DNA, Inc.

By: /s/ Laura B. Puga
Laura B. Puga
Vice President, People + Culture

I have read and understood this Agreement and hereby acknowledge, accept, and agree to the terms as set forth herein and further acknowledge that no other commitments were made to me as part of my employment except as specifically set forth herein.

Date: May 19, 2021

/s/ Todd R. Nelson
Signature

May 19, 2021

CONFIDENTIAL

Jennifer McNealey

Re: Confirmatory Employment Letter

Dear Jennifer:

This letter agreement (the “**Agreement**”) is entered into between Jennifer McNealey (“**you**”) and Codex DNA, Inc. (the “**Company**”) effective as of May 19, 2021 (the “**Effective Date**”), to confirm the terms and conditions of your employment with the Company as of the Effective Date. This Agreement supersedes and replaces any and all employment terms, compensation, or benefits you may have had or to which you may have been entitled prior to the Effective Date.

1. Title; Position. Your position will continue to be Chief Financial Officer and you will continue to report to our Chief Executive Officer, Todd R. Nelson. This is a full-time position. While you render services to the Company, you agree that you will not engage in any other employment, consulting, or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this Agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.

2. Cash Compensation. Your current annual base salary is \$400,000, payable in accordance with the Company’s standard payroll schedule. You are eligible to earn an annual cash bonus with a target value of 40% of your base salary, based on achieving performance objectives established by the Company’s Board of Directors or its designated committee (the Board of Directors or its designated committee, together, the “**Committee**”) in its sole discretion and payable upon achievement of those objectives as determined by the Committee. If any portion of such bonus is earned, it will be paid when practicable after the Committee determines it has been earned, subject to you remaining employed with the Company through the payment date. Your annual bonus opportunity will be subject to review and adjustment based upon the Company’s normal performance review practices.

3. Employee Benefits. As a regular employee of the Company, you will continue to be eligible to participate in a number of Company-sponsored benefits. In addition, you will continue to be entitled to paid vacation in accordance with the Company’s vacation policy, as in effect from time to time. The Company reserves the right to modify, amend, suspend, or terminate the benefit plans, programs, and policies it offers to its employees at any time.

4. Equity Awards. You will be eligible to receive awards of stock options, restricted stock units, or other equity awards pursuant to any plans or arrangements the Company may have in effect from time to time. The Committee will determine in its discretion whether you will be granted any such equity awards and the terms of any such award in accordance with the terms of any applicable plan or arrangement that may be in effect from time to time.

5. Severance. You will be eligible to enter into a Change in Control Severance Agreement (the “**Severance Agreement**”) applicable to you based on your position within the Company. The Severance Agreement will specify the severance payments and benefits you may become entitled to receive in connection with certain qualifying terminations of your employment with the Company. These protections will supersede all other severance payments and benefits to which you otherwise may be entitled, or may become entitled in the future, under any plan, program, or policy that the Company may

have in effect from time to time. For purposes of clarification, any severance benefits or arrangements that may have applied to you before the Effective Date no longer will apply and you will have no rights or entitlements under any such plans, programs, agreements, or arrangements.

6. Proprietary Information. Like all Company employees, you were required, as a condition of your employment with the Company, to sign the Company's standard Employee Nondisclosure and Invention Assignment Agreement (the "**Nondisclosure Agreement**") and your acceptance of this Agreement confirms that the terms of the Nondisclosure Agreement you previously signed with the Company still apply. The Company respects the right of every employer to protect its confidential and proprietary information. You therefore agree to continue to abide by the Company's strict policy that prohibits any employee from using, disclosing, or bringing with them from any prior employer any confidential information, trade secrets, proprietary materials, or processes of such former employers. You hereby represent that you have returned all property and confidential information belonging to any prior employers.

7. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will continue to be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this Agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation, and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and a duly authorized officer of the Company (other than you).

8. Withholding Taxes. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

9. Protected Activity Not Prohibited. Nothing in this Agreement or in any other agreement between you and the Company, as applicable, will in any way limit or prohibit you from engaging for a lawful purpose in any Protected Activity. For purposes of this Agreement, "**Protected Activity**" means filing a charge, complaint, or report with, or otherwise communicating, cooperating, or participating in any investigation or proceeding that may be conducted by, any state, federal, or local governmental agency or commission, including the U.S. Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board (the "**Government Agencies**"). You understand that in connection with such Protected Activity, you are permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company. Notwithstanding the foregoing, you agree to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information under the Nondisclosure Agreement to any parties other than the Government Agencies. You further understand that "**Protected Activity**" does not include the disclosure of any Company attorney-client privileged communications. Any language in the Nondisclosure Agreement regarding your right to engage in Protected Activity that conflicts with, or is contrary to, this paragraph is superseded by this Agreement. In addition, pursuant to the Defend Trade Secrets Act of 2016, you are notified that an individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made in confidence to a federal, state, or local government official (directly or indirectly) or to an attorney *solely* for the purpose of reporting or investigating a suspected violation of law, or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if (and only if) such filing is made under seal. In addition, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the individual's attorney and use the trade secret information in the court

proceeding, if the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

10. Interpretation, Amendment, and Enforcement. This Agreement along with the Nondisclosure Agreement and the Severance Agreement constitute the complete agreement between you and the Company, contain all of the terms of your employment with the Company and supersede any prior agreements, representations, or understandings (whether written, oral, or implied) between you and the Company. This Agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance, or validity of this Agreement or arising out of, related to, or in any way connected with, this Agreement, your employment with the Company, or any other relationship between you and the Company (the “**Disputes**”) will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

To confirm the current terms and conditions of your employment, please sign and date in the spaces indicated and return this Agreement to the Company.

Sincerely,

Codex DNA, Inc.

By: /s/ Laura B. Puga
Laura B. Puga
Vice President, People + Culture

I have read and understood this Agreement and hereby acknowledge, accept, and agree to the terms as set forth herein and further acknowledge that no other commitments were made to me as part of my employment except as specifically set forth herein.

Date: May 19, 2021

/s/ Jennifer McNealey
Signature

May 19, 2021

CONFIDENTIAL

Daniel Gibson

Re: Confirmatory Employment Letter

Dear Daniel:

This letter agreement (the “**Agreement**”) is entered into between Daniel Gibson (“**you**”) and Codex DNA, Inc. (the “**Company**”) effective as of May 19, 2021 (the “**Effective Date**”), to confirm the terms and conditions of your employment with the Company as of the Effective Date. This Agreement supersedes and replaces any and all employment terms, compensation, or benefits you may have had or to which you may have been entitled prior to the Effective Date.

1. Title; Position. Your position will continue to be Chief Technology Officer and you will continue to report to our Chief Executive Officer, Todd R. Nelson. This is a full-time position. While you render services to the Company, you agree that you will not engage in any other employment, consulting, or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this Agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.

2. Cash Compensation. Your current annual base salary is \$339,000, payable in accordance with the Company’s standard payroll schedule. You are eligible to earn an annual cash bonus with a target value of 35% of your base salary, based on achieving performance objectives established by the Company’s Board of Directors or its designated committee (the Board of Directors or its designated committee, together, the “**Committee**”) in its sole discretion and payable upon achievement of those objectives as determined by the Committee. If any portion of such bonus is earned, it will be paid when practicable after the Committee determines it has been earned, subject to you remaining employed with the Company through the payment date. Your annual bonus opportunity will be subject to review and adjustment based upon the Company’s normal performance review practices.

3. Employee Benefits. As a regular employee of the Company, you will continue to be eligible to participate in a number of Company-sponsored benefits. In addition, you will continue to be entitled to paid vacation in accordance with the Company’s vacation policy, as in effect from time to time. The Company reserves the right to modify, amend, suspend, or terminate the benefit plans, programs, and policies it offers to its employees at any time.

4. Equity Awards. You will be eligible to receive awards of stock options, restricted stock units, or other equity awards pursuant to any plans or arrangements the Company may have in effect from time to time. The Committee will determine in its discretion whether you will be granted any such equity awards and the terms of any such award in accordance with the terms of any applicable plan or arrangement that may be in effect from time to time.

5. Severance. You will be eligible to enter into a Change in Control Severance Agreement (the “**Severance Agreement**”) applicable to you based on your position within the Company. The Severance Agreement will specify the severance payments and benefits you may become entitled to receive in connection with certain qualifying terminations of your employment with the Company. These

protections will supersede all other severance payments and benefits to which you otherwise may be entitled, or may become entitled in the future, under any plan, program, or policy that the Company may have in effect from time to time. For purposes of clarification, any severance benefits or arrangements that may have applied to you before the Effective Date no longer will apply and you will have no rights or entitlements under any such plans, programs, agreements, or arrangements.

6. Proprietary Information. Like all Company employees, you were required, as a condition of your employment with the Company, to sign the Company's standard Employee Nondisclosure and Invention Assignment Agreement (the "**Nondisclosure Agreement**") and your acceptance of this Agreement confirms that the terms of the Nondisclosure Agreement you previously signed with the Company still apply. The Company respects the right of every employer to protect its confidential and proprietary information. You therefore agree to continue to abide by the Company's strict policy that prohibits any employee from using, disclosing, or bringing with them from any prior employer any confidential information, trade secrets, proprietary materials, or processes of such former employers. You hereby represent that you have returned all property and confidential information belonging to any prior employers.

7. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will continue to be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this Agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation, and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and a duly authorized officer of the Company (other than you).

8. Withholding Taxes. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

9. Protected Activity Not Prohibited. Nothing in this Agreement or in any other agreement between you and the Company, as applicable, will in any way limit or prohibit you from engaging for a lawful purpose in any Protected Activity. For purposes of this Agreement, "**Protected Activity**" means filing a charge, complaint, or report with, or otherwise communicating, cooperating, or participating in any investigation or proceeding that may be conducted by, any state, federal, or local governmental agency or commission, including the U.S. Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board (the "**Government Agencies**"). You understand that in connection with such Protected Activity, you are permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company. Notwithstanding the foregoing, you agree to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information under the Nondisclosure Agreement to any parties other than the Government Agencies. You further understand that "**Protected Activity**" does not include the disclosure of any Company attorney-client privileged communications. Any language in the Nondisclosure Agreement regarding your right to engage in Protected Activity that conflicts with, or is contrary to, this paragraph is superseded by this Agreement. In addition, pursuant to the Defend Trade Secrets Act of 2016, you are notified that an individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made in confidence to a federal, state, or local government official (directly or indirectly) or to an attorney *solely* for the purpose of reporting or investigating a suspected violation of law, or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if (and only if) such filing is made under seal. In addition, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law

may disclose the trade secret to the individual's attorney and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

10. Interpretation, Amendment, and Enforcement. This Agreement along with the Nondisclosure Agreement and the Severance Agreement constitute the complete agreement between you and the Company, contain all of the terms of your employment with the Company and supersede any prior agreements, representations, or understandings (whether written, oral, or implied) between you and the Company. This Agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance, or validity of this Agreement or arising out of, related to, or in any way connected with, this Agreement, your employment with the Company, or any other relationship between you and the Company (the "**Disputes**") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

To confirm the current terms and conditions of your employment, please sign and date in the spaces indicated and return this Agreement to the Company.

Sincerely,

Codex DNA, Inc.

By: /s/ Laura B. Puga

Laura B. Puga

Vice President, People+Culture

I have read and understood this Agreement and hereby acknowledge, accept, and agree to the terms as set forth herein and further acknowledge that no other commitments were made to me as part of my employment except as specifically set forth herein.

Date: May 19, 2021

/s/ Daniel Gibson

Signature

May 19, 2021

CONFIDENTIAL

Timothy Cloutier

Re: Confirmatory Employment Letter

Dear Timothy:

This letter agreement (the “**Agreement**”) is entered into between Timothy Cloutier (“**you**”) and Codex DNA, Inc. (the “**Company**”) effective as of May 19, 2021 (the “**Effective Date**”), to confirm the terms and conditions of your employment with the Company as of the Effective Date. This Agreement supersedes and replaces any and all employment terms, compensation, or benefits you may have had or to which you may have been entitled prior to the Effective Date.

1. Title; Position. Your position will continue to be Senior Vice President, Commercial Operations and you will continue to report to our Chief Executive Officer, Todd R. Nelson. This is a full-time position. While you render services to the Company, you agree that you will not engage in any other employment, consulting, or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this Agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.

2. Cash Compensation. Your current annual base salary is \$300,000, payable in accordance with the Company’s standard payroll schedule. You are eligible to earn an annual cash bonus with a target value of 30% of your base salary, based on achieving performance objectives established by the Company’s Board of Directors or its designated committee (the Board of Directors or its designated committee, together, the “**Committee**”) in its sole discretion and payable upon achievement of those objectives as determined by the Committee. If any portion of such bonus is earned, it will be paid when practicable after the Committee determines it has been earned, subject to you remaining employed with the Company through the payment date. Your annual bonus opportunity will be subject to review and adjustment based upon the Company’s normal performance review practices.

3. Employee Benefits. As a regular employee of the Company, you will continue to be eligible to participate in a number of Company-sponsored benefits. In addition, you will continue to be entitled to paid vacation in accordance with the Company’s vacation policy, as in effect from time to time. The Company reserves the right to modify, amend, suspend, or terminate the benefit plans, programs, and policies it offers to its employees at any time.

4. Equity Awards. You will be eligible to receive awards of stock options, restricted stock units, or other equity awards pursuant to any plans or arrangements the Company may have in effect from time to time. The Committee will determine in its discretion whether you will be granted any such equity awards and the terms of any such award in accordance with the terms of any applicable plan or arrangement that may be in effect from time to time.

5. Severance. You will be eligible to enter into a Change in Control Severance Agreement (the “**Severance Agreement**”) applicable to you based on your position within the Company. The Severance Agreement will specify the severance payments and benefits you may become entitled to receive in connection with certain qualifying terminations of your employment with the Company. These protections will supersede all other severance payments and benefits to which you otherwise may be entitled, or may become entitled in the future, under any plan, program, or policy that the Company may have in effect from time to time. For purposes of clarification, any severance benefits or arrangements

that may have applied to you before the Effective Date no longer will apply and you will have no rights or entitlements under any such plans, programs, agreements, or arrangements.

6. Proprietary Information. Like all Company employees, you were required, as a condition of your employment with the Company, to sign the Company's standard Employee Nondisclosure and Invention Assignment Agreement (the "**Nondisclosure Agreement**") and your acceptance of this Agreement confirms that the terms of the Nondisclosure Agreement you previously signed with the Company still apply. The Company respects the right of every employer to protect its confidential and proprietary information. You therefore agree to continue to abide by the Company's strict policy that prohibits any employee from using, disclosing, or bringing with them from any prior employer any confidential information, trade secrets, proprietary materials, or processes of such former employers. You hereby represent that you have returned all property and confidential information belonging to any prior employers.

7. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will continue to be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this Agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation, and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and a duly authorized officer of the Company (other than you).

8. Withholding Taxes. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

9. Protected Activity Not Prohibited. Nothing in this Agreement or in any other agreement between you and the Company, as applicable, will in any way limit or prohibit you from engaging for a lawful purpose in any Protected Activity. For purposes of this Agreement, "**Protected Activity**" means filing a charge, complaint, or report with, or otherwise communicating, cooperating, or participating in any investigation or proceeding that may be conducted by, any state, federal, or local governmental agency or commission, including the U.S. Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board (the "**Government Agencies**"). You understand that in connection with such Protected Activity, you are permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company. Notwithstanding the foregoing, you agree to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information under the Nondisclosure Agreement to any parties other than the Government Agencies. You further understand that "**Protected Activity**" does not include the disclosure of any Company attorney-client privileged communications. Any language in the Nondisclosure Agreement regarding your right to engage in Protected Activity that conflicts with, or is contrary to, this paragraph is superseded by this Agreement. In addition, pursuant to the Defend Trade Secrets Act of 2016, you are notified that an individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made in confidence to a federal, state, or local government official (directly or indirectly) or to an attorney *solely* for the purpose of reporting or investigating a suspected violation of law, or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if (and only if) such filing is made under seal. In addition, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the individual's attorney and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

10. Interpretation, Amendment, and Enforcement. This Agreement along with the Nondisclosure Agreement and the Severance Agreement constitute the complete agreement between you and the Company, contain all of the terms of your employment with the Company and supersede any prior agreements, representations, or understandings (whether written, oral, or implied) between you and the Company. This Agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance, or validity of this Agreement or arising out of, related to, or in any way connected with, this Agreement, your employment with the Company, or any other relationship between you and the Company (the “**Disputes**”) will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

To confirm the current terms and conditions of your employment, please sign and date in the spaces indicated and return this Agreement to the Company.

Sincerely,

Codex DNA, Inc.

By: Laura B. Puga

/s/

B. Puga

Laura

President, People + Culture

Vice

I have read and understood this Agreement and hereby acknowledge, accept, and agree to the terms as set forth herein and further acknowledge that no other commitments were made to me as part of my employment except as specifically set forth herein.

Date: May 19, 2021

/s/ Timothy Cloutier

Signature

May 19, 2021

CONFIDENTIAL

Brent Hunter

Re: Confirmatory Employment Letter

Dear Brent:

This letter agreement (the “**Agreement**”) is entered into between Brent Hunter (“**you**”) and Codex DNA, Inc. (the “**Company**”) effective as of May 19, 2021 (the “**Effective Date**”), to confirm the terms and conditions of your employment with the Company as of the Effective Date. This Agreement supersedes and replaces any and all employment terms, compensation, or benefits you may have had or to which you may have been entitled prior to the Effective Date.

- 1. Title; Position.** Your position will continue to be Senior Director, Corporate Controller and you will continue to report to our Chief Financial Officer, Jennifer McNealey. This is a full-time position. While you render services to the Company, you agree that you will not engage in any other employment, consulting, or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this Agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.
- 2. Cash Compensation.** Your current annual base salary is \$218,000, payable in accordance with the Company’s standard payroll schedule. You are eligible to earn an annual cash bonus with a target value of 20% of your base salary, based on achieving performance objectives established by the Company’s Board of Directors or its designated committee (the Board of Directors or its designated committee, together, the “**Committee**”) in its sole discretion and payable upon achievement of those objectives as determined by the Committee. If any portion of such bonus is earned, it will be paid when practicable after the Committee determines it has been earned, subject to you remaining employed with the Company through the payment date. Your annual bonus opportunity will be subject to review and adjustment based upon the Company’s normal performance review practices.
- 3. Employee Benefits.** As a regular employee of the Company, you will continue to be eligible to participate in a number of Company-sponsored benefits. In addition, you will continue to be entitled to paid vacation in accordance with the Company’s vacation policy, as in effect from time to time. The Company reserves the right to modify, amend, suspend, or terminate the benefit plans, programs, and policies it offers to its employees at any time.
- 4. Equity Awards.** You will be eligible to receive awards of stock options, restricted stock units, or other equity awards pursuant to any plans or arrangements the Company may have in effect from time to time. The Committee will determine in its discretion whether you will be granted any such equity awards and the terms of any such award in accordance with the terms of any applicable plan or arrangement that may be in effect from time to time.
- 5. Proprietary Information.** Like all Company employees, you were required, as a condition of your employment with the Company, to sign the Company’s standard Employee Nondisclosure and

Invention Assignment Agreement (the “**Nondisclosure Agreement**”) and your acceptance of this Agreement confirms that the terms of the Nondisclosure Agreement you previously signed with the Company still apply. The Company respects the right of every employer to protect its confidential and proprietary information. You therefore agree to continue to abide by the Company’s strict policy that prohibits any employee from using, disclosing, or bringing with them from any prior employer any confidential information, trade secrets, proprietary materials, or processes of such former employers. You hereby represent that you have returned all property and confidential information belonging to any prior employers.

6. Employment Relationship. Employment with the Company is for no specific period of time. Your employment with the Company will continue to be “at will,” meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this Agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation, and benefits, as well as the Company’s personnel policies and procedures, may change from time to time, the “at will” nature of your employment may only be changed in an express written agreement signed by you and a duly authorized officer of the Company (other than you).

7. Withholding Taxes. All forms of compensation referred to in this Agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.

8. Protected Activity Not Prohibited. Nothing in this Agreement or in any other agreement between you and the Company, as applicable, will in any way limit or prohibit you from engaging for a lawful purpose in any Protected Activity. For purposes of this Agreement, “**Protected Activity**” means filing a charge, complaint, or report with, or otherwise communicating, cooperating, or participating in any investigation or proceeding that may be conducted by, any state, federal, or local governmental agency or commission, including the U.S. Securities and Exchange Commission, the Equal Employment Opportunity Commission, the Occupational Safety and Health Administration, and the National Labor Relations Board (the “**Government Agencies**”). You understand that in connection with such Protected Activity, you are permitted to disclose documents or other information as permitted by law, and without giving notice to, or receiving authorization from, the Company. Notwithstanding the foregoing, you agree to take all reasonable precautions to prevent any unauthorized use or disclosure of any information that may constitute Company confidential information under the Nondisclosure Agreement to any parties other than the Government Agencies. You further understand that “**Protected Activity**” does not include the disclosure of any Company attorney-client privileged communications. Any language in the Nondisclosure Agreement regarding your right to engage in Protected Activity that conflicts with, or is contrary to, this paragraph is superseded by this Agreement. In addition, pursuant to the Defend Trade Secrets Act of 2016, you are notified that an individual will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that (i) is made in confidence to a federal, state, or local government official (directly or indirectly) or to an attorney *solely* for the purpose of reporting or investigating a suspected violation of law, or (ii) is made in a complaint or other document filed in a lawsuit or other proceeding, if (and only if) such filing is made under seal. In addition, an individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the individual’s attorney and use the trade secret information in the court proceeding, if the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

9. Interpretation, Amendment, and Enforcement. This Agreement along with the Nondisclosure Agreement and the Severance Agreement constitute the complete agreement between you and the

Company, contain all of the terms of your employment with the Company and supersede any prior agreements, representations, or understandings (whether written, oral, or implied) between you and the Company. This Agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this Agreement and the resolution of any disputes as to the meaning, effect, performance, or validity of this Agreement or arising out of, related to, or in any way connected with, this Agreement, your employment with the Company, or any other relationship between you and the Company (the “**Disputes**”) will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in California in connection with any Dispute or any claim related to any Dispute.

To confirm the current terms and conditions of your employment, please sign and date in the spaces indicated and return this Agreement to the Company.

Sincerely,

Codex DNA, Inc.

	/s/
By: Laura B. Puga	_____
B. Puga	Laura
President, People + Culture	Vice

I have read and understood this Agreement and hereby acknowledge, accept, and agree to the terms as set forth herein and further acknowledge that no other commitments were made to me as part of my employment except as specifically set forth herein.

Date: May 19, 2021

/s/ Brent Hunter
Signature

CODEX DNA, INC.

EXECUTIVE INCENTIVE COMPENSATION PLAN

1. Purposes of the Plan. The Plan is intended to increase stockholder value and the success of the Company by motivating Employees to (a) perform to the best of their abilities and (b) achieve the Company's objectives.

2. Definitions.

2.1 "Actual Award" means as to any Performance Period, the actual award (if any) payable to a Participant for the Performance Period, subject to the authority of the Administrator (as defined in Section 3) under Section 4.4.

2.2 "Affiliate" means any corporation or other entity (including, but not limited to, partnerships and joint ventures) that, from time to time and at the time of any determination, directly or indirectly, is in control of or is controlled by the Company.

2.3 "Board" means the Board of Directors of the Company.

2.4 "Bonus Pool" means the pool of funds available for distribution to Participants. Subject to the terms of the Plan, the Administrator establishes the Bonus Pool for each Performance Period.

2.5 "Code" means the U.S. Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or regulation thereunder will include such section or regulation, any valid regulation or formal guidance of general or direct applicability promulgated under such section or regulation, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

2.6 "Committee" means a committee appointed by the Board (pursuant to Section 3) to administer the Plan.

2.7 "Company" means Codex DNA, Inc., a Delaware corporation, or any successor thereto.

2.8 "Company Group" means the Company and any Parents, Subsidiaries, and Affiliates.

2.9 "Disability" means a permanent and total disability determined in accordance with uniform and nondiscriminatory standards adopted by the Administrator from time to time.

2.10 "Employee" means any executive, officer, or other employee of the Company Group, whether such individual is so employed at the time the Plan is adopted or becomes so employed subsequent to the adoption of the Plan.

2.11 “Fiscal Year” means the fiscal year of the Company.

2.12 “Parent” means a “parent corporation,” whether now or hereafter existing, as defined in Code Section 424(e).

2.13 “Participant” means as to any Performance Period, an Employee who has been selected by the Administrator for participation in the Plan for that Performance Period.

2.14 “Performance Period” means the period of time for the measurement of the performance criteria that must be met to receive an Actual Award, as determined by the Administrator. A Performance Period may be divided into one or more shorter periods if, for example, but not by way of limitation, the Administrator desires to measure some performance criteria over twelve (12) months and other criteria over three (3) months.

2.15 “Plan” means this Executive Incentive Compensation Plan (including any appendix attached hereto), as may be amended from time to time.

2.16 “Section 409A” means Section 409A of the Code and/or any state law equivalent as each may be amended or promulgated from time to time.

2.17 “Subsidiary” means a “subsidiary corporation,” whether now or hereafter existing, as defined in Code Section 424(f), in relation to the Company.

2.18 “Target Award” means the target award, at one hundred percent (100%) of target level performance achievement, payable under the Plan to a Participant for a Performance Period, as determined by the Administrator in accordance with Section 4.2.

2.19 “Tax Withholdings” means tax, social insurance and social security liability or premium obligations in connection with the awards under the Plan, including without limitation: (a) all federal, state, and local income, employment and any other taxes (including the Participant’s U.S. Federal Insurance Contributions Act (FICA) obligation) that are required to be withheld by the Company Group, (b) the Participant’s and, to the extent required by the Company Group, the fringe benefit tax liability of the Company Group associated with an award under the Plan, and (c) any other taxes or social insurance or social security liabilities or premium the responsibility for which the Participant has, or has agreed to bear, with respect to such award under the Plan.

2.20 “Termination of Employment” means a cessation of the employee-employer relationship between an Employee and the Company Group, including without limitation a termination by resignation, discharge, death, Disability, retirement, or the disaffiliation of a Parent, Subsidiary or Affiliate. For purposes of the Plan, transfer of employment of a Participant between any members of the Company Group (for example, between the Company and a Subsidiary) will not be deemed a Termination of Employment.

3. Administration of the Plan.

3.1 Administrator. The Plan will be administered by the Board or a Committee (the "Administrator"). To the extent necessary or desirable to satisfy applicable laws, the Committee acting as the Administrator will consist of not less than two (2) members of the Board. The members of any Committee will be appointed from time to time by, and serve at the pleasure of, the Board. The Board may retain the authority to administer the Plan concurrently with a Committee and may revoke the delegation of some or all authority previously delegated. Different Administrators may administer the Plan with respect to different groups of Employees. Unless and until the Board otherwise determines, the Board's Compensation Committee will administer the Plan.

3.2 Administrator Authority. It will be the duty of the Administrator to administer the Plan in accordance with the Plan's provisions. The Administrator will have all powers and discretion necessary or appropriate to administer the Plan and to control its operation, including, but not limited to, the power to (a) determine which Employees will be granted awards, (b) prescribe the terms and conditions of awards, (c) interpret the Plan and the awards, (d) adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are non-U.S. nationals or employed outside of the U.S. or to qualify awards for special tax treatment under the laws of jurisdictions other than the U.S., (e) adopt rules for the administration, interpretation and application of the Plan as are consistent therewith, and (f) interpret, amend or revoke any such rules. Any determinations and decisions made or to be made by the Administrator pursuant to the provisions of the Plan, unless specified otherwise by the Administrator, will be in the Administrator's sole discretion.

3.3 Decisions Binding. All determinations and decisions made by the Administrator and/or any delegate of the Administrator pursuant to the provisions of the Plan will be final, conclusive, and binding on all persons, and will be given the maximum deference permitted by law.

3.4 Delegation by Administrator. The Administrator, on such terms and conditions as it may provide, may delegate all or part of its authority and powers under the Plan to one or more directors and/or officers of the Company. Such delegation may be revoked at any time.

3.5 Indemnification. Each person who is or will have been a member of the Administrator will be indemnified and held harmless by the Company against and from (a) any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan or any award, and (b) from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit, or proceeding against him or her, provided he or she will give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification will not be exclusive of any other rights of indemnification to which such

persons may be entitled under the Company's Certificate of Incorporation or Bylaws, by contract, as a matter of law, or otherwise, or under any power that the Company may have to indemnify them or hold them harmless.

4. Selection of Participants and Determination of Awards.

4.1 Selection of Participants. The Administrator will select the Employees who will be Participants for any Performance Period. Participation in the Plan will be on a Performance Period by Performance Period basis. Accordingly, an Employee who is a Participant for a given Performance Period in no way is guaranteed or assured of being selected for participation in any subsequent Performance Period or Performance Periods. No Employee will have the right to be selected to receive an award under this Plan or, if so selected, to be selected to receive a future award.

4.2 Determination of Target Awards. The Administrator may establish a Target Award for each Participant (which may be expressed as a percentage of a Participant's average annual base salary for the Performance Period or a fixed dollar amount or such other amount or based on such other formula or factors as the Administrator determines).

4.3 Bonus Pool. Each Performance Period, the Administrator may establish a Bonus Pool, which pool may be established before, during or after the applicable Performance Period. Actual Awards will be paid from the Bonus Pool (if a Bonus Pool has been established).

4.4 Discretion to Modify Awards. Notwithstanding any contrary provision of the Plan, the Administrator, at any time prior to payment of an Actual Award, may: (a) increase, reduce or eliminate a Participant's Actual Award, and/or (b) increase, reduce or eliminate the amount allocated to the Bonus Pool. The Actual Award may be below, at or above the Target Award, as determined by the Administrator. The Administrator may determine the amount of any increase, reduction, or elimination based on such factors as it deems relevant, and will not be required to establish any allocation or weighting with respect to the factors it considers.

4.5 Discretion to Determine Criteria. Notwithstanding any contrary provision of the Plan, the Administrator will determine the performance goals, if any, applicable to any Target Award (or portion thereof) which may include, without limitation, goals related to: attainment of research and development milestones; bookings; business divestitures and acquisitions; capital raising; cash flow; cash position; contract awards or backlog; corporate transactions; customer renewals; customer retention rates from an acquired company, subsidiary, business unit or division; earnings (which may include any calculation of earnings, including but not limited to earnings before interest and taxes, earnings before taxes, earnings before interest, taxes, depreciation and amortization and net taxes); earnings per share; expenses; financial milestones; gross margin; growth in stockholder value relative to the moving average of the S&P 500 Index or another index; internal rate of return; leadership development or succession planning; license or research collaboration arrangements; market share; net income; net profit; net sales; new product or business development; new product invention or innovation; number of customers; operating cash flow; operating expenses; operating income; operating margin; overhead or other expense reduction; patents; procurement; product defect measures; product

release timelines; productivity; profit; regulatory milestones or regulatory-related goals; retained earnings; return on assets; return on capital; return on equity; return on investment; return on sales; revenue; revenue growth; sales bookings; sales results; sales growth; savings; stock price; time to market; total stockholder return; working capital; unadjusted or adjusted actual contract value; unadjusted or adjusted total contract value; and individual objectives such as peer reviews or other subjective or objective criteria. As determined by the Administrator, the performance goals may be based on U.S. generally accepted accounting principles (“GAAP”) or non-GAAP results and any actual results may be adjusted by the Administrator for one-time items or unbudgeted or unexpected items and/or payments of Actual Awards under the Plan when determining whether the performance goals have been met. The performance goals may be based on any factors the Administrator determines relevant, including without limitation on an individual, divisional, portfolio, project, business unit, segment or Company-wide basis. Any criteria used may be measured on such basis as the Administrator determines, including without limitation: (a) in absolute terms, (b) in combination with another performance goal or goals (for example, but not by way of limitation, as a ratio or matrix), (c) in relative terms (including, but not limited to, results for other periods, passage of time and/or against another company or companies or an index or indices), (d) on a per-share basis, (e) against the performance of the Company as a whole or a segment of the Company and/or (f) on a pre-tax or after-tax basis. The performance goals may differ from Participant to Participant and from award to award. Failure to meet the applicable performance goals will result in a failure to earn the Target Award, except as provided in Section 4.4.

5. Payment of Awards.

5.1 Right to Receive Payment. Each Actual Award will be paid solely from the general assets of the Company Group. Nothing in this Plan will be construed to create a trust or to establish or evidence any Participant’s claim of any right other than as an unsecured general creditor with respect to any payment to which the Participant may be entitled.

5.1 Timing of Payment. Payment of each Actual Award will be made as soon as practicable after the end of the Performance Period to which the Actual Award relates and after the Actual Award is approved by the Administrator, but in no event after the later of (a) the fifteenth (15th) day of the third (3rd) month of the Fiscal Year immediately following the Fiscal Year in which the Participant’s Actual Award first becomes no longer subject to a substantial risk of forfeiture, and (b) March 15 of the calendar year immediately following the calendar year in which the Participant’s Actual Award first becomes no longer subject to a substantial risk of forfeiture. Unless otherwise determined by the Administrator, to earn an Actual Award a Participant must be employed by the Company Group on the date the Actual Award is paid, and in all cases subject to the Administrator’s discretion pursuant to Section 4.4.

5.2 Form of Payment. Each Actual Award generally will be paid in cash (or its equivalent) in a single lump sum. The Administrator reserves the right to settle an Actual Award with a grant of an equity award with such terms and conditions, including any vesting requirements, as determined by the Administrator.

5.3 Payment in the Event of Death or Disability. If a Termination of Employment occurs due to a Participant's death or Disability prior to payment of an Actual Award that the Administrator has determined will be paid for a prior Performance Period, then the Actual Award will be paid to the Participant or the Participant's estate, as the case may be, subject to the Administrator's discretion pursuant to Section 4.4.

6. General Provisions.

6.1 Tax Matters.

6.1.1 Section 409A. It is the intent that this Plan be exempt from or comply with the requirements of Section 409A so that none of the payments to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities or ambiguous terms will be interpreted to be so exempt or so comply. Each payment under this Plan is intended to constitute a separate payment for purposes of Treasury Regulations Section 1.409A-2(b)(2). In no event will the Company Group have any liability, obligation, or responsibility to reimburse, indemnify or hold harmless any Participant or other Employee for any taxes, penalties or interest imposed, or other costs incurred, as a result of Section 409A.

6.1.2 Tax Withholdings. The Company Group will have the right and authority to deduct from any Actual Award all applicable Tax Withholdings. Prior to the payment of an Actual Award or such earlier time as any Tax Withholdings are due, the Company Group is permitted to deduct or withhold, or require a Participant to remit to the Company Group, an amount sufficient to satisfy any Tax Withholdings with respect to such Actual Award.

6.2 No Effect on Employment or Service. Neither the Plan nor any award under the Plan will confer upon a Participant any right regarding continuing the Participant's relationship as an Employee or other service provider to the Company Group, nor will they interfere with or limit in any way the right of the Company Group or the Participant to terminate such relationship at any time, with or without cause, to the extent permitted by applicable laws.

6.3 Forfeiture Events.

6.3.1 Clawback Policy; Applicable Laws. All awards under the Plan will be subject to reduction, cancellation, forfeiture, or recoupment in accordance with any clawback policy that the Company Group is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable laws. In addition, the Administrator may impose such other clawback, recovery or recoupment provisions with respect to an award under the Plan as the Administrator determines necessary or appropriate, including without limitation a reacquisition right in respect of previously acquired cash, stock, or other property provided with respect to an award. Unless this Section 6.3.1 is specifically mentioned and waived in a written agreement between a Participant and a member of the Company Group or other document, no recovery of compensation under a clawback policy will give the Participant the right to resign for "good

reason” or “constructive termination” (or similar term) under any agreement with a member of the Company Group.

6.3.2 Additional Forfeiture Terms. The Administrator may specify when providing for an award under the Plan that the Participant’s rights, payments, and benefits with respect to the award will be subject to reduction, cancellation, forfeiture, or recoupment upon the occurrence of specified events, in addition to any otherwise applicable vesting or performance conditions of the award. Such events may include, without limitation, termination of the Participant’s status as an Employee for “cause” or any act by a Participant, whether before or after the Participant’s status as an Employee terminates, that would constitute “cause.”

6.3.3 Accounting Restatements. If the Company is required to prepare an accounting restatement due to the material noncompliance of the Company, as a result of misconduct, with any financial reporting requirement under the securities laws, then any Participant who knowingly or through gross negligence engaged in the misconduct, or who knowingly or through gross negligence failed to prevent the misconduct, and any Participant who is one of the individuals subject to automatic forfeiture under Section 304 of the Sarbanes-Oxley Act of 2002, will reimburse the Company Group the amount of any payment with respect to an award earned or accrued during the twelve (12) month period following the first public issuance or filing with the U.S. Securities and Exchange Commission (whichever first occurred) of the financial document embodying such financial reporting requirement.

6.4 Successors. All obligations of the Company under the Plan, with respect to awards under the Plan, will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business or assets of the Company.

6.5 Nontransferability of Awards. No award under the Plan may be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or by the laws of descent and distribution, and except as provided in Section 5.3. All rights with respect to an award granted to a Participant will be available during his or her lifetime only to the Participant.

7. Amendment, Termination, and Duration.

7.1 Amendment, Suspension, or Termination. The Administrator may amend or terminate the Plan, or any part thereof, at any time and for any reason. The amendment, suspension or termination of the Plan will not, without the consent of the Participant, alter or impair any rights or obligations under any Actual Award earned by such Participant. No award may be granted during any period of suspension or after termination of the Plan.

7.2 Duration of Plan. The Plan will commence on the date first adopted by the Board or the Compensation Committee of the Board, and subject to Section 7.1 (regarding the Administrator’s right to amend or terminate the Plan), will remain in effect thereafter until terminated.

8. Legal Construction.

8.1 Gender and Number. Unless otherwise indicated by the context, any feminine term used herein also will include the masculine and any masculine term used herein also will include the feminine; the plural will include the singular and the singular will include the plural.

8.2 Severability. If any provision of the Plan is or becomes or is deemed to be invalid, illegal, or unenforceable for any reason in any jurisdiction or as to any Participant, such invalidity, illegality, or unenforceability will not affect the remaining parts of the Plan, and the Plan will be construed and enforced as if the invalid, illegal, or unenforceable provision had not been included.

8.3 Governing Law. The Plan and all awards will be construed in accordance with and governed by the laws of the State of California, but without regard to its conflict of law provisions. For purposes of litigating any dispute that arises under this Plan, a Participant's acceptance of an award is his or her consent to the jurisdiction of the State of California, and agreement that any such litigation will be conducted in San Diego County, California, or the federal courts for the United States for the Southern District of California, and no other courts, regardless of where a Participant's services are performed.

8.4 Bonus Plan. The Plan is intended to be a "bonus program" as defined under U.S. Department of Labor regulations section 2510.3-2(c) and will be construed and administered in accordance with such intention.

8.5 Headings. Headings are provided herein for convenience only, and will not serve as a basis for interpretation or construction of the Plan.

9. Compliance with Applicable Laws. Awards under the Plan (including without limitation the granting of such awards) will be subject to all applicable laws, rules and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

* * *

CODEX DNA, INC.

CHANGE IN CONTROL SEVERANCE AGREEMENT

This Change in Control Severance Agreement (the “**Agreement**”) is made between Codex DNA, Inc. (the “**Company**”) and [_____] (the “**Executive**”), effective as of _____, 2021 (the “**Effective Date**”).

This Agreement provides certain protections to the Executive in connection with a change in control of the Company or in connection with the involuntary termination of the Executive’s employment under the circumstances described in this Agreement. Certain capitalized terms are defined in Section 7 to the extent not otherwise defined in other Sections of the Agreement.

The Company and the Executive agree as follows:

1. **Term of Agreement.** This Agreement will terminate upon the date that all of the obligations of the parties hereto with respect to this Agreement have been satisfied.

2. **At-Will Employment.** The Company and the Executive acknowledge that the Executive’s employment is and will continue to be at-will, as defined under applicable law.

3. **Severance Benefits.**

(a) **Qualifying Non-CIC Termination.** In the event of a Qualifying Non-CIC Termination (as defined below), and subject to Sections 5 and 6, the Executive will be eligible to receive the following from the Company:

(i) **Salary Severance.** A single, lump sum payment equal to [twelve (12) / nine (9) / six (6)] months of the Executive’s Salary (as defined below), less applicable withholdings.

(ii) **COBRA Coverage.** Subject to Section 3(d), the Company will pay the premiums for coverage under COBRA (as defined below) for the Executive and the Executive’s eligible dependents, if any, at the rates then in effect, subject to any subsequent changes in rates that are generally applicable to the Company’s active employees (the “**COBRA Coverage**”), until the earliest of (A) a period of [twelve (12) / nine (9) / six (6)] months from the date of the Executive’s termination of employment, (B) the date upon which the Executive (and the Executive’s eligible dependents, as applicable) becomes covered under similar plans, or (C) the date upon which the Executive ceases to be eligible for coverage under COBRA.

(b) **Qualifying CIC Termination.** In the event of a Qualifying CIC Termination (as defined below), and subject to Sections 5 and 6, the Executive will be eligible to receive the following from the Company:

(i) **Salary Severance.** A single, lump sum payment equal to [eighteen (18) / twelve (12) / nine (9)] months of the Executive’s Salary, less applicable withholdings.

(ii) Bonus Severance. A single, lump sum payment equal to [one hundred fifty percent (150%) / one hundred percent (100%)] of the Executive's target annual bonus as in effect for the fiscal year in which the Qualifying CIC Termination occurs, less applicable withholdings.

(iii) COBRA Coverage. Subject to Section 3(d), the Company will provide COBRA Coverage until the earliest of (A) a period of [eighteen (18) / twelve (12) / nine (9)] months from the date of the Executive's termination of employment, (B) the date upon which the Executive (and the Executive's eligible dependents, as applicable) becomes covered under similar plans, or (C) the date upon which the Executive ceases to be eligible for coverage under COBRA.

(iv) Equity Vesting. Vesting acceleration (and exercisability, as applicable) as to one hundred percent (100%) of the then-unvested shares subject to each of the Company equity awards granted to the Executive that is outstanding as of the date of the Qualifying Termination (each, an "**Equity Award**"). In the case of an Equity Award that is subject to performance-based vesting, unless otherwise specified in the applicable Equity Award agreement governing the Equity Award, all performance goals and other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels. For the avoidance of doubt, in the event of the Executive's Qualifying Pre-CIC Termination (as defined below), any then outstanding Equity Awards will remain outstanding until the earlier of (x) three (3) months following the Qualifying Termination or (y) the occurrence of a Change in Control, solely so that any benefits due on a Qualifying Pre-CIC Termination can be provided if a Change in Control occurs within three (3) months following the Qualifying Termination (provided that in no event will the Executive's stock options or similar Equity Awards remain outstanding beyond the Equity Award's maximum term to expiration). If no Change in Control occurs within three (3) months following a Qualifying Termination, any unvested portion of the Executive's Equity Awards automatically and permanently will be forfeited on the date three (3) months following the date of the Qualifying Termination without having vested.

(c) Termination Other Than a Qualifying Termination. If the termination of the Executive's employment with the Company Group (as defined below) is not a Qualifying Termination, then the Executive will not be entitled to receive the severance payments or other benefits specified in this Agreement.

(d) Conditions to Receipt of COBRA Coverage. The Executive's receipt of COBRA Coverage is subject to the Executive electing COBRA continuation coverage within the time period prescribed pursuant to COBRA for the Executive and the Executive's eligible dependents, if any. If the Company determines in its sole discretion that it cannot provide the COBRA Coverage without potentially violating, or being subject to an excise tax under, applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then in lieu of any COBRA Coverage, the Company will provide to the Executive a taxable monthly payment payable on the last day of a given month, in an amount equal to the monthly COBRA premium that the Executive would be required to pay to continue his or her group health coverage in effect on the date of his or her Qualifying Termination (which amount will be

based on the premium rates applicable for the first month of COBRA Coverage for the Executive and any of eligible dependents of the Executive) (each, a “**COBRA Replacement Payment**”), which COBRA Replacement Payments will be made regardless of whether the Executive elects COBRA continuation coverage and will end on the earlier of (x) the date upon which the Executive obtains other employment or (y) the date the Company has paid an amount totaling the number of COBRA Replacement Payments equal to the number of months in the applicable COBRA Coverage period. For the avoidance of doubt, the COBRA Replacement Payments may be used for any purpose, including, but not limited, to continuation coverage under COBRA, and will be subject to any applicable withholdings. Notwithstanding anything to the contrary under this Agreement, if the Company determines in its sole discretion at any time that it cannot provide the COBRA Replacement Payments without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Executive will not receive the COBRA Replacement Payments or any further COBRA Coverage.

(e) **Non-Duplication of Payment or Benefits.** For purposes of clarity, in the event of a Qualifying Pre-CIC Termination, any severance payments and benefits to be provided to the Executive under Section 3(b) will be reduced by any amounts that already were provided to the Executive under Section 3(a). Notwithstanding any provision of this Agreement to the contrary, if the Executive is entitled to any cash severance, continued health coverage benefits, or vesting acceleration of any Equity Awards (other than under this Agreement) by operation of applicable law or under a plan, policy, contract, or arrangement sponsored by or to which any member of the Company Group is a party in connection with the Executive’s separation (“**Other Benefits**”), then the corresponding severance payments and benefits under this Agreement will be reduced by the amount of Other Benefits paid or provided to the Executive.

(f) **Death of the Executive.** In the event of the Executive’s death before all payments or benefits the Executive is entitled to receive under this Agreement have been provided, the unpaid amounts will be provided to the Executive’s designated beneficiary, if living, or otherwise to the Executive’s personal representative in a single lump sum as soon as possible following the Executive’s death.

(g) **Transfer Between Members of the Company Group.** For purposes of this Agreement, if the Executive is involuntarily transferred from one member of the Company Group to another, the transfer will not be a termination without Cause but may give the Executive the ability to resign for Good Reason.

(h) **Exclusive Remedy.** In the event of a termination of the Executive’s employment with the Company Group, the provisions of this Agreement are intended to be and are exclusive and in lieu of any other rights or remedies to which the Executive may otherwise be entitled, whether at law, tort or contract, or in equity. The Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Agreement.

4. **Accrued Compensation.** On any termination of the Executive’s employment with the Company Group, the Executive will be entitled to receive all accrued but unpaid vacation, expense reimbursements, wages, and other benefits due to the Executive under any Company-

provided plans, policies, and arrangements. For avoidance of doubt, receipt of accrued compensation is not subject to the Release Requirement discussed in Section 5(a).

5. Conditions to Receipt of Severance.

(a) Separation Agreement and Release of Claims. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 3 is subject to the Executive signing and not revoking the Company's then-standard separation agreement and release of claims (which may include an agreement not to disparage any member of the Company Group, non-solicit provisions, an agreement to assist in any litigation matters, and other standard terms and conditions) (the "**Release**") and that requirement, the "**Release Requirement**"), which must become effective and irrevocable no later than the sixtieth (60th) day following the date of the Executive's Qualifying Termination (the "**Release Deadline Date**"). If the Release does not become effective and irrevocable by the Release Deadline Date, the Executive will forfeit any right to the severance payments or benefits under Section 3.

(b) Payment Timing. Any lump sum salary [or bonus] payments under Sections 3(a) and 3(b) will be provided on the first regularly scheduled payroll date of the Company following the date the Release becomes effective and irrevocable (the "**Severance Start Date**"), subject to any delay required by Section 5(d) below. Any taxable installments of any COBRA-related severance benefits that otherwise would have been made to the Executive on or before the Severance Start Date will be paid on the Severance Start Date, and any remaining installments thereafter will be provided as specified in this Agreement. Subject to Section 5(d), any restricted stock units, performance shares, performance units, and/or similar full value awards that accelerate vesting under Section 3(b) will be settled (x) within ten (10) days following the date the Release becomes effective and irrevocable, or (y) if later, in the event of a Qualifying Pre-CIC Termination, on the date of the Change in Control.

(c) Return of Company Property. The Executive's receipt of any severance payments or benefits upon the Executive's Qualifying Termination under Section 3 is subject to the Executive having returned all documents and other property provided to the Executive by any member of the Company Group (with the exception of a copy of the Company employee handbook and personnel documents specifically relating to the Executive), developed or obtained by the Executive in connection with his or her employment with the Company Group, or otherwise belonging to the Company Group, by no later than ten (10) days following the date of the Qualifying Termination.

(d) Section 409A. The Company intends that all payments and benefits provided under this Agreement or otherwise are exempt from, or comply with, the requirements of Section 409A of the Code (as defined below) and any guidance promulgated under Section 409A of the Code (collectively, "**Section 409A**") so that none of the payments or benefits will be subject to the additional tax imposed under Section 409A, and any ambiguities in this Agreement will be interpreted in accordance with this intent. No payment or benefits to be paid to the Executive, if any such payments or benefits, under this Agreement or otherwise, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Section 409A (together, the "**Deferred Payments**") will be paid or

otherwise provided until the Executive has a “separation from service” within the meaning of Section 409A. If, at the time of the Executive’s termination of employment, the Executive is a “specified employee” within the meaning of Section 409A, then the payment of the Deferred Payments will be delayed to the extent necessary to avoid the imposition of the additional tax imposed under Section 409A, which generally means that the Executive will receive payment on the first payroll date that occurs on or after the date that is six (6) months and one (1) day following the Executive’s termination of employment. The Company reserves the right to amend this Agreement as it considers necessary or advisable, in its sole discretion and without the consent of the Executive or the consent of any other individual, to comply with any provision required to avoid the imposition of the additional tax imposed under Section 409A or to otherwise avoid income recognition under Section 409A prior to the actual payment of any benefits or imposition of any additional tax. Each payment, installment, and benefit payable under this Agreement is intended to constitute a separate payment for purposes of U.S. Treasury Regulation Section 1.409A-2(b)(2). In no event will any member of the Company Group reimburse, indemnify, or hold harmless the Executive for any taxes, penalties and interest that may be imposed, or other costs that may be incurred, as a result of Section 409A.

(e) Resignation of Officer and Director Positions. The Executive’s receipt of any severance payments or benefits upon the Executive’s Qualifying Termination under Section 3 is subject to the Executive having resigned from all officer and director positions with all members of the Company Group and the Executive executing any documents the Company may require in connection with the same.

6. Limitation on Payments.

(a) Reduction of Severance Benefits. If any payment or benefit that the Executive would receive from any Company Group member or any other party whether in connection with the provisions in this Agreement or otherwise (the “**Payment**”) would (i) constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then the Payment will be equal to the Best Results Amount. The “**Best Results Amount**” will be either (x) the full amount of the Payment or (y) a lesser amount that would result in no portion of the Payment being subject to the Excise Tax, whichever of those amounts, taking into account the applicable federal, state and local employment taxes, income taxes and the Excise Tax, results in the Executive’s receipt, on an after-tax basis, of the greater amount. If a reduction in payments or benefits constituting parachute payments is necessary so that the Payment equals the Best Results Amount, reduction will occur in the following order: (A) reduction of cash payments in reverse chronological order (that is, the cash payment owed on the latest date following the occurrence of the event triggering the excise tax will be the first cash payment to be reduced); (B) cancellation of Equity Awards that were granted “contingent on a change in ownership or control” within the meaning of Section 280G of the Code in the reverse order of date of grant of the awards (that is, the most recently granted Equity Awards will be cancelled first); (C) reduction of the accelerated vesting of Equity Awards in the reverse order of date of grant of the awards (that is, the vesting of the most recently granted Equity Awards will be cancelled first); and (D) reduction of employee benefits in reverse chronological order (that is,

the benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first benefit to be reduced). In no event will the Executive have any discretion with respect to the ordering of Payment reductions. The Executive will be solely responsible for the payment of all personal tax liability that is incurred as a result of the payments and benefits received under this Agreement, and the Executive will not be reimbursed, indemnified, or held harmless by any member of the Company Group for any of those payments of personal tax liability.

(b) Determination of Excise Tax Liability. Unless the Company and the Executive otherwise agree in writing, the Company will select a professional services firm (the "**Firm**") to make all determinations required under this Section 6, which determinations will be conclusive and binding upon the Executive and the Company for all purposes. For purposes of making the calculations required by this Section 6, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Executive will furnish to the Firm such information and documents as the Firm reasonably may request in order to make determinations under this Section 6. The Company will bear the costs and make all payments for the Firm's services in connection with any calculations contemplated by this Section 6. The Company will have no liability to the Executive for the determinations of the Firm.

7. Definitions. The following terms referred to in this Agreement will have the following meanings:

(a) "**Board**" means the Company's Board of Directors.

(b) "**Cause**" means (i) the Executive's willful and repeated failure, in the reasonable judgment of the Board, to substantially perform his or her assigned duties or responsibility as an employee as directed or assigned by the [Board / Chief Executive Officer] (other than the Executive's failure resulting from a Disability); (ii) the Executive engaging in intentional illegal conduct that was or is materially injurious to the Company Group or its affiliates; (iii) the Executive's knowing violation of a federal or state law or regulation directly or indirectly applicable to the business of the Company Group or its affiliates, which violation was or is reasonably likely to be injurious to the Company Group or its affiliates; (iv) the Executive's material breach of the terms of any confidentiality agreement or invention assignment agreement between the Executive and the Company Group (or any affiliate); or (v) the Executive being convicted of, or entering a plea of guilty or nolo contendere to, a felony or committing any act of moral turpitude, dishonesty, or fraud against, or the misappropriation of material property belonging to, the Company Group or its affiliates. The foregoing definition does not in any way limit the Company's ability to terminate the Executive's employment at any time, and the term

“Company” will be interpreted to include any subsidiary, parent, affiliate, or any successor thereto, if appropriate.

(c) “**Change in Control**” means the occurrence of any of the following events:

(i) A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group (“**Person**”), acquires ownership of the stock of the Company that, with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, that for this subsection, the acquisition of additional stock by any one Person, who prior to such acquisition is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control and provided, further, that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board also will not be considered a Change in Control. Further, if the stockholders of the Company immediately before such change in ownership continue to retain immediately after the change in ownership, in substantially the same proportions as their ownership of shares of the Company’s voting stock immediately prior to the change in ownership, direct or indirect beneficial ownership of fifty percent (50%) or more of the total voting power of the stock of the Company or of the ultimate parent entity of the Company, such event shall not be considered a Change in Control under this Section 7(c)(i). For this purpose, indirect beneficial ownership shall include, without limitation, an interest resulting from ownership of the voting securities of one or more corporations or other business entities which own the Company, as the case may be, either directly or through one or more subsidiary corporations or other business entities; or

(ii) A change in the effective control of the Company which occurs on the date a majority of members of the Board is replaced during any twelve (12)-month period by members of the Board whose appointment or election is not endorsed by a majority of the members of the Board prior to the appointment or election. For purposes of this Section 7(c)(ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) A change in the ownership of a substantial portion of the Company’s assets which occurs on the date that any Person acquires (or has acquired during the twelve (12)-month period ending on the date of the most recent acquisition by such Person or Persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, that for this Section 7(c)(iii), the following will not constitute a change in the ownership of a substantial portion of the Company’s assets:

(1) a transfer to an entity controlled by the Company’s stockholders immediately after the transfer, or

(2) a transfer of assets by the Company to:

- stock,
- (A) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's
- Company,
- (B) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the
- outstanding stock of the Company, or
- (C) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the
- (D) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in Section 7(c)(iii)(2)(A) to Section 7(c)(iii)(2)(C).

For this definition, gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 7(c), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company. For the avoidance of doubt, wholly-owned subsidiaries of the Company shall not be considered "Persons" for purposes of this Section 7(c).

(iv) A transaction will not be a Change in Control:

(1) unless the transaction qualifies as a change in control event within the meaning of Code Section 409A; or

(2) if its primary purpose is to (1) change the jurisdiction of the Company's incorporation, or (2) create a holding company owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(d) "**Change in Control Period**" means the period beginning three (3) months prior to a Change in Control and ending twelve (12) months following a Change in Control.

(e) "**COBRA**" means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

(f) "**Code**" means the Internal Revenue Code of 1986, as amended.

(g) "**Company Group**" means the Company and its subsidiaries.

(h) **“Disability”** means a total and permanent disability as defined in Section 22(e)(3) of the Code.

(i) **“Good Reason”** means the Executive’s resignation due to the occurrence of any of the following conditions which occurs without the Executive’s written consent, provided that the requirements regarding advance notice and an opportunity to cure set forth below are satisfied: (i) a material reduction in the Executive’s Salary, which the parties agree is a reduction of at least ten percent (10%) of the Executive’s Salary; (ii) a material reduction of the Executive’s duties, authorities, or responsibilities relative to the Executive’s duties, authorities, or responsibilities in effect immediately prior to the reduction, [including where such material reduction results solely by virtue of the Company being acquired and made part of a larger entity (as, for example, when the Chief Financial Officer of the Company remains as such following a Change in Control but is not made the Chief Financial Officer of the acquiring corporation)] **OR** [provided, however, that continued employment following a Change in Control with substantially the same duties, authorities, or responsibilities with respect to the Company’s business and operations will not constitute “Good Reason” (for example, “Good Reason” does not exist if the Executive is employed by the Company Group or a successor with substantially the same duties, authorities, or responsibilities with respect to the Company Group’s business that the Executive had immediately prior to the Change in Control regardless of whether the Executive’s title is revised to reflect Executive’s placement within the overall corporate hierarchy or whether the Executive provides services to a subsidiary, affiliate, business unit or otherwise)]; or (iii) a change by more than fifty (50) miles in the geographic location at which the Executive must perform services; *provided, however*, that no condition described herein will constitute “Good Reason” for purposes of this Agreement unless (1) the Executive will have first provided written notice to the Board of the existence of the condition within ninety (90) days of the initial existence of such Good Reason condition; (2) the Board will have failed to remedy the condition within thirty (30) days following the receipt of such notice (the **“Cure Period”**); (3) the Executive must cooperate in good faith with any efforts by the Company to remedy the Good Reason condition; (4) the Good Reason condition must continue to exist upon completion of the Cure Period; and (5) the date of termination of employment occurs no more than thirty (30) days after the end of the Cure Period. In no instance will a termination by the Executive be deemed to be for Good Reason for purposes of this Agreement if it becomes effective more than twelve (12) months following the initial existence of the Good Reason condition.

(j) **“Qualifying Pre-CIC Termination”** means a Qualifying CIC Termination that occurs prior to the date of the Change in Control.

(k) **“Qualifying Termination”** means a termination of the Executive’s employment either (i) by a Company Group member without Cause and other than by reason of the Executive’s death or Disability, or (ii) by the Executive for Good Reason, in either case, during the Change in Control Period (a **“Qualifying CIC Termination”**) or outside of the Change in Control Period (a **“Qualifying Non-CIC Termination”**).

(l) **“Salary”** means the Executive’s rate of base salary as in effect immediately prior to the Executive’s Qualifying Termination (or if the termination is due to a

resignation for Good Reason based on a material reduction in base salary, then the Executive's rate of base salary in effect immediately prior to the reduction) or, if the Executive's Qualifying Termination is a Qualifying CIC Termination and the amount is greater, at the level in effect immediately prior to the Change in Control.

8. Successors. This Agreement will be binding upon and inure to the benefit of (a) the heirs, executors, and legal representatives of the Executive upon the Executive's death, and (b) any successor of the Company. Any such successor of the Company will be deemed substituted for the Company under the terms of this Agreement for all purposes. For this purpose, "successor" means any person, firm, corporation, or other business entity which at any time, whether by purchase, merger, or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company. None of the rights of the Executive to receive any form of compensation payable pursuant to this Agreement may be assigned or transferred except by will or the laws of descent and distribution. Any other attempted assignment, transfer, conveyance, or other disposition of the Executive's right to compensation or other benefits will be null and void.

9. Notice.

(a) General. All notices and other communications required or permitted under this Agreement will be in writing and will be effectively given (i) upon actual delivery to the party to be notified; (ii) upon transmission by email; (iii) twenty-four (24) hours after confirmed facsimile transmission; (iv) one (1) business day after deposit with a recognized overnight courier; or (v) three (3) business days after deposit with the U.S. Postal Service by first class certified or registered mail, return receipt requested, postage prepaid, addressed (A) if to the Executive, at the address the Executive will have most recently furnished to the Company in writing, (B) if to the Company, at the following address:

Codex DNA, Inc.
9535 Waples Street, Suite 100
San Diego, CA 92121
Attention: Chief Executive Officer

(b) Notice of Termination. Any termination by a Company Group member for Cause will be communicated by a notice of termination to the Executive, and any termination by the Executive for Good Reason will be communicated by a notice of termination to the Company, in each case given in accordance with Section 9(a) of this Agreement. The notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the later of (i) the giving of the notice, or (ii) the end of any applicable cure period).

10. Resignation. The termination of the Executive's employment for any reason will also constitute, without any further required action by the Executive, the Executive's voluntary resignation from all officer and/or director positions held at any member of the Company Group,

and at the Board's request, the Executive will execute any documents reasonably necessary to reflect the resignations.

11. Miscellaneous Provisions.

(a) No Duty to Mitigate. The Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any payment be reduced by any earnings that the Executive may receive from any other source except as specified in Section 3(e).

(b) Waiver; Amendment. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by an authorized officer of the Company (other than the Executive) and by the Executive. No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement constitutes the entire agreement of the parties and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter of this Agreement, including, for the avoidance of doubt, any other employment letter or agreement, change in control severance agreement, severance policy or program, or Equity Award agreement.

(e) Choice of Law. This Agreement will be governed by the laws of the State of California without regard to California's conflicts of law rules that may result in the application of the laws of any jurisdiction other than California. The Executive hereby expressly consents to the personal and exclusive jurisdiction and venue of the state and federal courts located in California for any lawsuit filed against the Executive by any member of the Company Group.

(f) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision of this Agreement, which will remain in full force and effect.

(g) Withholding. All payments and benefits under this Agreement will be paid less applicable withholding taxes. The Company is authorized to withhold from any payments or benefits all federal, state, local, and/or foreign taxes required to be withheld from the payments or benefits and make any other required payroll deductions. No member of the Company Group will pay the Executive's taxes arising from or relating to any payments or benefits under this Agreement.

(h) Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

[Signature page follows.]

By its signature below, each of the parties signifies its acceptance of the terms of this Agreement, in the case of the Company by its duly authorized officer.

COMPANY

CODEX DNA, INC.

By: _____
Title: _____
Date: _____

EXECUTIVE

[NAME]
Date: _____

[Signature page to Change in Control Severance Agreement]

CODEX DNA, INC.

OUTSIDE DIRECTOR COMPENSATION POLICY

Adopted and approved May 20, 2021

Codex DNA, Inc. (the “**Company**”) believes that the granting of equity and cash compensation to its members of the Board of Directors (the “**Board**,” and members of the Board, the “**Directors**”) represents an effective tool to attract, retain, and reward Directors who are not employees of the Company (the “**Outside Directors**”). This Outside Director Compensation Policy (the “**Policy**”) is intended to formalize the Company’s policy regarding the compensation to its Outside Directors. Unless otherwise defined herein, capitalized terms used in this Policy will have the meaning given to such terms in the Company’s 2021 Stock Incentive Plan (the “**Plan**”), or if the Plan is no longer in place, the meaning given to such terms or any similar terms in the equity plan then in place. Each Outside Director will be solely responsible for any tax obligations incurred by such Outside Director as a result of the equity and cash payments such Outside Director receives under this Policy.

This Policy will be effective as of the effective date of the first registration statement that is filed by the Company and declared effective pursuant to Section 12(b) of the Exchange Act, with respect to any class of the Company’s securities (the “**Registration Statement**”) (such date, the “**Effective Date**”).

1. CASH COMPENSATION*Annual Cash Retainer*

Effective as of the Effective Date, each Outside Director will be paid an annual cash retainer of \$40,000. There are no per-meeting attendance fees for attending Board meetings.

Non-Executive Chair / Committee Membership Annual Cash Retainer

Effective as of the Effective Date, each Outside Director who serves as Non-Executive Chair, or chair or member of a committee of the Board will be paid additional annual fees as follows:

Non-Executive Chair:	\$35,000
Chair of Audit Committee:	\$20,000
Member of Audit Committee (other than the Chair of the Audit Committee):	\$10,000
Chair of Nominating and Corporate Governance Committee:	\$10,000
Member of Nominating and Corporate Governance Committee (other than the Chair of the Nominating and Corporate Governance Committee):	\$5,000
Chair of Compensation Committee:	\$15,000
Member of Compensation Committee (other than the Chair of the Compensation Committee):	\$7,500

Each annual cash retainer and additional annual fee will be paid quarterly in arrears on a prorated basis.

2. EQUITY COMPENSATION

Outside Directors will be eligible to receive all types of Awards (except Incentive Stock Options) under the Plan (or the applicable equity plan in place at the time of grant), including discretionary Awards not covered under this Policy. All grants of Awards to Outside Directors pursuant to Section 2 of this Policy will be automatic and nondiscretionary, except as otherwise provided herein, and will be made in accordance with the following provisions:

a. No Discretion. No person will have any discretion to select which Outside Directors will be granted any Awards under this Policy or to determine the number of Shares to be covered by such Awards.

b. Initial Award. Subject to Section 7 of this Policy, each individual who first becomes an Outside Director following the Effective Date will be granted Options to purchase 100,000 Shares (an “**Initial Award**”). The Initial Award will be made on the first Trading Day on or after the date on which such individual first becomes an Outside Director, whether through election by the stockholders of the Company or appointment by the Board to fill a vacancy (such grant date, the “**Initial Award Grant Date**”). If an individual was a member of the Board and also an employee, becoming an Outside Director due to termination of employment will not entitle the Outside Director to an Initial Award.

Subject to Section 3 of this Policy, each Initial Award will be scheduled to vest as follows: 1/36th of the Shares subject to the Initial Award will be scheduled to vest each month following the Initial Award Grant Date on the same day of the month as the Initial Award Grant Date (or, if there is no corresponding day in a particular month, then the last day of that month), in each case, subject to the Outside Director continuing to be a Service Provider through the applicable vesting date.

c. Annual Award. Subject to Section 7 of this Policy, on the date of each annual meeting of the Company's stockholders following the Effective Date (each, an "**Annual Meeting**"), each Outside Director will be automatically granted Options to purchase 50,000 Shares (an "**Annual Award**"); provided, however, that an Outside Director who has not been a Director for at least six (6) months prior to the date of the applicable Annual Meeting will not receive an Annual Award.

Subject to Section 3 of this Policy, each Annual Award will be scheduled to vest on the earlier of (i) the one (1)-year anniversary of the date the Annual Award is granted, or (ii) the day prior to the date of the Annual Meeting next following the date the Annual Award is granted, in each case, subject to the Outside Director continuing to be a Service Provider through the applicable vesting date

d. Additional Terms of Initial Awards and Annual Awards. The terms and conditions of each Initial Award and Annual Award will be as follows:

- i. Each Option granted pursuant to this Policy will be a nonstatutory stock option for U.S. tax purposes.
- ii. The term of each Option granted pursuant to this Policy will be ten (10) years, subject to earlier termination as provided in the Plan.
- iii. The exercise price per Share of each Option granted pursuant to this Policy will be equal to 100% of the Fair Market Value per Share on such Option's grant date.
- iv. Each Initial Award and Annual Award will be granted under and subject to the terms and conditions of the Plan and the applicable form of Award Agreement previously approved by the Board or its Compensation Committee, as applicable, for use thereunder.

3. CHANGE IN CONTROL

In the event of a Change in Control, each Outside Director outstanding Company equity awards will be treated in accordance with the terms of the Plan.

4. TRAVEL EXPENSES

Each Outside Director's reasonable, customary, and documented travel expenses to Board meetings will be reimbursed by the Company.

5. ADDITIONAL PROVISIONS

All provisions of the Plan not inconsistent with this Policy will apply to Awards granted to Outside Directors.

6. ADJUSTMENTS

In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under this Policy, will adjust the number of Shares issuable pursuant to Awards granted under this Policy.

7. LIMITATIONS

No Outside Director may be paid, issued or granted, in any Fiscal Year, cash payments (including the fees under Section 1 above) and Awards with an aggregate value greater than \$750,000, increased to \$1,000,000 in connection with his or her initial service (with the value of Awards based on its grant date fair value (determined in accordance with U.S. generally accepted accounting principles)). Any Awards or other compensation provided to an individual (a) for his or her services as an Employee, or for his or her services as a Consultant other than as an Outside Director, or (b) prior to the Effective Date, will be excluded for purposes of the foregoing limits.

8. SECTION 409A

In no event will cash compensation or expense reimbursement payments under this Policy be paid after the later of (a) the fifteenth (15th) day of the third (3rd) month following the end of the Company's fiscal year in which the compensation is earned or expenses are incurred, as applicable, or (b) the fifteenth (15th) day of the third (3rd) month following the end of the calendar year in which the compensation is earned or expenses are incurred, as applicable, in compliance with the "short-term deferral" exception under Section 409A of the Internal Revenue Code of 1986, as amended, and the final regulations and guidance thereunder, as may be amended from time to time (together, "**Section 409A**"). It is the intent of this Policy that this Policy and all payments hereunder be exempt from or otherwise comply with the requirements of Section 409A so that none of the compensation to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities or ambiguous terms herein will be interpreted to be so exempt or comply. In no event will the Company reimburse an Outside Director for any taxes imposed or other costs incurred as a result of Section 409A.

9. REVISIONS

The Board or any Committee designated by the Board may amend, alter, suspend, or terminate this Policy at any time and for any reason. No amendment, alteration, suspension, or termination of this Policy will materially impair the rights of an Outside Director with respect to

compensation that already has been paid or awarded, unless otherwise mutually agreed between the Outside Director and the Company. Termination of this Policy will not affect the Board's or the Compensation Committee's ability to exercise the powers granted to it under the Plan with respect to Awards granted under the Plan pursuant to this Policy prior to the date of such termination.

LEASE
by and between
BMR-WAPLES LP,
a Delaware limited partnership

and

SGI-DNA, INC.,
a Delaware corporation

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LEASE

THIS LEASE (this "Lease") is entered into as of this 04th day of April, 2019 (the "Execution Date"), by and between BMR-WAPLES LP, a Delaware limited partnership ("Landlord"), and SGI-DNA, INC., a Delaware corporation ("Tenant").

RECITALS

A. WHEREAS, Landlord owns certain real property (the "Property") and the improvements on the Property located at 9535 Waples Street, San Diego, California, including the building located thereon (the "Building"); and

B. WHEREAS, Landlord wishes to lease to Tenant, and Tenant desires to lease from Landlord, certain premises (the "Premises") located on the first (1') floor of the Building, pursuant to the terms and conditions of this Lease, as detailed below.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Lease of Premises.

1.1 Effective on the Term Commencement Date (as defined below), Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, as shown on Exhibit A attached hereto, for use by Tenant in accordance with the Permitted Use (as defined below) and no other uses. The Property and all landscaping, parking facilities, private drives and other improvements and appurtenances related thereto, including the Building, are hereinafter collectively referred to as the "Project." All portions of the Project that are for the non-exclusive use of tenants of the Building, including driveways, sidewalks, parking areas, landscaped areas, service corridors, stairways, elevators, public restrooms and public lobbies, are hereinafter referred to as "Common Area."

2. Basic Lease Provisions. For convenience of the parties, certain basic provisions of this Lease are set forth herein. The provisions set forth herein are subject to the remaining terms and conditions of this Lease and are to be interpreted in light of such remaining terms and conditions.

2.1 This Lease shall take effect upon the Execution Date and, except as specifically otherwise provided within this Lease, each of the provisions hereof shall be binding upon and inure to the benefit of Landlord and Tenant from the date of execution and delivery hereof by all parties hereto.

2.2 In the definitions below, each current Rentable Area (as defined below) is expressed in square feet. Rentable Area and “Tenant’s Pro Rata Share” are both subject to adjustment as provided in this Lease.

<u>Definition or Provision</u>	<u>Means the Following (As of the Term Commencement Date)</u>
Approximate Rentable Area of Premises	18,794 square feet
Approximate Rentable Area of Project	50,055 square feet
Tenant’s Pro Rata Share of Project	37.55%

2.3 Initial monthly and annual installments of Base Rent for the Premises (“Base Rent”) as of the Term Commencement Date, subject to adjustment under this Lease:

<u>Dates</u>	<u>Square Feet of Rentable Area</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent</u>	<u>Annual Base Rent</u>
Months 1 - 12	18,794	\$3.35 monthly	\$62,959.90	\$755,518.80

* Note: Subject to the Free Rent Period (as defined in Section 8.2 below).

2.4 Estimated Term Commencement Date: June 1, 2019

2.5 Estimated Term Expiration Date: August 31, 2024

2.6 Security Deposit: \$63,000.00

2.7 Permitted Use: Office and laboratory use in conformity with all federal, state, municipal and local laws, codes, ordinances, rules and regulations of Governmental Authorities (as defined below), committees, associations, or other regulatory committees, agencies or governing bodies having jurisdiction over the Premises, the Building, the Property, the Project, Landlord or Tenant, including both statutory and common law and hazardous waste rules and regulations (“Applicable Laws”)

2.8 Address for Rent Payment:

BMR-Waples LP
 Attention Entity 755
 P.O. Box 511415
 Los Angeles, California 90051-7970

2.9 Address for Notices to Landlord:

BMR-Waples LP
 17190 Bernardo Center Drive
 San Diego, California 92128
 Attn: Legal Department

2.10 Address for Notices to Tenant:

SGI-DNA, Inc.
9535 Waples Street, Suite 100
San Diego, California 92121

2.11 Address for Invoices to Tenant:

SGI-DNA, Inc.
9535 Waples Street, Suite 100
San Diego, California 92121

2.12 The following Exhibits are attached hereto and incorporated herein by reference:

- Exhibit A Premises
- Exhibit B Work Letter
- Exhibit B-1 Tenant Work Insurance Schedule
- Exhibit C Acknowledgement of Term Commencement Date and Term Expiration Date
- Exhibit D Designated Fume Hoods
- Exhibit E Form of Letter of Credit
- Exhibit F Rules and Regulations
- Exhibit G FF&E
- Exhibit H Tenant's Personal Property
- Exhibit I Form of Estoppel Certificate

3. Term. The actual term of this Lease (as the same may be extended pursuant to Article 42 hereof, and as the same may be earlier terminated in accordance with this Lease, the "Term") shall commence on the actual Term Commencement Date (as defined in Article 4) and end on the date (the "Term Expiration Date") that is sixty-three (63) months after the actual Term Commencement Date, subject to extension or earlier termination of this Lease as provided herein. TENANT HEREBY WAIVES THE REQUIREMENTS OF SECTION 1933 OF THE CALIFORNIA CIVIL CODE, AS THE SAME MAY BE AMENDED FROM TIME TO TIME.

4. Possession and Commencement Date.

4.1 The "Term Commencement Date" shall be the earlier of (a) the Estimated Term Commencement Date and (b) the day that the Tenant Improvements (as defined below) are Substantially Complete (as defined below). Tenant shall execute and deliver to Landlord written acknowledgment of the actual Term Commencement Date and the Term Expiration Date within ten (10) days after Tenant takes occupancy of the Premises, in the form attached as Exhibit C hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Term Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain validation by any medical review board or other similar governmental licensing of the Premises required for the Permitted Use by Tenant shall not serve to extend the Term Commencement Date. The term "Substantially Complete" or "Substantial Completion" means that the Tenant Improvements are substantially complete in accordance with the Approved Plans (as defined in the Work Letter (as defined below)), except for minor punch list items.

4.2 Tenant shall cause the work (the “Tenant Improvements”) described in the Work Letter attached hereto as Exhibit B (the “Work Letter”) to be constructed in the Premises pursuant to the Work Letter at a cost to Landlord not to exceed One Hundred Eighty-Seven Thousand Nine Hundred Forty Dollars (\$187,940) (the “TI Allowance”). The TI Allowance may be applied to the costs of (a) construction, (b) project review by Landlord (which fee shall equal one point five percent (1.5%) of the cost of the Tenant Improvements, including the TI Allowance), (c) commissioning of mechanical, electrical, supplemental heating and cooling systems, plumbing and water filtration systems by a licensed, qualified commissioning agent hired by Tenant, and review of such party’s commissioning report by a licensed, qualified commissioning agent hired by Landlord, (d) space planning, architect, engineering and other related services performed by third parties unaffiliated with Tenant, (e) building permits and other taxes, fees, charges and levies by Governmental Authorities (as defined below) for permits or for inspections of the Tenant Improvements, and (f) costs and expenses for labor, material, equipment and fixtures, provided that no more than twelve percent (12%) of the TI allowance may be applied toward the cost of the purchase and installation of network and cabling improvements within the Premises. In no event shall the TI Allowance be used for (v) the cost of work that is not authorized by the Approved Plans (as defined in the Work Letter) or otherwise approved in writing by Landlord, (w) payments to Tenant or any affiliates of Tenant, (x) the purchase of any furniture, personal property or other non-building system equipment, (y) costs arising from any default by Tenant of its obligations under this Lease or (z) costs that are recoverable by Tenant from a third party (e.g., insurers, warrantors, or tortfeasors).

4.3 Tenant shall have until the date that is twelve (12) months after the Execution Date (the “TI Deadline”), to submit Fund Requests (as defined in the Work Letter) to Landlord for disbursement of the unused portion of the TI Allowance, after which date Landlord’s obligation to fund any such costs for which Tenant has not submitted a Fund Request to Landlord shall expire. In no event shall any unused T1 Allowance entitle Tenant to a credit against Rent payable under this Lease. Tenant shall deliver to Landlord (a) a certificate of occupancy (or its substantial equivalent) for the Premises suitable for the Permitted Use and (b) a Certificate of Substantial, Completion in the form of the American Institute of Architects document 0704 or similar documentation acceptable to Landlord, in its sole and absolute discretion, executed by the project architect and the general contractor.

4.4 Prior to entering upon the Premises, Tenant shall furnish to Landlord evidence satisfactory to Landlord that insurance coverages required of Tenant under the provisions of Article 23 are in effect, and such entry shall be subject to all the terms and conditions of this Lease. Prior to the Term Commencement Date, Tenant shall not be permitted to conduct business operations in the Premises or to use the Premises for any purpose other than construction of the Tenant Improvements.

4.5 Landlord and Tenant shall mutually agree upon the selection of the architect, engineer, general contractor and major subcontractors, and Landlord and Tenant shall each participate in the review of the competitive bid process. Landlord may refuse to approve any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord’s

reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas.

4.6 Tenant shall pay all utility charges, together with any fees, surcharges and taxes thereon for the period beginning on the date that Tenant first accesses the Premises for any reason after the Execution Date.

4.7 Following the Execution Date, Landlord shall, at Landlord's sole cost and expense, remove from the Premises ten (10) fume hoods in the area depicted on Exhibit D attached hereto (such fume hoods, the "Designated Fume Hoods"). Following Landlord's removal of the Designated Fume Hoods, Tenant shall be permitted to access the Premises for construction of the Tenant Improvements, subject to the terms and conditions of Section 4.4 above.

4.8 Throughout the Term, Tenant shall have the right to use the furniture, fixtures and equipment currently located within the Premises and listed on Exhibit G attached hereto (collectively, the "FF&E"). Landlord has made no representations or warranties, express, implied or otherwise, regarding the condition or working order of the FF&E. Tenant confirms that it has had the reasonable opportunity to inventory and inspect the FF&E and hereby represents that (i) it accepts the FF&E "AS IS AND WITH ALL FAULTS", and (ii) it is satisfied that all items of FF&E listed on Exhibit G attached hereto are currently located within the Premises and are hereby accepted by Tenant, subject to and in accordance with the terms of this Section. Tenant acknowledges and agrees that Landlord shall continue to own the FF&E, and Tenant shall acquire no ownership interest therein. Throughout the Term, Tenant shall be obligated to (a) maintain, repair, safeguard and keep lien free the FF&E, and (b) ensure that the FF&E is covered by the insurance policy required to be maintained by Tenant pursuant to Section 23.3(c) of this Lease. With the exception of ordinary wear and tear, Tenant shall promptly repair or replace any FF&E that becomes damaged, destroyed or for any reason is no longer located at the Premises, and shall keep a detailed log of any such repairs or replacements. All replacements shall be of substantially similar style and quality as the original items of FF&E so replaced. Tenant shall provide Landlord with a copy of such log upon request. In no event shall Landlord have any liability or responsibility with respect to the FF&E, and Landlord shall have no responsibility to repair or refurbish the FF&E at any time. At the expiration or earlier termination of the Term, Landlord and Tenant shall jointly inventory the FF&E then located within the Premises, and Tenant shall pay to Landlord, within thirty (30) days following the effective date of expiration or earlier termination of this Lease, an amount equal to the cost to repair or replace any items of the FF&E which are no longer located at the Premises, are of inferior style or quality as compared with the original FF&E, or which exhibit damage beyond ordinary wear and tear as reasonably determined by Landlord.

5. Condition of Premises. Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of the Premises, the Building or the Project, or with respect to the suitability of the Premises, the Building or the Project for the conduct of Tenant's business. Tenant acknowledges that (a) it is fully familiar with the condition of the Premises and agrees to take the same in its condition "as is" as of the Execution Date and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the

Premises for Tenant's occupancy or to pay for or construct any improvements to the Premises, except with respect to payment of the TI Allowance. Tenant's taking of possession of the Premises shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Premises, the Building and the Project were at such time in good, sanitary and satisfactory condition and repair.

6. Rentable Area.

6.1 The term "Rentable Area" shall reflect such areas as reasonably calculated by Landlord's architect, as the same may be reasonably adjusted from time to time by Landlord in consultation with Landlord's architect to reflect changes to the Premises, the Building or the Project, as applicable. Notwithstanding anything contained herein to the contrary, in no event shall the Rentable Area of the Premises, the Building or the Project be deemed to have increased unless due to a change in the outer dimensions of the exterior walls of the same.

6.2 The Rentable Area of the Building is generally determined by making separate calculations of Rentable Area applicable to each floor within the Building and totaling the Rentable Area of all floors within the Building. The Rentable Area of a floor is computed by measuring to the outside finished surface of the permanent outer Building walls. The full area calculated as previously set forth is included as Rentable Area, without deduction for columns and projections or vertical penetrations, including stairs, elevator shafts, flues, pipe shafts, vertical ducts and the like, as well as such items' enclosing walls.

6.3 The term "Rentable Area," when applied to the Premises, is that area equal to the usable area of the Premises, plus an equitable allocation of Rentable Area within the Building that is not then utilized or expected to be utilized as usable area, including that portion of the Building devoted to corridors, equipment rooms, restrooms, elevator lobby, atrium and mailroom.

7. Rent.

7.1 Tenant shall pay to Landlord as Base Rent for the Premises, commencing on the Term Commencement Date, the sums set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof. Base Rent shall be paid in equal monthly installments as set forth in Section 2.3, subject to the rental adjustments provided in Article 8 hereof, each in advance on the first day of each and every calendar month during the Term.

7.2 In addition to Base Rent, Tenant shall pay to Landlord as additional rent ("Additional Rent") at times hereinafter specified in this Lease (a) Tenant's Adjusted Share (as defined below) of Operating Expenses (as defined below), (b) the Property Management Fee (as defined below), (c) [intentionally omitted] and (d) any other amounts that Tenant assumes or agrees to pay under the provisions of this Lease that are owed to Landlord, including any and all other sums that may become due by reason of any default of Tenant or failure on Tenant's part to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after notice and the lapse of any applicable cure periods.

7.3 Base Rent and Additional Rent shall together be denominated "Rent." Rent shall be paid to Landlord, without abatement, deduction or offset, in lawful money of the United

States of America to the address set forth in Section 2.8 or to such other person or at such other place as Landlord may from time designate in writing. In the event the Term commences or ends on a day other than the first day of a calendar month, then the Rent for such fraction of a month shall be prorated for such period on the basis of the number of days in the month and shall be paid at the then-current rate for such fractional month.

7.4 Tenant's obligation to pay Rent shall not be discharged or otherwise affected by (a) any Applicable Laws now or hereafter applicable to the Premises, (b) any other restriction on Tenant's use, (c) except as expressly provided herein, any casualty or taking or (d) any other occurrence; and Tenant waives all rights now or hereafter existing to terminate or cancel this Lease or quit or surrender the Premises or any part thereof, or to assert any defense in the nature of constructive eviction to any action seeking to recover rent. Tenant's obligation to pay Rent with respect to any period or obligations arising, existing or pertaining to the period prior to the date of the expiration or earlier termination of the Term or this Lease shall survive any such expiration or earlier termination; provided, however, that nothing in this sentence shall in any way affect Tenant's obligations with respect to any other period.

8. Rent Adjustments: Free Rent Period.

8.1 Base Rent shall be subject to an annual upward adjustment of three percent (3%) of the then-current Base Rent. The first such adjustment shall become effective commencing on the first (1st) annual anniversary of the Term Commencement Date, and subsequent adjustments shall become effective on every successive annual anniversary for so long as this Lease continues in effect.

8.2 Notwithstanding anything to the contrary contained in this Lease, and so long as no Default (as defined below) by Tenant has occurred, Tenant shall not be required to pay Base Rent for the second (2nd), third (3rd) and fourth (4th) months of the initial Term of this Lease (such period, the "Free Rent Period"); provided, however, that the total amount of Base Rent abated during the Free Rent Period shall not exceed One Hundred Eighty-Eight Thousand Eight Hundred Seventy-Nine and 70/100 Dollars (\$188,879.70) (the "Free Rent Cap"). During the Free Rent Period, Tenant shall continue to be responsible for the payment of all of Tenant's other Rent obligations under this Lease, including all Additional Rent such as Operating Expenses, the Property Management Fee, and costs of utilities for the Premises. Upon the occurrence of any Default, the Free Rent Period shall immediately expire, and Tenant shall no longer be entitled to any further abatement of Base Rent pursuant to this Section. In the event of any Default that results in termination of this Lease, then, as part of the recovery to which Landlord is entitled pursuant to this Lease, and in addition to any other rights or remedies to which Landlord may be entitled pursuant to this Lease (including Article 31), at law or in equity, Landlord shall be entitled to the immediate recovery, as of the day immediately prior to such termination of the Lease, of the unamortized amount of Base Rent that Tenant would have paid had the Free Rent Period not been in effect.

9. Operating Expenses.

9.1 As used herein, the term "Operating Expenses" shall include:

(a) Government impositions, including property tax costs consisting of real and personal property taxes (including amounts due under any improvement bond upon the Building or the Project (including the parcel or parcels of real property upon which the Building and areas serving the Building and the Project are located)) or assessments in lieu thereof imposed by any federal, state, regional, local or municipal governmental authority, agency or subdivision (each, a "Governmental Authority"); taxes on or measured by gross rentals received from the rental of space in the Project; taxes based on the square footage of the Premises, the Building or the Project, as well as any parking charges, utilities surcharges or any other costs levied, assessed or imposed by, or at the direction of, or arising from Applicable Laws or interpretations thereof, promulgated by any Governmental Authority in connection with the use or occupancy of the Project or the parking facilities serving the Project; taxes on this transaction or any document to which Tenant is a party creating or transferring an interest in the Premises; any fee for a business license to operate an office building; and any expenses, including the reasonable cost of attorneys or experts, reasonably incurred by Landlord in seeking reduction by the taxing authority of the applicable taxes, less tax refunds obtained as a result of an application for review thereof; and

(b) All other costs of any kind paid or incurred by Landlord in connection with the operation or maintenance of the Building and the Project, which shall include Project office rent at fair market rental for a commercially reasonable amount of space for Project management personnel to the extent an office used for Project operations is maintained at the Project, plus customary expenses for such office, and costs of repairs and replacements to improvements within the Project as appropriate to maintain the Project as required hereunder, including costs of funding such reasonable reserves as Landlord, consistent with good business practice, may establish to provide for future repairs and replacements, or as any Lender (as defined below) may require; costs of utilities furnished to the Common Area; sewer fees; trash collection; cleaning, including windows; heating, ventilation and air-conditioning ("HVAC"); maintenance of landscaping and grounds; snow removal; maintenance of drives and parking areas; maintenance of the roof; security services and devices; building supplies; maintenance or replacement of equipment utilized for operation and maintenance of the Project; license, permit and inspection fees; sales, use and excise taxes on goods and services purchased by Landlord in connection with the operation, maintenance or repair of the Building or Project systems and equipment; telephone, postage, stationery supplies and other expenses incurred in connection with the operation, maintenance or repair of the Project; accounting, legal and other professional fees and expenses incurred in connection with the Project; costs of furniture, draperies, carpeting, landscaping supplies, snow removal and other customary and ordinary items of personal property provided by Landlord for use in Common Area or in the Project office; Project office rent or rental value for a commercially reasonable amount of space, to the extent an office used for Project operations is maintained at the Project, plus customary expenses for such office; capital expenditures; costs of complying with Applicable Laws (except to the extent such costs are incurred to remedy non-compliance as of the Execution Date with Applicable Laws); costs to keep the Project in compliance with, or costs or fees otherwise required under or incurred

pursuant to any CC&Rs (as defined below), including condominium fees; insurance premiums, including premiums for commercial general liability, property casualty, earthquake, terrorism and environmental coverages; portions of insured losses paid by Landlord as part of the deductible portion of a loss pursuant to the terms of insurance policies; service contracts; costs of services of independent contractors retained to do work of a nature referenced above; and costs of compensation (including employment taxes and fringe benefits) of all persons who perform regular and recurring duties connected with the day-to-day operation and maintenance of the Project, its equipment, the adjacent walks, landscaped areas, drives and parking areas, including janitors, floor waxers, window washers, watchmen, gardeners, sweepers, plow truck drivers, handymen, and engineering/maintenance/facilities personnel.

(c) Notwithstanding the foregoing, Operating Expenses shall not include any net income, franchise, capital stock, estate or inheritance taxes, or taxes that are the personal obligation of Tenant or of another tenant of the Project; any leasing commissions; expenses that relate to preparation of rental space for a tenant; expenses of initial development and construction, including grading, paving, landscaping and decorating (as distinguished from maintenance, repair and replacement of the foregoing); legal expenses relating to other tenants; costs of repairs to the extent reimbursed by payment of insurance proceeds received by Landlord; interest upon loans to Landlord or secured by a loan agreement, mortgage, deed of trust, security instrument or other loan document covering the Project or a portion thereof (collectively, "Loan Documents") (provided that interest upon a government assessment or improvement bond payable in installments shall constitute an Operating Expense under Subsection 9.1(a)); salaries of executive officers of Landlord; depreciation claimed by Landlord for tax purposes (provided that this exclusion of depreciation is not intended to delete from Operating Expenses actual costs of repairs and replacements and reasonable reserves in regard thereto that are provided for in Subsection 9.1(b)); taxes that are excluded from Operating Expenses by the last sentence of Subsection 9.1(a); costs or expenses incurred in connection with the financing or sale of the Project or any portion thereof; costs expressly excluded from Operating Expenses elsewhere in this Lease or that are charged to or paid by Tenant under other provisions of this Lease; professional fees and disbursements and other costs and expenses related to the ownership (as opposed to the use, occupancy, operation, maintenance or repair) of the Project; and any item that, if included in Operating Expenses, would involve a double collection for such item by Landlord. To the extent that Tenant uses more than Tenant's Pro Rata Share of any item of Operating Expenses, Tenant shall pay Landlord for such excess in addition to Tenant's obligation to pay Tenant's Pro Rata Share of Operating Expenses (such excess, together with Tenant's Pro Rata Share, "Tenant's Adjusted Share").

9.2 Tenant shall pay to Landlord on the first day of each calendar month of the Term, as Additional Rent, (a) the Property Management Fee (as defined below), (b) [intentionally omitted] and (c) Landlord's estimate of Tenant's Adjusted Share of Operating Expenses with respect to the Building and the Project, as applicable, for such month.

(w) The "Property Management Fee" shall equal three percent (3%) of Base Rent due from Tenant. Tenant shall pay the Property Management Fee in accordance with Section 9.2 with respect to the entire Term, including any Free Rent Period, any extensions of the Term, or any holdover periods, regardless of whether Tenant is obligated to pay Base Rent,

Operating Expenses or any other Rent with respect to any such period or portion thereof. During any Free Rent Period (and any period of occupancy prior to the Term as further described in Section 9.4), the Property Management Fee shall be calculated as if Tenant were paying Base Rent in the full amount required pursuant to this Lease had the Free Rent Period not been in effect.

(x) [Intentionally omitted].

(y) Within ninety (90) days after the conclusion of each calendar year (or such longer period as may be reasonably required by Landlord), Landlord shall furnish to Tenant a statement showing in reasonable detail the actual Operating Expenses, Tenant's Adjusted Share of Operating Expenses, and the cost of providing utilities to the Premises for the previous calendar year ("Landlord's Statement"). Any additional sum due from Tenant to Landlord shall be due and payable within thirty (30) days after receipt of an invoice therefor. If the amounts paid by Tenant pursuant to this Section exceed Tenant's Adjusted Share of Operating Expenses for the previous calendar year, then Landlord shall credit the difference against the Rent next due and owing from Tenant; provided that, if the Lease term has expired, Landlord shall accompany Landlord's Statement with payment for the amount of such difference.

(z) Any amount due under this Section for any period that is less than a full month shall be prorated for such fractional month on the basis of the number of days in the month.

9.3 Landlord or an affiliate(s) of Landlord currently own other property(ies) adjacent to the Project or its neighboring properties (collectively, "Neighboring Properties"). In connection with Landlord performing services for the Project pursuant to this Lease, similar services may be performed by the same vendor(s) for Neighboring Properties. In such a case, Landlord shall reasonably allocate to each Building and the Project the costs for such services based upon the ratio that the square footage of the Building or the Project (as applicable) bears to the total square footage of all of the Neighboring Properties or buildings within the Neighboring Properties for which the services are performed, unless the scope of the services performed for any building or property (including the Building and the Project) is disproportionately more or less than for others, in which case Landlord shall equitably allocate the costs based on the scope of the services being performed for each building or property (including the Building and the Project).

9.4 Tenant shall not be responsible for Operating Expenses with respect to any time period prior to the Term Commencement Date; provided, however, that if Tenant substantially completes the Tenant Improvements and occupies the Premises for the conduct of its business prior to the Term Commencement Date, Tenant shall be responsible for Operating Expenses from such earlier date of possession (the Term Commencement Date or such earlier date, as applicable, the "Expense Trigger Date"); and provided, further, that Landlord may annualize certain Operating Expenses incurred prior to the Expense Trigger Date over the course of the budgeted year during which the Expense Trigger Date occurs, and Tenant shall be responsible for the annualized portion of such Operating Expenses corresponding to the number of days during such year, commencing with the Expense Trigger Date, for which Tenant is otherwise liable for Operating Expenses pursuant to this Lease. Tenant's responsibility for Tenant's

Adjusted Share of Operating Expenses shall continue to the latest of (a) the date of termination of the Lease, (b) the date Tenant has fully vacated the Premises and (c) if termination of the Lease is due to a default by Tenant, the date of rental commencement of a replacement tenant.

9.5 Operating Expenses for the calendar year in which Tenant's obligation to share therein commences and for the calendar year in which such obligation ceases shall be prorated on a basis reasonably determined by Landlord. Expenses such as taxes, assessments and insurance premiums that are incurred for an extended time period shall be prorated based upon the time periods to which they apply so that the amounts attributed to the Premises relate in a reasonable manner to the time period wherein Tenant has an obligation to share in Operating Expenses.

9.6 Within thirty (30) days after the end of each calendar month, Tenant shall submit to Landlord an invoice, or, in the event an invoice is not available, an itemized list, of all costs and expenses that (a) Tenant has incurred (either internally or by employing third parties) during the prior month and (b) for which Tenant reasonably believes it is entitled to reimbursements from Landlord pursuant to the terms of this Lease or that Tenant reasonably believes is the responsibility of Landlord pursuant to this Lease or the Work Letter.

9.7 In the event that the Project is less than fully occupied during a calendar year, Tenant acknowledges that Landlord may extrapolate Operating Expenses that vary depending on the occupancy of the Project to equal Landlord's reasonable estimate of what such Operating Expenses would have been had the Project been ninety-five percent (95%) occupied during such calendar year; provided, however, that Landlord shall not recover more than one hundred percent (100%) of Operating Expenses.

10. Taxes on Tenant's Property.

10.1 Tenant shall be solely responsible for the payment of any and all taxes levied upon (a) personal property and trade fixtures located at the Premises and (b) any gross or net receipts of or sales by Tenant, and shall pay the same prior to delinquency.

10.2 If any such taxes on Tenant's personal property or trade fixtures are levied against Landlord or Landlord's property or, if the assessed valuation of the Building, the Property or the Project is increased by inclusion therein of a value attributable to Tenant's personal property or trade fixtures, and if Landlord, after written notice to Tenant, pays the taxes based upon any such increase in the assessed value of the Building, the Property or the Project, then Tenant shall, upon demand, repay to Landlord the taxes so paid by Landlord.

10.3 If any improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, are assessed for real property tax purposes at a valuation higher than the valuation at which improvements conforming to Landlord's building standards (the "Building Standard") in other spaces in the Building are assessed, then the real property taxes and assessments levied against Landlord or the Building, the Property or the Project by reason of such excess assessed valuation shall be deemed to be taxes levied against personal property of Tenant and shall be governed by the provisions of Section 10.2. Any such excess assessed valuation due to improvements in or alterations to space in the Project leased by other tenants at the Project shall not be included in

Operating Expenses. If the records of the applicable governmental assessor's office are available and sufficiently detailed to serve as a basis for determining whether such Tenant improvements or alterations are assessed at a higher valuation than the Building Standard, then such records shall be binding on both Landlord and Tenant.

11. Security Deposit.

11.1 Tenant shall deposit with Landlord on or before the Execution Date the sum set forth in Section 2.6 (the "Security Deposit"), which sum shall be held by Landlord as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease to be kept and performed by Tenant during the period commencing on the Execution Date and ending upon the expiration or termination of Tenant's obligations under this Lease. If Tenant Defaults (as defined below) with respect to any provision of this Lease, including any provision relating to the payment of Rent, then Landlord may (but shall not be required to) use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default, or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, then Tenant shall, within ten (10) days following demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to its original amount, and Tenant's failure to do so shall be a material breach of this Lease. The provisions of this Article shall survive the expiration or earlier termination of this Lease. TENANT HEREBY WAIVES THE REQUIREMENTS OF SECTION 1950.7 OF THE CALIFORNIA CIVIL CODE, AS THE SAME MAY BE AMENDED FROM TIME TO TIME.

11.2 In the event of bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for all periods prior to the filing of such proceedings.

11.3 Landlord may deliver to any purchaser of Landlord's interest in the Premises the funds deposited hereunder by Tenant, and thereupon Landlord shall be discharged from any further liability with respect to such deposit. This provision shall also apply to any subsequent transfers.

11.4 If Tenant shall fully and faithfully perform every provision of this Lease to be performed by it, then the Security Deposit, or any balance thereof, shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within thirty (30) days after the expiration or earlier termination of this Lease.

11.5 If the Security Deposit shall be in cash, Landlord shall hold the Security Deposit in an account at a banking organization selected by Landlord; provided however, that Landlord shall not be required to maintain a separate account for the Security Deposit, but may intermingle it with other funds of Landlord. Landlord shall be entitled to all interest and/or dividends, if any, accruing on the Security Deposit. Landlord shall not be required to credit Tenant with any interest for any period during which Landlord does not receive interest on the Security Deposit.

11.6 The Security Deposit may be in the form of cash, a letter of credit or any other security instrument acceptable to Landlord in its sole discretion. Tenant may at any time, except

when Tenant is in Default (as defined below), deliver a letter of credit (the “L/C Security.”) as the entire Security Deposit, as follows:

(a) If Tenant elects to deliver L/C Security, then Tenant shall provide Landlord, and maintain in full force and effect throughout the Term and until the date that is six (6) months after the then-current Term Expiration Date, a letter of credit in the form of Exhibit E issued by an issuer reasonably satisfactory to Landlord, in the amount of the Security Deposit, with an initial term of at least one year. Landlord may require the L/C Security to be re-issued by a different issuer at any time during the Term if Landlord reasonably believes that the issuing bank of the L/C Security is or may soon become insolvent; provided, however, Landlord shall return the existing L/C Security to the existing issuer immediately upon receipt of the substitute L/C Security. If any issuer of the L/C Security shall become insolvent or placed into FDIC receivership, then Tenant shall immediately deliver to Landlord (without the requirement of notice from Landlord) substitute L/C Security issued by an issuer reasonably satisfactory to Landlord, and otherwise conforming to the requirements set forth in this Article. As used herein with respect to the issuer of the L/C Security, “insolvent” shall mean the determination of insolvency as made by such issuer’s primary bank regulator (i.e., the state bank supervisor for state chartered banks; the OCC or OTS, respectively, for federally chartered banks or thrifts; or the Federal Reserve for its member banks). If, at the Term Expiration Date, any Rent remains uncalculated or unpaid, then (i) Landlord shall with reasonable diligence complete any necessary calculations, (ii) Tenant shall extend the expiry date of such L/C Security from time to time as Landlord reasonably requires and (iii) in such extended period, Landlord shall not unreasonably refuse to consent to an appropriate reduction of the L/C Security. Tenant shall reimburse Landlord’s legal costs (as estimated by Landlord’s counsel) in handling Landlord’s acceptance of L/C Security or its replacement or extension.

(b) If Tenant delivers to Landlord satisfactory L/C Security in place of the entire Security Deposit, Landlord shall remit to Tenant any cash Security Deposit Landlord previously held.

(c) Landlord may draw upon the L/C Security, and hold and apply the proceeds in the same manner and for the same purposes as the Security Deposit, if (i) an uncured Default (as defined below) exists, (ii) as of the date that is forty-five (45) days before any L/C Security expires (even if such scheduled expiry date is after the Term Expiration Date) Tenant has not delivered to Landlord an amendment or replacement for such L/C Security, reasonably satisfactory to Landlord, extending the expiry date to the earlier of (1) six (6) months after the then-current Term Expiration Date or (2) the date that is one year after the then-current expiry date of the L/C Security, (iii) the L/C Security provides for automatic renewals, Landlord asks the issuer to confirm the current L/C Security expiry date, and the issuer fails to do so within ten (10) business days, (iv) Tenant fails to pay (when and as Landlord reasonably requires) any bank charges for Landlord’s transfer of the L/C Security or (v) the issuer of the L/C Security ceases, or announces that it will cease, to maintain an office in the city where Landlord may present drafts under the L/C Security (and fails to permit drawing upon the L/C Security by overnight courier or facsimile). This Section does not limit any other provisions of this Lease allowing Landlord to draw the L/C Security under specified circumstances.

(d) Tenant shall not seek to enjoin, prevent, or otherwise interfere with Landlord's draw under L/C Security, even if it violates this Lease. Tenant acknowledges that the only effect of a wrongful draw would be to substitute a cash Security Deposit for L/C Security, causing Tenant no legally recognizable damage. Landlord shall hold the proceeds of any draw in the same manner and for the same purposes as a cash Security Deposit. In the event of a wrongful draw, the parties shall cooperate to allow Tenant to post replacement L/C Security simultaneously with the return to Tenant of the wrongfully drawn sums, and Landlord shall upon request confirm in writing to the issuer of the L/C Security that Landlord's draw was erroneous.

(e) If Landlord transfers its interest in the Premises, then Tenant shall at Tenant's expense, within five (5) business days after receiving a request from Landlord, deliver (and, if the issuer requires, Landlord shall consent to) an amendment to the L/C Security naming Landlord's grantee as substitute beneficiary. If the required Security Deposit changes while L/C Security is in force, then Tenant shall deliver (and, if the issuer requires, Landlord shall consent to) a corresponding amendment to the L/C Security.

12. Use.

12.1 Tenant shall use the Premises for the Permitted Use, and shall not use the Premises, or permit or suffer the Premises to be used, for any other purpose without Landlord's prior written consent, which consent Landlord may withhold in its sole and absolute discretion.

12.2 Tenant shall not use or occupy the Premises in violation of Applicable Laws; zoning ordinances; or the certificate of occupancy (or its substantial equivalent) issued for the Building or the Project, and shall, upon five (5) days' written notice from Landlord, discontinue any use of the Premises that is declared or claimed by any Governmental Authority having jurisdiction to be a violation of any of the above, or that in Landlord's reasonable opinion violates any of the above. Tenant shall comply with any direction of any Governmental Authority having jurisdiction that shall, by reason of the nature of Tenant's use or occupancy of the Premises, impose any duty upon Tenant or Landlord with respect to the Premises or with respect to the use or occupation thereof, and shall indemnify, defend (at the option of and with counsel reasonably acceptable to the indemnified party(ies)), save, reimburse and hold harmless (collectively, "Indemnify." "Indemnity." or "Indemnification." as the case may require) Landlord and its affiliates, employees, agents and contractors; and any lender, mortgagee, ground lessor or beneficiary (each, a "Lender" and, collectively with Landlord and its affiliates, employees, agents and contractors, the "Landlord Indemnitees") harmless from and against any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages, suits or judgments, and all reasonable expenses (including reasonable attorneys' fees, charges and disbursements, regardless of whether the applicable demand, claim, action, cause of action or suit is voluntarily withdrawn or dismissed) incurred in investigating or resisting the same (collectively, "Claims") of any kind or nature that arise before, during or after the Term as a result of Tenant's breach of this Section.

12.3 Tenant shall not do or permit to be done anything that will invalidate or increase the cost of any fire, environmental, extended coverage or any other insurance policy covering the Building or the Project, and shall comply with all rules, orders, regulations and requirements of the insurers of the Building and the Project, and Tenant shall promptly, upon demand, reimburse

Landlord for any additional premium charged for such policy by reason of Tenant's failure to comply with the provisions of this Article.

12.4 Tenant shall keep all doors opening onto public corridors closed, except when in use for ingress and egress.

12.5 No additional locks or bolts of any kind shall be placed upon any of the doors or windows by Tenant, nor shall any changes be made to existing locks or the mechanisms thereof without Landlord's prior written consent. Tenant shall, upon termination of this Lease, return to Landlord all keys to offices and restrooms either furnished to or otherwise procured by Tenant. In the event any key so furnished to Tenant is lost, Tenant shall pay to Landlord the cost of replacing the same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such change.

12.6 No awnings or other projections shall be attached to any outside wall of the Building. No curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises other than Landlord's standard window coverings. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreened without Landlord's prior written consent, nor shall any bottles, parcels or other articles be placed on the windowsills or items attached to windows that are visible from outside the Premises. No equipment, furniture or other items of personal property shall be placed on any exterior balcony without Landlord's prior written consent.

12.7 No sign, advertisement or notice ("Signage") shall be exhibited, painted or affixed by Tenant on any part of the Premises or the Building without Landlord's prior written consent. Signage shall conform to Landlord's design criteria. For any Signage, Tenant shall, at Tenant's own cost and expense, (a) acquire all permits for such Signage in compliance with Applicable Laws and (b) design, fabricate, install and maintain such Signage in a first-class condition. Tenant shall be responsible for reimbursing Landlord for costs incurred by Landlord in removing any of Tenant's Signage upon the expiration or earlier termination of the Lease. Interior signs on entry doors to the Premises and the directory tablet shall be inscribed, painted or affixed for Tenant by Landlord at Tenant's sole cost and expense, and shall be of a size, color and type and be located in a place acceptable to Landlord. The directory tablet shall be provided exclusively for the display of the name and location of tenants only. Tenant shall not place anything on the exterior of the corridor walls or corridor doors other than Landlord's standard lettering. Subject to the Landlord's prior written consent (which shall not be unreasonably withheld), any required permits or other approvals of Governmental Authorities, and compliance with Applicable Laws, any CC&Rs (as defined below) applicable to the Project and the Rules and Regulations (as defined below), Tenant shall be entitled to install one panel displaying Tenant's name on the existing monument Signage at the Building. At Landlord's option, Landlord may install any Tenant Signage, and Tenant shall pay all costs associated with such installation within thirty (30) days after demand therefor.

12.8 Tenant may only place equipment within the Premises with floor loading consistent with the Building's structural design unless Tenant obtains Landlord's prior written approval. Tenant may place such equipment only in a location designed to carry the weight of such equipment.

12.9 Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations therefrom from extending into the Common Area or other offices in the Project.

12.10 Tenant shall not (a) do or permit anything to be done in or about the Premises that shall in any way obstruct or interfere with the rights of other tenants or occupants of the Project, or injure or annoy them, (b) use or allow the Premises to be used for immoral, unlawful or objectionable purposes, (c) cause, maintain or permit any nuisance or waste in, on or about the Project or (d) take any other action that would in Landlord's reasonable determination in any manner adversely affect other tenants' quiet use and enjoyment of their space or adversely impact their ability to conduct business in a professional and suitable work environment. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for all liabilities, costs and expenses arising from or in connection with the compliance of the Premises with the Americans with Disabilities Act, 42 U.S.C. § 12101, et seq., and any state and local accessibility laws, codes, ordinances and rules (collectively, and together with regulations promulgated pursuant thereto, the "ADA"), and Tenant shall Indemnify the Landlord Indemnitees from and against any Claims arising from any such failure of the Premises to comply with the ADA. The Premises have not undergone inspection by a Certified Access Specialist ("CASp," as defined in California Civil Code Section 55.52). Even if not required by California law, the Premises may be inspected by a CASp to determine whether the Premises comply with the ADA, and Landlord may not prohibit a CASp performing such an inspection. If Tenant requests that such an inspection take place, Landlord and Tenant shall agree on the time and manner of the inspection, as well as which party will pay the cost of the inspection and the cost to remedy any defects identified by the CASp. A Certified Access Specialist can inspect the Premises and determine whether the Premises comply with all of the applicable construction-related accessibility standards under State law. Although State law does not require a Certified Access Specialist inspection of the Premises, Landlord may not prohibit Tenant from obtaining a Certified Access Specialist inspection of the Premises for the occupancy or potential occupancy of Tenant, if requested by Tenant. Landlord and Tenant shall agree on the arrangements for the time and manner of the Certified Access Specialist inspection, the payment of the fee for the Certified Access Specialist inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the Premises. For the avoidance of doubt, "Lenders" shall also include historic tax credit investors and new market tax credit investors. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

13. Rules and Regulations, CC&Rs, Parking Facilities and Common Area.

13.1 Tenant shall have the non-exclusive right, in common with others, to use the Common Area in conjunction with Tenant's use of the Premises for the Permitted Use, and such use of the Common Area and Tenant's use of the Premises shall be subject to the rules and regulations adopted by Landlord and attached hereto as Exhibit F, together with such other reasonable and nondiscriminatory rules and regulations as are hereafter promulgated by Landlord in its sole and absolute discretion (the "Rules and Regulations"). Tenant shall and shall ensure that its contractors, subcontractors, employees, subtenants and invitees faithfully observe and comply with the Rules and Regulations. Landlord shall not be responsible to Tenant for the

violation or non-performance by any other tenant or any agent, employee or invitee thereof of any of the Rules and Regulations.

13.2 This Lease is subject to any recorded covenants, conditions or restrictions on the Project or Property, as the same may be amended, amended and restated, supplemented or otherwise modified from time to time (the "CC&Rs"). Tenant shall, at its sole cost and expense, comply with the CC&Rs.

13.3 Notwithstanding anything in this Lease to the contrary, Tenant may not install any security systems (including cameras) outside the Premises or that record sounds or images outside the Premises without Landlord's prior written consent, which Landlord may withhold in its sole and absolute discretion.

13.4 Tenant shall have a non-exclusive, irrevocable license to use Tenant's Pro Rata Share of parking facilities serving the Project in common on an unreserved basis with other tenants of the Project during the Term at no additional cost.

13.5 Tenant agrees not to unreasonably overburden the parking facilities and agrees to cooperate with Landlord and other tenants in the use of the parking facilities. Landlord reserves the right to determine that parking facilities are becoming overcrowded and to limit Tenant's use thereof. Upon such determination, Landlord may reasonably allocate parking spaces among Tenant and other tenants of the Building or the Project. Nothing in this Section, however, is intended to create an affirmative duty on Landlord's part to monitor parking.

14. Project Control by Landlord.

14.1 Landlord reserves full control over the Building and the Project to the extent not inconsistent with Tenant's enjoyment of the Premises as provided by this Lease. This reservation includes Landlord's right to subdivide the Project; convert the Building to condominium units; change the size of the Project by selling all or a portion of the Project or adding real property and any improvements thereon to the Project; grant easements and licenses to third parties; maintain or establish ownership of the Building separate from fee title to the Property; make additions to or reconstruct portions of the Building and the Project; install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building or the Project pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building or elsewhere at the Project; and alter or relocate any other Common. Area or facility, including private drives, lobbies, entrances and landscaping; provided, however, that such rights shall be exercised in a way that does not materially adversely affect Tenant's beneficial use and occupancy of the Premises, including the Permitted Use and Tenant's access to the Premises. Tenant acknowledges that Landlord specifically reserves the right to allow the exclusive use of corridors and restroom facilities located on specific floors to one or more tenants occupying such floors; provided, however, that Tenant shall not be deprived of the use of the corridors reasonably required to serve the Premises or of restroom facilities serving the floor upon which the Premises are located.

14.2 Possession of areas of the Premises necessary for utilities, services, safety and operation of the Building is reserved to Landlord.

14.3 Tenant shall, at Landlord's request, promptly execute such further documents as may be reasonably appropriate to assist Landlord in the performance of its obligations hereunder; provided that Tenant need not execute any document that creates additional liability for Tenant or that deprives Tenant of the quiet enjoyment and use of the Premises as provided for in this Lease.

14.4 Landlord may, at any and all reasonable times during non-business hours (or during business hours, if (a) with respect to Subsections 14.4(u) through 14.4(y), Tenant so requests, and (b) with respect to Subsection 14.4(z), if Landlord so requests), and upon twenty-four (24) hours' prior notice (which may be oral or by email to the office manager or other Tenant-designated individual at the Premises; but provided that no time restrictions shall apply or advance notice be required if an emergency necessitates immediate entry), enter the Premises to (u) inspect the same and to determine whether Tenant is in compliance with its obligations hereunder, (v) supply any service Landlord is required to provide hereunder, (w) alter, improve or repair any portion of the Building other than the Premises for which access to the Premises is reasonably necessary, (x) post notices of nonresponsibility, (y) access the telephone equipment, electrical substation and fire risers and (z) show the Premises to prospective tenants during the final year of the Term and current and prospective purchasers and lenders at any time. In connection with any such alteration, improvement or repair as described in Subsection 14.4(w), Landlord may erect in the Premises or elsewhere in the Project scaffolding and other structures reasonably required for the alteration, improvement or repair work to be performed. In no event shall Tenant's Rent abate as a result of Landlord's activities pursuant to this Section; provided, however, that all such activities shall be conducted in such a manner so as to cause as little interference to Tenant as is reasonably possible. Landlord shall at all times retain a key with which to unlock all of the doors in the Premises. If an emergency necessitates immediate access to the Premises, Landlord may use whatever force is necessary to enter the Premises, and any such entry to the Premises shall not constitute a forcible or unlawful entry to the Premises, a detainer of the Premises, or an eviction of Tenant from the Premises or any portion thereof.

15. Quiet Enjoyment. Landlord covenants that Tenant, upon paying the Rent and performing its obligations contained in this Lease, may peacefully and quietly have, hold and enjoy the Premises, free from any claim by Landlord or persons claiming under Landlord, but subject to all of the terms and provisions hereof, provisions of Applicable Laws and rights of record to which this Lease is or may become subordinate. This covenant is in lieu of any other quiet enjoyment covenant, either express or implied.

16. Utilities and Services.

16.1 Tenant shall pay for all water (including the cost to service, repair and replace reverse osmosis, de-ionized and other treated water), gas, heat, light, power, telephone, internet service, cable television, other telecommunications and other utilities supplied to the Premises, together with any fees, surcharges and taxes thereon. If any such utility is not separately metered to Tenant, Tenant shall pay Tenant's Adjusted Share of all charges of such utility jointly metered with other premises as Additional Rent or, in the alternative, Landlord may, at its option, monitor the usage of such utilities by Tenant and charge Tenant with the cost of purchasing, installing and monitoring such metering equipment, which cost shall be paid by Tenant as Additional Rent.

Tenant shall maintain temperature and humidity in the Premises in accordance with ASHRAE standards at all times.

16.2 Landlord may base its bills for utilities on reasonable estimates; provided that Landlord adjusts such billings as part of the next Landlord's Statement (or more frequently, as determined by Landlord) to reflect the actual cost of providing utilities to the Premises. To the extent that Tenant uses more than Tenant's Pro Rata Share of any utilities, then Tenant shall pay Landlord for Tenant's Adjusted Share of such utilities to reflect such excess. In the event that the Project is less than fully occupied during a calendar year, Tenant acknowledges that Landlord may extrapolate utility usage that varies depending on the occupancy of the Project to equal Landlord's reasonable estimate of what such utility usage would have been had the Project been ninety-five percent (95%) occupied during such calendar year; provided, however, that Landlord shall not recover more than one hundred percent (100%) of the cost of such utilities.

16.3 Landlord shall not be liable for, nor shall any eviction of Tenant result from, the failure to furnish any utility or service, whether or not such failure is caused by accidents; breakage; casualties (to the extent not caused by the party claiming Force Majeure); Severe Weather Conditions (as defined below); physical natural disasters (but excluding weather conditions that are not Severe Weather Conditions); strikes, lockouts or other labor disturbances or labor disputes (other than labor disturbances and labor disputes resulting solely from the acts or omissions of the party claiming Force Majeure); acts of terrorism; riots or civil disturbances; wars or insurrections; shortages of materials (which shortages are not unique to the party claiming Force Majeure); government regulations, moratoria or other governmental actions, inactions or delays; failures to grant consent or delays in granting consent by any Lender whose consent is required under any applicable Loan Document; failures by third parties to deliver gas, oil or another suitable fuel supply, or inability of the party claiming Force Majeure, by exercise of reasonable diligence, to obtain gas, oil or another suitable fuel; or other causes beyond the reasonable control of the party claiming that Force Majeure has occurred (collectively, "Force Majeure"); or, to the extent permitted by Applicable Laws, Landlord's negligence. In the event of such failure, Tenant shall not be entitled to termination of this Lease or any abatement or reduction of Rent, nor shall Tenant be relieved from the operation of any covenant or agreement of this Lease. "Severe Weather Conditions" means weather conditions that are materially worse than those that reasonably would be anticipated for the Property at the applicable time based on historic meteorological records.

16.4 Tenant shall pay for, prior to delinquency of payment therefor, any utilities and services that may be furnished to the Premises during or, if Tenant occupies the Premises after the expiration or earlier termination of the Term, after the Term, beyond those utilities provided by Landlord, including telephone, internet service, cable television and other telecommunications, together with any fees, surcharges and taxes thereon. Upon Landlord's demand, utilities and services provided to the Premises that are separately metered shall be paid by Tenant directly to the supplier of such utilities or services.

16.5 Tenant shall not, without Landlord's prior written consent, use any device in the Premises (including data processing machines) that will in any way (a) increase the amount of ventilation, air exchange, gas, steam, electricity or water required or consumed in the Premises

based upon Tenant's Pro Rata Share of the Project beyond the existing capacity of the Project usually furnished or supplied for the Permitted Use or (b) exceed Tenant's Pro Rata Share of the Project's capacity to provide such utilities or services.

16.6 If Tenant shall require utilities or services in excess of those usually furnished or supplied for tenants in similar spaces in the Building or the Project by reason of Tenant's equipment or extended hours of business operations, then Tenant shall first procure Landlord's consent for the use thereof, which consent Landlord may condition upon the availability of such excess utilities or services, and Tenant shall pay as Additional Rent an amount equal to the cost of providing such excess utilities and services.

16.7 Landlord shall provide water in Common Area for lavatory and landscaping purposes only, which water shall be from the local municipal or similar source; provided, however, that if Landlord determines that Tenant requires, uses or consumes water provided to the Common Area for any purpose other than ordinary lavatory purposes, Landlord may install a water meter ("Tenant Water Meter") and thereby measure Tenant's water consumption for all purposes. Tenant shall pay Landlord for the costs of any Tenant Water Meter and the installation and maintenance thereof during the Term. If Landlord installs a Tenant Water Meter, Tenant shall pay for water consumed, as shown on such meter, as and when bills are rendered. If Tenant fails to timely make such payments, Landlord may pay such charges and collect the same from Tenant. Any such costs or expenses incurred or payments made by Landlord for any of the reasons or purposes stated in this Section shall be deemed to be Additional Rent payable by Tenant and collectible by Landlord as such.

16.8 Landlord reserves the right to stop service of the elevator, plumbing, ventilation, air conditioning and utility systems, when Landlord deems necessary or desirable, due to accident, emergency or the need to make repairs, alterations or improvements, until such repairs, alterations or improvements shall have been completed, and Landlord shall further have no responsibility or liability for failure to supply elevator facilities, plumbing, ventilation, air conditioning or utility service when prevented from doing so by Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence. Without limiting the foregoing, it is expressly understood and agreed that any covenants on Landlord's part to furnish any service pursuant to any of the terms, covenants, conditions, provisions or agreements of this Lease, or to perform any act or thing for the benefit of Tenant, shall not be deemed breached if Landlord is unable to furnish or perform the same by virtue of Force Majeure or, to the extent permitted by Applicable Laws, Landlord's negligence.

16.9 Tenant shall have the right to connect the existing back-up generator serving the Building (the "Generator") to the Premises' emergency electrical panel. Tenant acknowledges and agrees that Landlord has made no representation or warranty (express or implied) regarding the condition of the Generator or the suitability of the Generator for Tenant's use, including any warranty of merchantability or fitness for a particular purpose. The Generator shall be the sole responsibility of Tenant and Landlord shall have no obligations with respect thereto. Tenant shall, at its sole cost and expense, maintain and keep the Generator in good condition and repair, in compliance with all Applicable Laws (including, without limitation, any required permits) and shall otherwise be solely responsible for any repair, maintenance and/or replacement costs with

respect to the Generator. Tenant shall keep in full force and effect during the Term (and occupancy by Tenant, if any, after termination of this Lease) a preventative maintenance contract for inspections and maintenance for the Generator (using a qualified, licensed, bonded service provider reasonably approved by Landlord) at commercially reasonable intervals that comply with industry standard practices and Applicable Laws. If requested in writing by Landlord, Tenant shall provide to Landlord copies of any Generator maintenance contracts and any Generator maintenance reports on a quarterly basis. Notwithstanding anything to the contrary in this Lease, Landlord shall have no liability, and Tenant shall have no right or remedy, on account of any interruption or impairment with respect to the Generator or failure of the Generator to operate in an emergency situation.

16.10 For the Premises, Landlord shall (a) maintain and operate the HVAC systems used for the Permitted Use only (“Base HVAC”) and (b) subject to Subsection 16.10(a), furnish HVAC as reasonably required (except as this Lease otherwise provides) for reasonably comfortable occupancy of the Premises twenty-four (24) hours a day, every day during the Term, subject to casualty, eminent domain or as otherwise specified in this Article. Notwithstanding anything to the contrary in this Section, Landlord shall have no liability, and Tenant shall have no right or remedy, on account of any interruption or impairment in HVAC services.

16.11 For any utilities serving the Premises for which Tenant is billed directly by such utility provider, Tenant agrees to furnish to Landlord (a) any invoices or statements for such utilities within thirty (30) days after Tenant’s receipt thereof, (b) within thirty (30) days after Landlord’s request, any other utility usage information reasonably requested by Landlord, and (c) within thirty (30) days after each calendar year during the Term, authorization to allow Landlord to access Tenant’s usage information necessary for Landlord to complete an ENERGY STAR® Statement of Performance (or similar comprehensive utility usage report (e.g., related to Labs 21), if requested by Landlord) and any other information reasonably requested by Landlord for the immediately preceding year; and Tenant shall comply with any other energy usage or consumption requirements required by Applicable Laws. Tenant shall retain records of utility usage at the Premises, including invoices and statements from the utility provider, for at least sixty (60) months, or such other period of time as may be requested by Landlord. Tenant acknowledges that any utility information for the Premises, the Building and the Project may be shared with third parties, including Landlord’s consultants and Governmental Authorities. In the event that Tenant fails to comply with this Section, Tenant hereby authorizes Landlord to collect utility usage information directly from the applicable utility providers, and Tenant shall pay Landlord a fee of One Thousand Dollars (\$1,000) per month to collect such utility usage information. In addition to the foregoing, Tenant shall comply with all Applicable Laws related to the disclosure and tracking of energy consumption at the Premises. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17. Alterations.

17.1 Tenant shall make no alterations, additions or improvements other than the Tenant Improvements in or to the Premises or engage in any construction, demolition, reconstruction, renovation or other work (whether major or minor) of any kind in, at or serving the Premises (“Alterations”) without Landlord’s prior written approval, which approval may be subject to the

consent of one or more Lenders, if required under any applicable Loan Document, but which approval Landlord shall not otherwise unreasonably withhold; provided, however, that, in the event any proposed Alteration affects (a) any structural portions of the Building, including exterior walls, the roof, the foundation or slab, foundation or slab systems (including barriers and subslab systems) or the core of the Building, (b) the exterior of the Building or (c) any Building systems, including elevator, plumbing, HVAC, electrical, security, life safety and power, then Landlord may withhold its approval in its sole and absolute discretion. Tenant shall, in making any Alterations, use only those architects, contractors, suppliers and mechanics of which Landlord has given prior written approval, which approval shall be in Landlord's sole and absolute discretion. In seeking Landlord's approval, Tenant shall provide Landlord, at least sixty (60) days in advance of the desired commencement date of any proposed construction, with plans, specifications, bid proposals, certified stamped engineering drawings and calculations by Tenant's engineer of record or architect of record (including connections to the Building's structural system, modifications to the Building's envelope, non-structural penetrations in slabs or walls, and modifications or tie-ins to life safety systems), work contracts, requests for laydown areas and such other information concerning the nature and cost of the Alterations as Landlord may reasonably request, provided that Tenant shall not commence any such Alterations that require Landlord's consent unless and until Tenant has received the written approval of Landlord and any and all Lenders whose consent is required under any applicable Loan Document. In no event shall Tenant use or Landlord be required to approve any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the Premises that do not require any permits or more than three (3) total contractors and subcontractors ("Cosmetic Alterations") without Landlord's consent; provided that (y) the cost of any Cosmetic Alterations does not exceed Fifty Thousand Dollars (\$50,000.00) annually, (z) such Cosmetic Alterations are not reasonably expected to have any material adverse effect on the Project and do not (i) require any structural or other substantial modifications to the Premises, (ii) require any changes to or adversely affect the Building systems, (iii) affect any portion of the Building or Project that is exterior to the Premises or (iv) trigger any requirement under Applicable Laws that would require Landlord to make any alteration or improvement to the Premises, the Building or the Project.

17.2 Tenant shall not construct or permit to be constructed partitions or other obstructions that might interfere with free access to mechanical installation or service facilities of the Building or with other tenants' components located within the Building, or interfere with the moving of Landlord's equipment to or from the enclosures containing such installations or facilities.

17.3 Tenant shall accomplish any work performed on the Premises or the Building in such a manner as to permit any life safety systems to remain fully operable at all times.

17.4 Any work performed on the Premises, the Building or the Project by Tenant or Tenant's contractors shall be done at such times and in such manner as Landlord may from time to time designate. Tenant covenants and agrees that all work done by Tenant or Tenant's

contractors shall be performed in full compliance with Applicable Laws. Within thirty (30) days after completion of any Alterations, Tenant shall provide Landlord with complete “as built” drawing print sets and electronic CADD files on disc (or files in such other current format in common use as Landlord reasonably approves or requires) showing any changes in the Premises, as well as a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems. Any such “as built” plans shall show the applicable Alterations as an overlay on the Building as-built plans; provided that Landlord provides the Building “as built” plans to Tenant.

17.5 Before commencing any Alterations or Tenant Improvements, Tenant shall (a) give Landlord at least (i) sixty (60) days’ prior written notice, with respect to any Alterations, or (ii) fifteen (15) days’ prior written notice, with respect to any Tenant Improvements, of the proposed commencement of such work and the names and addresses of the persons supply labor or materials therefor so that Landlord may enter the Premises to post and keep posted thereon and therein notices or to take any further action that Landlord may reasonably deem proper for the protection of Landlord’s interest in the Project and (b) shall, if required by Landlord, secure, at Tenant’s own cost and expense, a completion and lien indemnity bond satisfactory to Landlord for such work.

17.6 Tenant shall repair any damage to the Premises arising from Tenant’s removal of any property from the Premises. During any such restoration period, Tenant shall pay Rent to Landlord as provided herein as if such space were otherwise occupied by Tenant. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

17.7 The Premises plus any Alterations; Signage; Tenant Improvements; attached equipment, decorations, fixtures and trade fixtures; movable_ laboratory casework and related appliances; and other additions and improvements attached to or built into the Premises made by either of the parties (including all floor and wall coverings; paneling; sinks and related plumbing fixtures; laboratory benches; exterior venting fume hoods; walk-in freezers and refrigerators; ductwork; conduits; electrical panels and circuits; attached machinery and equipment; and built-in furniture and cabinets, in each case, together with all additions and accessories thereto), shall (unless, prior to such construction or installation, Landlord elects otherwise in writing) at all times remain the property of Landlord, shall remain in the Premises and shall (unless, prior to construction or installation thereof, Landlord elects otherwise in writing) be surrendered to Landlord upon the expiration or earlier termination of this Lease. For the avoidance of doubt, the items listed on Exhibit H attached hereto (which Exhibit H may be updated by Tenant from and after the Term Commencement Date, subject to Landlord’s written consent) constitute Tenant’s property and shall be removed by Tenant upon the expiration or earlier termination of the Lease.

17.8 Notwithstanding any other provision of this Article to the contrary, in no event shall Tenant remove any improvement from the Premises in which any Lender has a security interest or as to which Landlord contributed payment, including the Tenant Improvements, without Landlord’s prior written consent, which consent Landlord may withhold in its sole and absolute discretion.

17.9 If Tenant shall fail to remove any of its property from the Premises prior to the expiration or earlier termination of this Lease, then Landlord may, at its option, remove the same

in any manner that Landlord shall choose and store such effects without liability to Tenant for loss thereof or damage thereto, and Tenant shall pay Landlord, upon demand, any costs and expenses incurred due to such removal and storage or Landlord may, at its sole option and without notice to Tenant, sell such property or any portion thereof at private sale and without legal process for such price as Landlord may obtain and apply the proceeds of such sale against any (a) amounts due by Tenant to Landlord under this Lease and (b) any expenses incident to the removal, storage and sale of such personal property.

17.10 Tenant shall pay to Landlord an amount equal to five percent (5%) of the cost to Tenant of all Alterations to cover Landlord's overhead and expenses for plan review, engineering review, coordination, scheduling and supervision thereof or obtaining any required Lender consent. For purposes of payment of such sum, Tenant shall submit to Landlord copies of all bills, invoices and statements covering the costs of such charges, accompanied by payment to Landlord of the fee set forth in this Section. Tenant shall reimburse Landlord for any extra expenses incurred by Landlord by reason of faulty work done by Tenant or its contractors, or by reason of delays arising from such faulty work, or by reason of inadequate clean-up.

17.11 Within sixty (60) days after final completion of the Tenant Improvements or any Alterations performed by Tenant with respect to the Premises, Tenant shall submit to Landlord documentation showing the amounts expended by Tenant with respect to such Tenant Improvements and Alterations, together with supporting documentation reasonably acceptable to Landlord.

17.12 Tenant shall take, and shall cause its contractors to take, commercially reasonable steps to protect the Premises during the performance of any Alterations or Tenant Improvements, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage.

17.13 Tenant shall require its contractors and subcontractors performing work on the Premises to name Landlord and its affiliates and Lenders as additional insureds on their respective insurance policies.

18. Repairs and Maintenance.

18.1 Landlord shall repair and maintain the structural and exterior portions and Common Area of the Building and the Project, including roofing and covering materials; foundations (excluding any architectural slabs, but including any structural slabs); exterior walls; base Building plumbing; fire sprinkler systems (if any); base Building HVAC systems up to the first damper or isolation valve that serves the Premises (for purposes of clarity, the portion of the HVAC system that includes such first damper or isolation valve and extends into and through the Premises, and any supplemental HVAC serving the Premises shall not be part of the base Building HVAC and shall be Tenant's obligation to maintain and repair pursuant to Section 18.2 below); elevators; and base Building electrical systems installed or furnished by Landlord.

18.2 Except for services of Landlord, if any, required by Section 18.1, Tenant shall at Tenant's sole cost and expense maintain and keep the Premises (including but not limited to the portion of the HVAC system that includes the first damper or isolation valve and extends into

and through the Premises, any supplemental HVAC serving the Premises, and any other systems or equipment exclusively serving the Premises) and every part thereof in good condition and repair, damage thereto from ordinary wear and tear excepted, and shall, within fifteen (15) days after receipt of written notice from Landlord, provide to Landlord any maintenance records that Landlord reasonably requests. Tenant shall, upon the expiration or sooner termination of the Term, surrender the Premises to Landlord in as good a condition as when received, ordinary wear and tear excepted and with the Tenant Improvements in substantially the same condition as existed upon substantial completion thereof, and shall, at Landlord's request and Tenant's sole cost and expense, remove all telephone and data systems, wiring and equipment from the Premises, and repair any damage to the Premises caused thereby. Landlord shall have no obligation to alter, remodel, improve, repair, decorate or paint the Premises or any part thereof.

18.3 Landlord shall not be liable for any failure to make any repairs or to perform any maintenance that is Landlord's obligation pursuant to this Lease unless such failure shall persist for an unreasonable time after Tenant provides Landlord with written notice of the need of such repairs or maintenance. Tenant waives its rights under Applicable Laws now or hereafter in effect to make repairs at Landlord's expense.

18.4 If any excavation shall be made upon land adjacent to or under the Building, or shall be authorized to be made, Tenant shall afford to the person causing or authorized to cause such excavation, license to enter the Premises for the purpose of performing such work as such person shall deem necessary or desirable to preserve and protect the Building from injury or damage and to support the same by proper foundations, without any claim for damages or liability against Landlord and without reducing or otherwise affecting Tenant's obligations under this Lease.

18.5 This Article relates to repairs and maintenance arising in the ordinary course of operation of the Building and the Project. In the event of a casualty described in Article 24, Article 24 shall apply in lieu of this Article. In the event of eminent domain, Article 25 shall apply in lieu of this Article.

18.6 Costs incurred by Landlord pursuant to this Article shall constitute Operating Expenses.

19. Liens.

19.1 Subject to the immediately succeeding sentence, Tenant shall keep the Premises, the Building and the Project free from any liens arising from work or services performed, materials furnished to or obligations incurred by Tenant. Tenant further covenants and agrees that any mechanic's or materialman's lien filed against the Premises, the Building or the Project for work or services claimed to have been done for, or materials claimed to have been furnished to, or obligations incurred by Tenant shall be discharged or bonded by Tenant within ten (10) business days after the filing thereof, at Tenant's sole cost and expense.

19.2 Should Tenant fail to discharge or bond against any lien of the nature described in Section 19.1, Landlord may, at Landlord's election, pay such claim or post a statutory lien bond or otherwise provide security to eliminate the lien as a claim against title, and Tenant shall

immediately reimburse Landlord for the costs thereof as Additional Rent. Tenant shall Indemnify the Landlord Indemnitees from and against any Claims arising from any such liens, including any administrative, court or other legal proceedings related to such liens.

19.3 In the event that Tenant leases or finances the acquisition of office equipment, furnishings or other personal property of a removable nature utilized by Tenant in the operation of Tenant's business, Tenant warrants that any Uniform Commercial Code financing statement shall, upon its face or by exhibit thereto, indicate that such financing statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Premises, the Building or the Project be furnished on a financing statement without qualifying language as to applicability of the lien only to removable personal property located in an identified suite leased by Tenant. Should any holder of a financing statement record or place of record a financing statement that appears to constitute a lien against any interest of Landlord or against equipment that may be located other than within an identified suite leased by Tenant, Tenant shall, within ten (10) business days after filing such financing statement, cause (a) a copy of the lender security agreement or other documents to which the financing statement pertains to be furnished to Landlord to facilitate Landlord's ability to demonstrate that the lien of such financing statement is not applicable to Landlord's interest and (b) Tenant's lender to amend such financing statement and any other documents of record to clarify that any liens imposed thereby are not applicable to any interest of Landlord in the Premises, the Building or the Project.

20. Estoppel Certificate. Tenant shall, within ten (10) business days after receipt of written notice from Landlord, execute, acknowledge and deliver a statement in writing substantially in the form attached to this Lease as Exhibit L, or on any other form reasonably requested by a current or proposed Lender or encumbrancer or proposed purchaser, (a) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which rental and other charges are paid in advance, if any, (b) acknowledging that there are not, to Tenant's knowledge, any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (c) setting forth such further information with respect to this Lease or the Premises as may be requested thereon. Any such statements may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the Property. Tenant's failure to deliver any such statement within such the prescribed time shall, at Landlord's option, constitute a Default (as defined below) under this Lease, and, in any event, shall be binding upon Tenant that the Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

21. Hazardous Materials.

21.1 Tenant shall not cause or permit any Hazardous Materials (as defined below) to be brought upon, kept or used in or about the Premises, the Building or the Project in violation of Applicable Laws by Tenant or any of its employees, agents, contractors or invitees (collectively with Tenant, each a "Tenant Party"). If (a) Tenant breaches such obligation, (b) the presence of Hazardous Materials as a result of such a breach results in contamination of the Project, any

portion thereof, or any adjacent property, (c) contamination of the Premises otherwise occurs during the Term or any extension or renewal hereof or holding over hereunder or (d) contamination of the Project occurs as a result of Hazardous Materials that are placed on or under or are released into the Project by a Tenant Party, then Tenant shall Indemnify the Landlord Indemnitees from and against any and all Claims of any kind or nature, including (w) diminution in value of the Project or any portion thereof, (x) damages for the loss or restriction on use of rentable or usable space or of any amenity of the Project, (y) damages arising from any adverse impact on marketing of space in the Project or any portion thereof and (z) sums paid in settlement of Claims that arise before, during or after the Term as a result of such breach or contamination. This Indemnification by Tenant includes costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal or restoration work required by any Governmental Authority because of Hazardous Materials present in the air, soil or groundwater above, on, under or about the Project. Without limiting the foregoing, if the presence of any Hazardous Materials in, on, under or about the Project, any portion thereof or any adjacent property caused or permitted by any Tenant Party results in any contamination of the Project, any portion thereof or any adjacent property, then Tenant shall promptly take all actions at its sole cost and expense as are necessary to return the Project, any portion thereof or any adjacent property to its respective condition existing prior to the time of such contamination; provided that Landlord's written approval of such action shall first be obtained, which approval Landlord shall not unreasonably withhold; and provided, further, that it shall be reasonable for Landlord to withhold its consent if such actions could have a material adverse long-term or short-term effect on the Project, any portion thereof or any adjacent property. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation.

21.2 Landlord acknowledges that it is not the intent of this Article to prohibit Tenant from operating its business for the Permitted Use. Tenant may operate its business according to the custom of Tenant's industry so long as the use or presence of Hazardous Materials is strictly and properly monitored in accordance with Applicable Laws. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord (a) a list identifying each type of Hazardous Material to be present at the Premises that is subject to regulation under any environmental Applicable Laws in the form of a Tier II form pursuant to Section 312 of the Emergency Planning and Community Right-to-Know Act of 1986 (or any successor statute) or any other form reasonably requested by Landlord, (b) a list of any and all approvals or permits from Governmental Authorities required in connection with the presence of such Hazardous Material at the Premises and (c) correct and complete copies of (i) notices of violations of Applicable Laws related to Hazardous Materials and (ii) plans relating to the installation of any storage tanks to be installed in, on, under or about the Project (provided that installation of storage tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent Landlord may withhold in its sole and absolute discretion) and closure plans or any other documents required by any and all Governmental Authorities for any storage tanks installed in, on, under or about the Project for the closure of any such storage tanks (collectively, "Hazardous Materials Documents"). Tenant shall deliver to Landlord updated Hazardous Materials Documents, within ten (10) business days after

receipt of a written request therefor from Landlord, not more often than once per year, unless (in) there are any changes to the Hazardous Materials Documents or (n) Tenant initiates any Alterations or changes its business, in either case in a way that involves any material increase in the types or amounts of Hazardous Materials, in which case Tenant shall deliver updated Hazardous Materials documents (without Landlord having to request them) before or, if not practicable to do so before, as soon as reasonably practicable after the occurrence of the events in Subsection 21.2(m) or (n). For each type of Hazardous Material listed, the Hazardous Materials Documents shall include (t) the chemical name, (u) the material state (e.g., solid, liquid, gas or cryogen), (v) the concentration, (w) the storage amount and storage condition (e.g., in cabinets or not in cabinets), (x) the use amount and use condition (e.g., open use or closed use), (y) the location (e.g., room number or other identification) and (z) if known, the chemical abstract service number. Notwithstanding anything in this Section to the contrary, Tenant shall not be required to provide Landlord with any documents containing information of a proprietary nature, unless such documents contain a reference to Hazardous Materials or activities related to Hazardous Materials. Landlord may, at Landlord's expense, cause the Hazardous Materials Documents to be reviewed by a person or firm qualified to analyze Hazardous Materials to confirm compliance with the provisions of this Lease and with Applicable Laws. In the event that a review of the Hazardous Materials Documents indicates non-compliance with this Lease or Applicable Laws, Tenant shall, at its expense, diligently take steps to bring its storage and use of Hazardous Materials into compliance. Notwithstanding anything in this Lease to the contrary or Landlord's review into Tenant's Hazardous Materials Documents or use or disposal of hazardous materials, however, Landlord shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of Hazardous Materials, it being acknowledged by Tenant that Tenant is best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

21.3 Tenant represents and warrants to Landlord that it is not nor has it been, in connection with the use, disposal or storage of Hazardous Materials, (a) subject to a material enforcement order issued by any Governmental Authority or (b) required to take any remedial action.

21.4 At any time, and from time to time, prior to the expiration of the Term, Landlord shall have the right to conduct appropriate tests of the Project or any portion thereof to demonstrate that Hazardous Materials are present or that contamination has occurred due to the acts or omissions of a Tenant Party. Tenant shall pay all reasonable costs of such tests if such tests reveal that Hazardous Materials exist at the Project in violation of this Lease.

21.5 If underground or other storage tanks storing Hazardous Materials installed or utilized by Tenant are located on the Premises, or are hereafter placed on the Premises by Tenant (or by any other party, if such storage tanks are utilized by Tenant), then Tenant shall monitor the storage tanks, maintain appropriate records, implement reporting procedures, properly close any underground storage tanks, and take or cause to be taken all other steps necessary or required under the Applicable Laws. Tenant shall have no responsibility or liability for underground or other storage tanks installed by anyone other than Tenant unless Tenant utilizes such tanks, in which case Tenant's responsibility for such tanks shall be as set forth in this Section.

21.6 Tenant shall promptly report to Landlord any actual or suspected presence of mold or water intrusion at the Premises.

21.7 Tenant's obligations under this Article shall survive the expiration or earlier termination of the Lease. During any period of time needed by Tenant or Landlord after the termination of this Lease to complete the removal from the Premises of any such Hazardous Materials, Tenant shall be deemed a holdover tenant and subject to the provisions of Article 27.

21.8 As used herein, the term "Hazardous Material" means any toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or otherwise hazardous substance, material or waste that is or becomes regulated by Applicable Laws or any Governmental Authority.

21.9 Notwithstanding anything to the contrary in this Lease, Landlord shall have sole control over the equitable allocation of fire control areas (as defined in the Uniform Building Code as adopted by the city or municipality(ies) in which the Project is located (the "UBC")) within the Project for the storage of Hazardous Materials. Notwithstanding anything to the contrary in this Lease, the quantity of Hazardous Materials allowed by this Section is specific to Tenant and shall not run with the Lease in the event of a Transfer (as defined in Article 29). In the event of a Transfer, if the use of Hazardous Materials by such new tenant ("New Tenant") is such that New Tenant utilizes fire control areas in the Project in excess of New Tenant's Pro Rata Share of the Project, then New Tenant shall, at its sole cost and expense and upon Landlord's written request, establish and maintain a separate area of the Premises classified by the UBC as an "H" occupancy area for the use and storage of Hazardous Materials, or take such other action as is necessary to ensure that its share of the fire control areas of the Project is not greater than New Tenant's Pro Rata Share of the Project. Notwithstanding anything in this Lease to the contrary, Landlord shall not have and expressly disclaims any liability related to Tenant's or other tenants' use or disposal of fire control areas, it being acknowledged by Tenant that Tenant and other tenants are best suited to evaluate the safety and efficacy of its Hazardous Materials usage and procedures.

22. Odors and Exhaust. Tenant acknowledges that Landlord would not enter into this Lease with Tenant unless Tenant assured Landlord that under no circumstances will any other occupants of the Building or the Project (including persons legally present in any outdoor areas of the Project) be subjected to odors or fumes (whether or not noxious), and that the Building and the Project will not be damaged by any exhaust, in each case from Tenant's operations. Landlord and Tenant therefore agree as follows:

22.1 Tenant shall not cause or permit (or conduct any activities that would cause) any release of any odors or fumes of any kind from the Premises.

22.2 If the Building has a ventilation system that, in Landlord's judgment, is adequate, suitable, and appropriate to vent the Premises in a manner that does not release odors affecting any indoor or outdoor part of the Project, Tenant shall vent the Premises through such system. If Landlord at any time determines that any existing ventilation system is inadequate, or if no ventilation system exists, Tenant shall in compliance with Applicable Laws vent all fumes and odors from the Premises (and remove odors from Tenant's exhaust stream) as Landlord requires.

The placement and configuration of all ventilation exhaust pipes, louvers and other equipment shall be subject to Landlord's approval. Tenant acknowledges Landlord's legitimate desire to maintain the Project (indoor and outdoor areas) in an odor-free manner, and Landlord may require Tenant to abate and remove all odors in a manner that goes beyond the requirements of Applicable Laws.

22.3 Tenant shall, at Tenant's sole cost and expense, provide odor eliminators and other devices (such as filters, air cleaners, scrubbers and whatever other equipment may in Landlord's judgment be necessary or appropriate from time to time) to completely remove, eliminate and abate any odors, fumes or other substances in Tenant's exhaust stream that, in Landlord's judgment, emanate from Tenant's Premises. Any work Tenant performs under this Section shall constitute Alterations.

22.4 Tenant's responsibility to remove, eliminate and abate odors, fumes and exhaust shall continue throughout the Term. Landlord's approval of the Tenant Improvements shall not preclude Landlord from requiring additional measures to eliminate odors, fumes and other adverse impacts of Tenant's exhaust stream (as Landlord may designate in Landlord's discretion). Tenant shall install additional equipment as Landlord requires from time to time under the preceding sentence. Such installations shall constitute Alterations.

22.5 If Tenant fails to install satisfactory odor control equipment within ten (10) business days after Landlord's demand made at any time, then Landlord may, without limiting Landlord's other rights and remedies, require Tenant to cease and suspend any operations in the Premises that, in Landlord's determination, cause odors, fumes or exhaust. For example, if Landlord determines that Tenant's production of a certain type of product causes odors, fumes or exhaust, and Tenant does not install satisfactory odor control equipment within ten (10) business days after Landlord's request, then Landlord may require Tenant to stop producing such type of product in the Premises unless and until Tenant has installed odor control equipment satisfactory to Landlord.

23. Insurance.

23.1 Landlord shall maintain insurance for the Building and the Project in amounts equal to full replacement cost (exclusive of the costs of excavation, foundations and footings, engineering costs or such other costs to the extent the same are not incurred in the event of a rebuild and without reference to depreciation taken by Landlord upon its books or tax returns) or such lesser coverage as Landlord may elect, provided that such coverage shall not be less than the amount of such insurance Landlord's Lender, if any, requires Landlord to maintain, providing protection against any peril generally included within the classification "Fire and Extended Coverage," together with insurance against sprinkler damage (if applicable), vandalism and malicious mischief. Landlord, subject to availability thereof, shall further insure, if Landlord deems it appropriate, coverage against flood, environmental hazard, earthquake, loss or failure of building equipment, rental loss during the period of repairs or rebuilding, Workers' Compensation insurance and fidelity bonds for employees employed to perform services. Notwithstanding the foregoing, Landlord may, but shall not be deemed required to, provide insurance for any improvements installed by Tenant or that are in addition to the standard

improvements customarily furnished by Landlord, without regard to whether or not such are made a part of or are affixed to the Building.

23.2 In addition, Landlord shall carry Commercial General Liability insurance with limits of not less than One Million Dollars (\$1,000,000) per occurrence/general aggregate for bodily injury (including death), or property damage with respect to the Project.

23.3 Tenant shall, at its own cost and expense, procure and maintain during the Term the following insurance for the benefit of Tenant and Landlord (as their interests may appear) with insurers financially acceptable and lawfully authorized to do business in the state where the Premises are located:

(a) Commercial General Liability insurance on a broad-based occurrence coverage form, with coverages including but not limited to bodily injury (including death), property damage (including loss of use resulting therefrom), premises/operations, personal & advertising injury, and contractual liability with limits of liability of not less than \$1,000,000 for bodily injury and property damage per occurrence, \$2,000,000 general aggregate, which limits may be met by use of excess and/or umbrella liability insurance; provided that such coverage is at least as broad as the primary coverages required herein.

(b) Commercial Automobile Liability insurance covering liability arising from the use or operation of any auto on behalf of Tenant or invited by Tenant (including those owned, hired, rented, leased, borrowed, scheduled or non-owned). Coverage shall be on a broad-based occurrence form in an amount not less than \$1,000,000 combined single limit per accident for bodily injury and property damage. Such coverage shall apply to all vehicles and persons, whether accessing the property with active or passive consent.

(c) Umbrella/Excess Liability insurance in the amount of \$1,000,000 per occurrence and general aggregate and products/completed operations aggregate. This policy should provide excess coverage above Commercial General Liability and Auto Liability required policies noted in this Section. Coverage shall be at least as broad as the underlying coverages.

(d) Commercial Property insurance covering property damage to the full replacement cost value and business interruption. Covered property shall include all tenant improvements in the Premises (to the extent not insured by Landlord pursuant to Section 23.1) and Tenant's Property including personal property, furniture, fixtures, machinery, equipment, stock, inventory and improvements and betterments, which may be owned by Tenant or Landlord and required to be insured hereunder, or which may be leased, rented, borrowed or in the care custody or control of Tenant, or Tenant's agents, employees or subcontractors. Such insurance, with respect only to all Tenant Improvements, Alterations or other work performed on the Premises by Tenant (collectively, "Tenant Work"), shall name Landlord and Landlord's current and future mortgagees as loss payees as their interests may appear. Such insurance shall be written on an "all risk" of physical loss or damage basis including the perils of fire, extended coverage, electrical injury, mechanical breakdown, windstorm, vandalism, malicious mischief, sprinkler leakage, back-up of sewers or drains, terrorism and such other risks Landlord may from time to time designate, for the full replacement cost value of the covered items with an agreed amount endorsement with no co-insurance. Business interruption coverage shall have limits

sufficient to cover Tenant's lost profits and necessary continuing expenses, including rents due Landlord under the Lease. The minimum period of indemnity for business interruption coverage shall be twenty-four (24) months.

(e) Workers' Compensation in compliance with all Applicable Laws or as may be available on a voluntary basis. Employer's Liability must be at least in the amount of \$1,000,000 for bodily injury by accident for each employee, \$1,000,000 for bodily injury by disease for each employee, and \$1,000,000 bodily injury by disease for policy limit.

(f) Medical malpractice insurance at limits of not less than \$1,000,000 each claim during such periods, if any, that Tenant engages in the practice of medicine or clinical trials involving human beings at the Premises.

(g) Pollution Legal Liability insurance shall include coverage for bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage including physical injury to or destruction of tangible property including the resulting loss of use thereof, clean-up costs, and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the commencement date of this agreement, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$1,000,000 per incident with a \$5,000,000 policy aggregate and for a period of two (2) years thereafter.

(h) During all construction by Tenant at the Premises, with respect to tenant improvements being constructed (including the Tenant Improvements and any Alterations, insurance required in Exhibit B-I must be in place.

23.4 The insurance required of Tenant by this Article shall be with companies at all times having a current rating of not less than A- and financial category rating of at least Class VII in "A.M. Best's Insurance Guide" current edition. Tenant shall obtain for Landlord from the insurance companies/broker or cause the insurance companies/broker to furnish certificates of insurance evidencing all coverages required herein to Landlord. Landlord reserves the right to require complete, certified copies of all required insurance policies including any endorsements. No such policy shall be cancelable or subject to reduction of coverage or other modification or cancellation except after thirty (30) days' prior written notice to Landlord from Tenant or its insurers (except in the event of non-payment of premium, in which case ten (10) days' written notice shall be given). All such policies shall be written as primary policies, not contributing with and not in excess of the coverage that Landlord may carry. Tenant's required policies shall contain severability of interests clauses stating that, except with respect to limits of insurance, coverage shall apply separately to each insured or additional insured. Tenant shall, on the date of expiration of such policies, furnish Landlord with renewal certificates of insurance or binders. Tenant agrees that if Tenant does not take out and maintain such insurance, Landlord may (but

shall not be required to procure such insurance on Tenant's behalf and at its cost to be paid by Tenant as Additional Rent. Commercial General Liability, Commercial Automobile Liability, Umbrella Liability and Pollution Legal Liability insurance as required above shall name Landlord, BioMed Realty, L.P., BRE Edison L.P., BRE Edison LLC, BRE Edison Holdings L.P., BRE Edison Holdings LLC, BRE Edison Parent L.P., and their respective officers, employees, agents, general partners, members, subsidiaries, affiliates and Lenders ("Landlord Parties") as additional insureds as respects liability arising from work or operations performed by or on behalf of Tenant, Tenant's use or occupancy of Premises, and ownership, maintenance or use of vehicles by or on behalf of Tenant.

23.5 In each instance where insurance is to name Landlord Parties as additional insureds, Tenant shall, upon Landlord's written request, also designate and furnish certificates evidencing such Landlord Parties as additional insureds to (a) any Lender of Landlord holding a security interest in the Building or the Project, (b) the landlord under any lease whereunder Landlord is a tenant of the real property upon which the Building is located if the interest of Landlord is or shall become that of a tenant under a ground lease rather than that of a fee owner and (c) any management company retained by Landlord to manage the Project.

23.6 Tenant assumes the risk of damage to any fixtures, goods, inventory, merchandise, equipment and leasehold improvements, and Landlord shall not be liable for injury to Tenant's business or any loss of income therefrom, relative to such damage, all as more particularly set forth within this Lease. Tenant shall, at Tenant's sole cost and expense, carry such insurance as Tenant desires for Tenant's protection with respect to personal property of Tenant or business interruption.

23.7 Tenant, on behalf of itself and its insurers, hereby waives any and all rights of recovery against the Landlord Parties with respect to any loss, damage, claims, suits or demands, howsoever caused, that are covered, or should have been covered, by valid and collectible workers' compensation, employer's liability insurance and other liability insurance required to be obtained and carried by Tenant pursuant to this Article, including any deductibles or self-insurance maintained thereunder. Tenant agrees to endorse the required workers' compensation, employer's liability and other liability insurance policies to permit waivers of subrogation as required hereunder and hold harmless and indemnify the Landlord Parties for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers. Such waivers shall continue so long as Tenant's insurers so permit. Any termination of such a waiver shall be by written notice to Landlord, containing a description of the circumstances hereinafter set forth in this Section. Tenant, upon obtaining the policies of workers' compensation, employer's liability and other liability insurance required or permitted under this Lease, shall give notice to its insurance carriers that the foregoing waiver of subrogation is contained in this Lease. If such policies shall not be obtainable with such waiver or shall be so obtainable only at a premium over that chargeable without such waiver, then Tenant shall notify Landlord of such conditions.

23.8 Landlord may require insurance policy limits required under this Lease to be raised to conform with requirements of Landlord's Lender or to bring coverage limits to levels then being required of new tenants within the Project.

23.9 In addition to other insurance required by this Lease to be carried by Tenant, if Tenant sells, merchandises, transfers, gives away or exchanges so-called “alcoholic liquors” in, upon or from any part of the Premises, then Tenant shall, at Tenant’s sole cost and expense, purchase and maintain in full force and effect during the Term dram shop insurance in form and substance satisfactory to Landlord, with total limits of liability for bodily injury, loss of means of support and property damage for each occurrence in an amount and with a carrier reasonably acceptable to Landlord, and otherwise in compliance with the general provisions of this Article governing the provision of insurance by Tenant. Such policy shall name Landlord and the Landlord Parties as additional insureds against any liability by virtue of Applicable Laws concerning the use, sale or giving away of alcoholic liquors. If at any time such insurance is for any reason not in force, then during all and any such times no selling, merchandising, transferring, giving away or exchanging of so-called “alcoholic liquors” shall be conducted by Tenant in, upon or from any part of the Premises.

23.10 Any costs incurred by Landlord pursuant to this Article shall constitute a portion of Operating Expenses.

23.11 The provisions of this Article shall survive the expiration or earlier termination of this Lease.

24. Damage or Destruction.

24.1 In the event of a partial destruction of (a) the Premises, (b) the Building, (c) the Common Area or (d) the Project ((a)-(d) collectively, the “Affected Areas”) by fire or other perils covered by extended coverage insurance not exceeding twenty-five percent (25%) of the full insurable value thereof, and provided that (w) the damage thereto is such that the Affected Areas may be repaired, reconstructed or restored within a period of six (6) months from the date of the happening of such casualty, (x) Landlord shall receive insurance proceeds from its insurer or Lender sufficient to cover the cost of such repairs, reconstruction and restoration (except for any deductible amount provided by Landlord’s policy, which deductible amount, if paid by Landlord, shall constitute an Operating Expense), (y) the repair, reconstruction or restoration of the Affected Areas is permitted by all applicable Loan Documents or otherwise consented to by any and all Lenders whose consent is required thereunder and (z) such casualty was not intentionally caused by a Tenant Party, then Landlord shall commence and proceed diligently with the work of repair, reconstruction and restoration of the Affected Areas and this Lease shall continue in full force and effect.

24.2 In the event of any damage to or destruction of the Building or the Project other than as described in Section 24.1, Landlord may elect to repair, reconstruct and restore the Building or the Project, as applicable, in which case this Lease shall continue in full force and effect. If Landlord elects not to repair, reconstruct and restore the Building or the Project, as applicable, then this Lease shall terminate as of the date of such damage or destruction.

24.3 Landlord shall give written notice to Tenant within sixty (60) days following the date of damage or destruction of its election not to repair, reconstruct or restore the Building or the Project, as applicable.

24.4 Upon any termination of this Lease under any of the provisions of this Article, the parties shall be released thereby without further obligation to the other from the date possession of the Premises is surrendered to Landlord, except with regard to (a) items occurring prior to the damage or destruction and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof

24.5 In the event of repair, reconstruction and restoration as provided in this Article, all Rent to be paid by Tenant under this Lease shall be abated proportionately based on the extent to which Tenant's use of the Premises is impaired during the period of such repair, reconstruction or restoration, unless Landlord provides Tenant with other space during the period of repair, reconstruction and restoration that, in Tenant's reasonable opinion, is suitable for the temporary conduct of Tenant's business; provided, however, that the amount of such abatement shall be reduced by the amount of Rent that is received by Tenant as part of the business interruption or loss of rental income with respect to the Premises from the proceeds of business interruption or loss of rental income insurance.

24.6 Notwithstanding anything to the contrary contained in this Article, (a) Landlord shall not be required to repair, reconstruct or restore any damage or destruction to the extent that Landlord is prohibited from doing so by any applicable Loan Document or any Lender whose consent is required thereunder withholds its consent, and (b) should Landlord be delayed or prevented from completing the repair, reconstruction or restoration of the damage or destruction to the Premises after the occurrence of such damage or destruction by Force Majeure or delays caused by a Lender or Tenant Party, then the time for Landlord to commence or complete repairs, reconstruction and restoration shall be extended on a day-for-day basis; provided, however, that, at Landlord's election, Landlord shall be relieved of its obligation to make such repairs, reconstruction and restoration.

24.7 If Landlord is obligated to or elects to repair, reconstruct or restore as herein provided, then Landlord shall be obligated to make such repairs, reconstruction or restoration only with regard to (a) those portions of the Premises that were originally provided at Landlord's expense and (b) the Common Area portion of the Affected Areas. The repairs, reconstruction or restoration of improvements not originally provided by Landlord or at Landlord's expense shall be the obligation of Tenant. In the event Tenant has elected to upgrade certain improvements from the Building Standard, Landlord shall, upon the need for replacement due to an insured loss, provide only the Building Standard, unless Tenant again elects to upgrade such improvements and pay any incremental costs related thereto, except to the extent that excess insurance proceeds, if received, are adequate to provide such upgrades, in addition to providing for basic repairs, reconstruction and restoration of the Premises, the Building and the Project.

24.8 Notwithstanding anything to the contrary contained in this Article, Landlord shall not have any obligation whatsoever to repair, reconstruct or restore the Premises if the damage resulting from any casualty covered under this Article occurs during the last twenty-four (24) months of the Term or any extension thereof, or to the extent that insurance proceeds are not available therefor.

24.9 Landlord's obligation, should it elect or be obligated to repair, reconstruct or restore, shall be limited to the Affected Areas, and shall be conditioned upon Landlord receiving

any permits or authorizations required by Applicable Laws. Tenant shall, at its expense, replace or fully repair all of Tenant's personal property and any Alterations installed by Tenant existing at the time of such damage or destruction. If Affected Areas are to be repaired, reconstructed or restored in accordance with the foregoing, Landlord shall make available to Tenant any portion of insurance proceeds it receives that are allocable to the Alterations constructed by Tenant pursuant to this Lease; provided Tenant is not then in default under this Lease, and subject to the requirements of any Lender of Landlord.

24.10 This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any damage or destruction. Accordingly, the parties hereby waive the provisions of California Civil Code Sections 1932(2) and 1933(4) (and any successor statutes) permitting the parties to terminate this Lease as a result of any damage or destruction.

25. Eminent Domain.

25.1 In the event (a) the whole of all Affected Areas or (b) such part thereof as shall substantially interfere with Tenant's use and occupancy of the Premises for the Permitted Use shall be taken for any public or quasi-public purpose by any lawful power or authority by exercise of the right of appropriation, condemnation or eminent domain, or sold to prevent such taking, Tenant or Landlord may terminate this Lease effective as of the date possession is required to be surrendered to such authority, except with regard to (y) items occurring prior to the taking and (z) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof.

25.2 In the event of a partial taking of (a) the Building or the Project or (b) drives, walkways or parking areas serving the Building or the Project for any public or quasi-public purpose by any lawful power or authority by exercise of right of appropriation, condemnation, or eminent domain, or sold to prevent such taking, then, without regard to whether any portion of the Premises occupied by Tenant was so taken, Landlord may elect to terminate this Lease (except with regard to (a) items occurring prior to the taking and (b) provisions of this Lease that, by their express terms, survive the expiration or earlier termination hereof) as of such taking if such taking is, in Landlord's sole opinion, of a material nature such as to make it uneconomical to continue use of the unappropriated portion for purposes of renting office or laboratory space.

25.3 To the extent permitted under all applicable Loan Documents or otherwise consented to by any and all Lenders whose consent is required thereunder, Tenant shall be entitled to any award that is specifically awarded as compensation for (a) the taking of Tenant's personal property that was installed at Tenant's expense and (b) the costs of Tenant moving to a new location. Except as set forth in the previous sentence, any award for such taking shall be the property of Landlord.

25.4 It upon any taking of the nature described in this Article, this Lease continues in effect, then Landlord shall promptly proceed to restore the Affected Areas to substantially their same condition prior to such partial taking. To the extent such restoration is infeasible, as determined by Landlord in its sole and absolute discretion, the Rent shall be decreased proportionately to reflect the loss of any portion of the Premises no longer available to Tenant. Notwithstanding anything to the contrary contained in this Article, Landlord shall not be required

to restore the Affected Areas to the extent that Landlord is prohibited from doing so by any applicable Loan Document or any Lender whose consent is required thereunder withholds its consent.

25.5 This Article sets forth the terms and conditions upon which this Lease may terminate in the event of any taking. Accordingly, the parties hereby waive the provisions of California Code of Civil Procedure Section 1265.130 (and any successor statutes) permitting the parties to terminate this Lease as a result of any taking.

26. Surrender.

26.1 At least thirty (30) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall provide Landlord with a facility decommissioning and Hazardous Materials closure plan for the Premises ("Exit Survey") prepared by an independent third party state-certified professional with appropriate expertise, which Exit Survey must be reasonably acceptable to Landlord. The Exit Survey shall comply with the American National Standards Institute's Laboratory Decommissioning guidelines (ANSI/AIHA Z9.11-2008) or any successor standards published by ANSI or any successor organization (or, if ANSI and its successors no longer exist, a similar entity publishing similar standards). In addition, at least ten (10) days prior to Tenant's surrender of possession of any part of the Premises, Tenant shall (a) provide Landlord with written evidence of all appropriate governmental releases obtained by Tenant in accordance with Applicable Laws, including laws pertaining to the surrender of the Premises, (b) place Laboratory Equipment Decontamination Forms on all decommissioned equipment to assure safe occupancy by future users and (c) conduct a site inspection with Landlord. In addition, Tenant agrees to remain responsible after the surrender of the Premises for the remediation of any recognized environmental conditions set forth in the Exit Survey and comply with any recommendations set forth in the Exit Survey. Tenant's obligations under this Section shall survive the expiration or earlier termination of the Lease.

26.2 No surrender of possession of any part of the Premises shall release Tenant from any of its obligations hereunder, unless such surrender is accepted in writing by Landlord.

26.3 The voluntary or other surrender of this Lease by Tenant shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building, the Property or the Project, unless Landlord consents in writing, and shall, at Landlord's option, operate as an assignment to Landlord of any or all subleases.

26.4 The voluntary or other surrender of any ground or other underlying lease that now exists or may hereafter be executed affecting the Building or the Project, or a mutual cancellation thereof or of Landlord's interest therein by Landlord and its lessor shall not effect a merger with Landlord's fee title or leasehold interest in the Premises, the Building or the Property and shall, at the option of the successor to Landlord's interest in the Building or the Project, as applicable, operate as an assignment of this Lease.

27. Holding Over.

27.1 If, with Landlord's prior written consent, Tenant holds possession of all or any part of the Premises after the Term, Tenant shall become a tenant from month to month after the

expiration or earlier termination of the Term, and in such case Tenant shall continue to pay (a) Base Rent in accordance with Article 7, as adjusted in accordance with Article 8, and (b) any amounts for which Tenant would otherwise be liable under this Lease if the Lease were still in effect, including payments for Tenant's Adjusted Share of Operating Expenses. Any such month-to-month tenancy shall be subject to every other term, covenant and agreement contained herein.

27.2 Notwithstanding the foregoing, if Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without Landlord's prior written consent, (a) Tenant shall become a tenant at sufferance subject to the terms and conditions of this Lease, except that the monthly rent shall be equal to one hundred fifty percent (150%) of the Rent in effect during the last thirty (30) days of the Term, and (b) Tenant shall be liable to Landlord for any and all damages suffered by Landlord as a result of such holdover, including any lost rent or consequential, special and indirect damages (in each case, regardless of whether such damages are foreseeable).

27.3 Acceptance by Landlord of Rent after the expiration or earlier termination of the Term shall not result in an extension, renewal or reinstatement of this Lease.

27.4 The foregoing provisions of this Article are in addition to and do not affect Landlord's right of reentry or any other rights of Landlord hereunder or as otherwise provided by Applicable Laws.

27.5 The provisions of this Article shall survive the expiration or earlier termination of this Lease.

28. Indemnification and Exculpation.

28.1 Tenant agrees to Indemnify the Landlord Indemnitees from and against any and all Claims of any kind or nature, real or alleged, arising from (a) injury to or death of any person or damage to any property occurring within or about the Premises, the Building, the Property or the Project, arising directly or indirectly out of (i) the presence at or use or occupancy of the Premises or Project by a Tenant Party or (ii) an act or omission on the part of any Tenant Party, (b) a breach or default by Tenant in the performance of any of its obligations hereunder (including any Claim asserted by a Lender against any Landlord Indemnitees under any Loan Document as a direct result of such breach or default by Tenant) or (c) injury to or death of persons or damage to or loss of any property, real or alleged, arising from the serving of alcoholic beverages at the Premises or Project, including liability under any dram shop law, host liquor law or similar Applicable Law, except to the extent arising directly from Landlord's negligence or willful misconduct. Tenant's obligations under this Section shall not be affected, reduced or limited by any limitation on the amount or type of damages, compensation or benefits payable by or for Tenant under workers' compensation acts, disability benefit acts, employee benefit acts or similar legislation. Tenant's obligations under this Section shall survive the expiration or earlier termination of this Lease.

28.2 Notwithstanding anything in this Lease to the contrary, Landlord shall not be liable to Tenant for and Tenant assumes all risk of (a) damage or losses arising from fire, electrical malfunction, gas explosion or water damage of any type (including broken water lines,

malfunctioning fire sprinkler systems, roof leaks or stoppages of lines), unless any such loss is due to Landlord's willful disregard of written notice by Tenant of need for a repair that Landlord is responsible to make for an unreasonable period of time, and (b) damage to personal property or scientific research, including loss of records kept by Tenant within the Premises (in each case, regardless of whether such damages are foreseeable). Tenant further waives any claim for injury to Tenant's business or loss of income relating to any such damage or destruction of personal property as described in this Section. Notwithstanding anything in the foregoing or this Lease to the contrary, except (x) as otherwise provided herein (including Section 27.2), (y) as may be provided by Applicable Laws or (z) in the event of Tenant's breach of Article 21 or Section 26.1, in no event shall Landlord or Tenant be liable to the other for any consequential, special or indirect damages arising from this Lease, including lost profits (provided that this Subsection 28.2(z) shall not limit Tenant's liability for Base Rent or Additional Rent pursuant to this Lease).

28.3 Landlord shall not be liable for any damages arising from any act, omission or neglect of any other tenant in the Building or the Project, or of any other third party.

28.4 Tenant acknowledges that security devices and services, if any, while intended to deter crime, may not in given instances prevent theft or other criminal acts. Landlord shall not be liable for injuries or losses arising from criminal acts of third parties, and Tenant assumes the risk that any security device or service may malfunction or otherwise be circumvented by a criminal. If Tenant desires protection against such criminal acts, then Tenant shall, at Tenant's sole cost and expense, obtain appropriate insurance coverage. Tenant's security programs and equipment for the Premises shall be coordinated with Landlord and subject to Landlord's reasonable approval.

28.5 The provisions of this Article shall survive the expiration or earlier termination of this Lease.

29. Assignment or Subletting.

29.1 Except as hereinafter expressly permitted, none of the following (each, a "Transfer"), either voluntarily or by operation of Applicable Laws, shall be directly or indirectly performed without Landlord's prior written consent: (a) Tenant selling, hypothecating, assigning, pledging, encumbering or otherwise transferring this Lease or subletting the Premises or (b) a controlling interest in Tenant being sold, assigned or otherwise transferred (other than as a result of shares in Tenant being sold on a public stock exchange). For purposes of the preceding sentence, "control" means (f) owning (directly or indirectly) more than fifty percent (50%) of the stock or other equity interests of another person or (g) possessing, directly or indirectly, the power to direct or cause the direction of the management and policies of such person. In no event shall Tenant perform a Transfer to or with an entity that is a tenant at the Project or that is in discussions or negotiations with Landlord or an affiliate of Landlord to lease premises at the Project or a property owned by Landlord or an affiliate of Landlord.

29.2 In the event Tenant desires to effect a Transfer, then, at least thirty (30) but not more than ninety (90) days prior to the date when Tenant desires the Transfer to be effective (the "Transfer Date"), Tenant shall provide written notice to Landlord (the "Transfer Notice") containing information (including references) concerning the character of the proposed

transferee, assignee or sublessee; the Transfer Date; the most recent unconsolidated financial statements of Tenant and of the proposed transferee, assignee or sublessee satisfying the requirements of Section 40.2 (“Required Financials”); any ownership or commercial relationship between Tenant and the proposed transferee, assignee or sublessee; copies of Hazardous Materials Documents for the proposed transferee, assignee or sublessee; and the consideration and all other material terms and conditions of the proposed Transfer, all in such detail as Landlord shall reasonably require.

29.3 Landlord, in determining whether consent should be given to a proposed Transfer, may give consideration to (a) the financial strength of Tenant and of such transferee, assignee or sublessee (notwithstanding Tenant remaining liable for Tenant’s performance), (b) any change in use that such transferee, assignee or sublessee proposes to make in the use of the Premises and (c) Landlord’s desire to exercise its rights under Section 29.7 to cancel this Lease. In no event shall Landlord be deemed to be unreasonable for declining to consent to a Transfer if any applicable Loan Document prohibits such assignment or any Lender whose consent is required thereunder withholds its consent, or if the Transfer is to a transferee, assignee or sublessee of poor reputation, lacking financial qualifications or seeking a change in the Permitted Use, or jeopardizing directly or indirectly the status of Landlord or any of Landlord’s affiliates as a Real Estate Investment Trust under the Internal Revenue Code of 1986 (as the same may be amended from time to time, the “Revenue Code”). Notwithstanding anything contained in this Lease to the contrary, (w) no Transfer shall be consummated on any basis such that the rental or other amounts to be paid by the occupant, assignee, manager or other transferee thereunder would be based, in whole or in part, on the income or profits derived by the business activities of such occupant, assignee, manager or other transferee; (x) Tenant shall not furnish or render any services to an occupant, assignee, manager or other transferee with respect to whom transfer consideration is required to be paid, or manage or operate the Premises or any capital additions so transferred, with respect to which transfer consideration is being paid; (y) Tenant shall not consummate a Transfer with any person in which Landlord owns an interest, directly or indirectly (by applying constructive ownership rules set forth in Section 856(d)(5) of the Revenue Code); and (z) Tenant shall not consummate a Transfer with any person or in any manner that could cause any portion of the amounts received by Landlord pursuant to this Lease or any sublease, license or other arrangement for the right to use, occupy or possess any portion of the Premises to fail to qualify as “rents from real property” within the meaning of Section 856(d) of the Revenue Code, or any similar or successor provision thereto or which could cause any other income of Landlord to fail to qualify as income described in Section 856(c)(2) of the Revenue Code. Notwithstanding anything in this Lease to the contrary, if (a) Tenant or any proposed transferee, assignee or sublessee of Tenant has been required by any prior landlord, Lender or Governmental Authority to take material remedial action in connection with Hazardous Materials contaminating a property if the contamination resulted from such party’s action or omission or use of the property in question or (b) Tenant or any proposed transferee, assignee or sublessee is subject to a material enforcement order issued by any Governmental Authority in connection with the use, disposal or storage of Hazardous Materials, then Landlord shall have the right to terminate this Lease in Landlord’s sole and absolute discretion (with respect to any such matter involving Tenant), and it shall not be unreasonable for Landlord to

withhold its consent to any proposed transfer, assignment or subletting (with respect to any such matter involving a proposed transferee, assignee or sublessee).

29.4 The following are conditions precedent to a Transfer or to Landlord considering a request by Tenant to a Transfer:

(a) Tenant shall remain fully liable under this Lease. Tenant agrees that it shall not be (and shall not be deemed to be) a guarantor or surety of this Lease, however, and waives its right to claim that it is a guarantor or surety or to raise in any legal proceeding any guarantor or surety defenses permitted by this Lease or by Applicable Laws;

(b) If Tenant or the proposed transferee, assignee or sublessee does not or cannot deliver the Required Financials, then Landlord may elect to have either Tenant's ultimate parent company or the proposed transferee's, assignee's or sublessee's ultimate parent company provide a guaranty of the applicable entity's obligations under this Lease, in a form acceptable to Landlord, which guaranty shall be executed and delivered to Landlord by the applicable guarantor prior to the Transfer Date;

(c) Tenant shall provide Landlord with evidence reasonably satisfactory to Landlord that the value of Landlord's interest under this Lease shall not be diminished or reduced by the proposed Transfer. Such evidence shall include evidence respecting the relevant business experience and financial responsibility and status of the proposed transferee, assignee or sublessee;

(d) Tenant shall reimburse Landlord for Landlord's actual costs and expenses, including reasonable attorneys' fees, charges and disbursements incurred in connection with the review, processing and documentation of such request;

(e) If Tenant's transfer of rights or sharing of the Premises provides for the receipt by, on behalf of or on account of Tenant of any consideration of any kind whatsoever (including a premium rental for a sublease or lump sum payment for an assignment, but excluding Tenant's reasonable costs in marketing and subleasing the Premises) in excess of the rental and other charges due to Landlord under this Lease, Tenant shall pay fifty percent (50%) of all of such excess to Landlord, after making deductions for any reasonable marketing expenses, tenant improvement funds expended by Tenant, alterations, cash concessions, brokerage commissions, attorneys' fees and free rent actually paid by Tenant. If such consideration consists of cash paid to Tenant, payment to Landlord shall be made upon receipt by Tenant of such cash payment;

(f) The proposed transferee, assignee or sublessee shall agree that, in the event Landlord gives such proposed transferee, assignee or sublessee notice that Tenant is in default under this Lease, such proposed transferee, assignee or sublessee shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments shall be received by Landlord without any liability being incurred by Landlord, except to credit such payment against those due by Tenant under this Lease, and any such proposed transferee, assignee or sublessee shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for

any reason; provided, however, that in no event shall Landlord or its Lenders, successors or assigns be obligated to accept such attornment;

- (g) Landlord's consent to any such Transfer shall be effected on Landlord's forms;
- (h) Tenant shall not then be in default hereunder in any respect;
- (i) Such proposed transferee, assignee or sublessee's use of the Premises shall be the same as the Permitted Use;
- (j) Landlord shall not be bound by any provision of any agreement pertaining to the Transfer, except for Landlord's written consent to the same;
- (k) Tenant shall pay all transfer and other taxes (including interest and penalties) assessed or payable for any Transfer;
- (l) Landlord's consent (or waiver of its rights) for any Transfer shall not waive Landlord's right to consent or refuse consent to any later Transfer;
- (m) Tenant shall deliver to Landlord one executed copy of any and all written instruments evidencing or relating to the Transfer; and
- (n) Tenant shall deliver to Landlord a list of Hazardous Materials (as defined below), certified by the proposed transferee, assignee or sublessee to be true and correct, that the proposed transferee, assignee or sublessee intends to use or store in the Premises. Additionally, Tenant shall deliver to Landlord, on or before the date any proposed transferee, assignee or sublessee takes occupancy of the Premises, all of the items relating to Hazardous Materials of such proposed transferee, assignee or sublessee as described in Section 21.2.

29.5 Any Transfer that is not in compliance with the provisions of this Article or with respect to which Tenant does not fulfill its obligations pursuant to this Article shall be void and shall, at the option of Landlord, terminate this Lease.

29.6 Notwithstanding any Transfer, Tenant shall remain fully and primarily liable for the payment of all Rent and other sums due or to become due hereunder, and for the full performance of all other terms, conditions and covenants to be kept and performed by Tenant. The acceptance of Rent or any other sum due hereunder, or the acceptance of performance of any other term, covenant or condition thereof, from any person or entity other than Tenant shall not be deemed a waiver of any of the provisions of this Lease or a consent to any Transfer.

29.7 If Tenant delivers to Landlord a Transfer Notice indicating a desire to transfer this Lease to a proposed transferee, assignee or sublessee, then Landlord shall have the option, exercisable by giving notice to Tenant at any time within thirty (30) days after Landlord's receipt of such Transfer Notice, to terminate this Lease as of the date specified in the Transfer Notice as the Transfer Date, except for those provisions that, by their express terms, survive the expiration or earlier termination hereof. If Landlord exercises such option, then Tenant shall have the right to withdraw such Transfer Notice by delivering to Landlord written notice of such election within five (5) days after Landlord's delivery of notice electing to exercise Landlord's option to

terminate this Lease. In the event Tenant withdraws the Transfer Notice as provided in this Section, this Lease shall continue in full force and effect. No failure of Landlord to exercise its option to terminate this Lease shall be deemed to be Landlord's consent to a proposed Transfer.

29.8 If Tenant sublets the Premises or any portion thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and appoints Landlord as assignee and attorney-in-fact for Tenant, and Landlord (or a receiver for Tenant appointed on Landlord's application) may collect such rent and apply it toward Tenant's obligations under this Lease; provided that, until the occurrence of a Default (as defined below) by Tenant, Tenant shall have the right to collect such rent.

29.9 In the event that Tenant enters into a sublease for the entire Premises in accordance with this Article that expires within two (2) days of the Term Expiration Date, the term expiration date of such sublease shall, notwithstanding anything in this Lease, the sublease or any consent to the sublease to the contrary, be deemed to be the date that is two (2) days prior to the Term Expiration Date.

30. Subordination and Attornment.

30.1 This Lease shall be subject and subordinate to the lien of any mortgage, deed of trust, or lease in which Landlord is tenant now or hereafter in force against the Building or the Project and to all advances made or hereafter to be made upon the security thereof without the necessity of the execution and delivery of any further instruments on the part of Tenant to effectuate such subordination.

30.2 Notwithstanding the foregoing, Tenant shall execute and deliver upon demand such further instrument or instruments evidencing such subordination of this Lease to the lien of any such mortgage or mortgages or deeds of trust or lease in which Landlord is tenant as may be required by Landlord. If any Lender so elects, however, this Lease shall be deemed prior in lien to any such lease, mortgage, or deed of trust upon or including the Premises regardless of date and Tenant shall execute a statement in writing to such effect at Landlord's request. If Tenant fails to execute any document required from Tenant under this Section within ten (10) days after written request therefor, Tenant hereby constitutes and appoints Landlord or its special attorney-in-fact to execute and deliver any such document or documents in the name of Tenant. Such power is coupled with an interest and is irrevocable. For the avoidance of doubt, "Lenders" shall also include historic tax credit investors and new market tax credit investors.

30.3 Upon written request of Landlord and opportunity for Tenant to review, Tenant agrees to execute any Lease amendments not materially altering the terms of this Lease, if required by a Lender incident to the financing of the real property of which the Premises constitute a part.

30.4 In the event any proceedings are brought for foreclosure, or in the event of the exercise of the power of sale under any mortgage or deed of trust made by Landlord covering the Premises, Tenant shall at the election of the purchaser at such foreclosure or sale attorn to the

purchaser upon any such foreclosure or sale and recognize such purchaser as Landlord under this Lease.

31. Defaults and Remedies.

31.1 Late payment by Tenant to Landlord of Rent and other sums due shall cause Landlord to incur costs not contemplated by this Lease, the exact amount of which shall be extremely difficult and impracticable to ascertain. Such costs include processing and accounting charges and late charges that may be imposed on Landlord by the terms of any mortgage or trust deed covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within five (5) days after the date such payment is due, Tenant shall pay to Landlord (a) an additional sum of six percent (6%) of the overdue Rent as a late charge plus (b) interest at an annual rate (the "Default Rate") equal to the lesser of (a) twelve percent (12%) and (b) the highest rate permitted by Applicable Laws. The parties agree that this late charge represents a fair and reasonable estimate of the costs that Landlord shall incur by reason of late payment by Tenant and shall be payable as Additional Rent to Landlord due with the next installment of Rent or within five (5) business days after Landlord's demand, whichever is earlier. Landlord's acceptance of any Additional Rent (including a late charge or any other amount hereunder) shall not be deemed an extension of the date that Rent is due or prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity.

31.2 No payment by Tenant or receipt by Landlord of a lesser amount than the Rent payment herein stipulated shall be deemed to be other than on account of the Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy provided in this Lease or in equity or at law. If a dispute shall arise as to any amount or sum of money to be paid by Tenant to Landlord hereunder, Tenant shall have the right to make payment "under protest," such payment shall not be regarded as a voluntary payment, and there shall survive the right on the part of Tenant to institute suit for recovery of the payment paid under protest.

31.3 If Tenant fails to pay any sum of money required to be paid by it hereunder or perform any other act on its part to be performed hereunder, in each case within the applicable cure period (if any) described in Section 31.4, then Landlord may (but shall not be obligated to), without waiving or releasing Tenant from any obligations of Tenant, make such payment or perform such act; provided that such failure by Tenant unreasonably interfered with the use of the Building or the Project by any other tenant or with the efficient operation of the Building or the Project, or resulted or could have resulted in a violation of Applicable Laws or the cancellation of an insurance policy maintained by Landlord. Notwithstanding the foregoing, in the event of an emergency, Landlord shall have the right to enter the Premises and act in accordance with its rights as provided elsewhere in this Lease. In addition to the late charge described in Section 31.1, Tenant shall pay to Landlord as Additional Rent all sums so paid or incurred by Landlord, together with interest at the Default Rate, computed from the date such sums were paid or incurred.

31.4 The occurrence of any one or more of the following events shall constitute a “Default” hereunder by Tenant:

(a) Tenant abandons the Premises;

(b) Tenant fails to make any payment of Rent, as and when due, or to satisfy its obligations under Article 19, where such failure shall continue for a period of three (3) days after written notice thereof from Landlord to Tenant;

(c) Tenant fails to observe or perform any obligation or covenant contained herein (other than described in Sections 31.4(a) and 31.4(b)) to be performed by Tenant, where such failure continues for a period of ten (10) days after written notice thereof from Landlord to Tenant; provided that, if the nature of Tenant’s default is such that it reasonably requires more than ten (10) days to cure, Tenant shall not be deemed to be in Default if Tenant commences such cure within such ten (10) day period and thereafter diligently prosecutes the same to completion; and provided, further, that such cure is completed no later than thirty (30) days after Tenant’s receipt of written notice from Landlord;

(d) Tenant makes an assignment for the benefit of creditors;

(e) A receiver, trustee or custodian is appointed to or does take title, possession or control of all or substantially all of Tenant’s assets;

(f) Tenant files a voluntary petition under the United States Bankruptcy Code or any successor statute (as the same may be amended from time to time, the “Bankruptcy Code”) or an order for relief is entered against Tenant pursuant to a voluntary or involuntary proceeding commenced under any chapter of the Bankruptcy Code;

(g) Any involuntary petition is filed against Tenant under any chapter of the Bankruptcy Code and is not dismissed within one hundred twenty (120) days;

(h) Tenant or Guarantor fails to deliver an estoppel certificate in accordance with Article 20; or

(i) Tenant’s interest in this Lease is attached, executed upon or otherwise judicially seized and such action is not released within one hundred twenty (120) days of the action.

Notices given under this Section shall specify the alleged default and shall demand that Tenant perform the provisions of this Lease or pay the Rent that is in arrears, as the case may be, within the applicable period of time, or quit the Premises. No such notice shall be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice.

31.5 In the event of a Chronic Delinquency (as defined below), Landlord may, in addition to all other remedies under this Lease, at law or in equity, require that Tenant thereafter pay Rent quarterly in advance. This provision shall not limit in any way nor be construed as a waiver of Landlord’s rights and remedies contained in this Lease, at law or in equity in the event of a default. “Chronic Delinquency” means that Tenant commits a Default pursuant to Section 31.4(b) three (3) times in any twelve (12) month period.

31.6 In the event of a Default by Tenant, and at any time thereafter, with or without notice or demand and without limiting Landlord in the exercise of any right or remedy that Landlord may have, Landlord has the right to do any or all of the following:

(a) Halt any Tenant Improvements and Alterations and order Tenant's contractors, subcontractors, consultants, designers and material suppliers to stop work;

(b) Terminate Tenant's right to possession of the Premises by written notice to Tenant or by any lawful means, in which case Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby; and

(c) Terminate this Lease, in which event Tenant shall immediately surrender possession of the Premises to Landlord. In such event, Landlord shall have the immediate right to re-enter and remove all persons and property, and such property may be removed and stored in a public warehouse or elsewhere at the cost and for the account of Tenant, all without service of notice or resort to legal process and without being deemed guilty of trespass or becoming liable for any loss or damage that may be occasioned thereby. In the event that Landlord shall elect to so terminate this Lease, then Landlord shall be entitled to recover from Tenant all damages incurred by Landlord by reason of Tenant's default, including:

(i) The sum of:

A. The worth at the time of award of any unpaid Rent that had accrued at the time of such termination; plus

B. The worth at the time of award of the amount by which the unpaid Rent that would have accrued during the period commencing with termination of the Lease and ending at the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

C. The worth at the time of award of the amount by which the unpaid Rent for the balance of the Term after the time of award exceeds that portion of the loss of Landlord's rental income from the Premises that Tenant proves to Landlord's reasonable satisfaction could have been reasonably avoided; plus

D. Any other amount necessary to compensate Landlord for all the detriment arising from Tenant's failure to perform its obligations under this Lease or that in the ordinary course of things would be likely to result therefrom, including the cost of restoring the Premises to the condition required under the terms of this Lease, including any rent payments not otherwise chargeable to Tenant (e.g., during any "free" rent period or rent holiday); plus

E. At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by

Applicable Laws; or

(ii) At Landlord's election, as minimum liquidated damages in addition to any (A) amounts paid or payable to Landlord pursuant to Section 31.6(c)(i)(A) prior to such election and (B) costs of restoring the Premises to the condition required under the terms of this Lease, an amount (the "Election Amount") equal to either (Y) the positive difference (if any, and measured at the time of such termination) between (1) the then-present value of the total Rent and other benefits that would have accrued to Landlord under this Lease for the remainder of the Term if Tenant had fully complied with the Lease minus (2) the then-present cash rental value of the Premises as determined by Landlord for what would be the then-unexpired Term if the Lease remained in effect, computed using the discount rate of the Federal Reserve Bank of San Francisco at the time of the award plus one (1) percentage point (the "Discount Rate") or (Z) twelve (12) months (or such lesser number of months as may then be remaining in the Term) of Base Rent and Additional Rent at the rate last payable by Tenant pursuant to this Lease, in either case as Landlord specifies in such election. Landlord and Tenant agree that the Election Amount represents a reasonable forecast of the minimum damages expected to occur in the event of a breach, taking into account the uncertainty, time and cost of determining elements relevant to actual damages, such as fair market rent, time and costs that may be required to re-lease the Premises, and other factors; and that the Election Amount is not a penalty.

As used in Sections 31.6(c)(i)(A) and (B), "worth at the time of award" shall be computed by allowing interest at the Default Rate. As used in Section 31.6(c)(i)(C), the "worth at the time of the award" shall be computed by taking the present value of such amount, using the Discount Rate.

31.7 In addition to any other remedies available to Landlord at law or in equity and under this Lease, Landlord shall have the remedy described in California Civil Code Section 1951.4 and may continue this Lease in effect after Tenant's Default or abandonment and recover Rent as it becomes due, provided Tenant has the right to sublet or assign, subject only to reasonable limitations. In addition, Landlord shall not be liable in any way whatsoever for its failure or refusal to relet the Premises. For purposes of this Section, the following acts by Landlord will not constitute the termination of Tenant's right to possession of the Premises:

(a) Acts of maintenance or preservation or efforts to relet the Premises, including alterations, remodeling, redecorating, repairs, replacements or painting as Landlord shall consider advisable for the purpose of reletting the Premises or any part thereof; or

(b) The appointment of a receiver upon the initiative of Landlord to protect Landlord's interest under this Lease or in the Premises.

Notwithstanding the foregoing, in the event of a Default by Tenant, Landlord may elect at any time to terminate this Lease and to recover damages to which Landlord is entitled.

31.8 If Landlord does not elect to terminate this Lease as provided in Section 31.6, then Landlord may, from time to time, recover all Rent as it becomes due under this Lease. At any time thereafter, Landlord may elect to terminate this Lease and to recover damages to which Landlord is entitled.

31.9 In the event Landlord elects to terminate this Lease and relet the Premises, Landlord may execute any new lease in its own name. Tenant hereunder shall have no right or authority whatsoever to collect any Rent from such tenant. The proceeds of any such reletting shall be applied as follows:

(a) First, to the payment of any indebtedness other than Rent due hereunder from Tenant to Landlord, including storage charges or brokerage commissions owing from Tenant to Landlord as the result of such reletting;

(b) Second, to the payment of the costs and expenses of reletting the Premises, including (i) alterations and repairs that Landlord deems reasonably necessary and advisable and (ii) reasonable attorneys' fees, charges and disbursements incurred by Landlord in connection with the retaking of the Premises and such reletting;

(c) Third, to the payment of Rent and other charges due and unpaid hereunder; and

(d) Fourth, to the payment of future Rent and other damages payable by Tenant under this Lease.

31.10 All of Landlord's rights, options and remedies hereunder shall be construed and held to be nonexclusive and cumulative. Landlord shall have the right to pursue any one or all of such remedies, or any other remedy or relief that may be provided by Applicable Laws, whether or not stated in this Lease. No waiver of any default of Tenant hereunder shall be implied from any acceptance by Landlord of any Rent or other payments due hereunder or any omission by Landlord to take any action on account of such default if such default persists or is repeated, and no express waiver shall affect defaults other than as specified in such waiver. Notwithstanding any provision of this Lease to the contrary, in no event shall Landlord be required to mitigate its damages with respect to any default by Tenant, except as required by Applicable Laws. Any such obligation imposed by Applicable Laws upon Landlord to relet the Premises after any termination of this Lease shall be subject to the reasonable requirements of Landlord to (a) lease to high quality tenants on such terms as Landlord may from time to time deem appropriate in its discretion and (b) develop the Project in a harmonious manner with a mix of uses, tenants, floor areas, terms of tenancies, etc., as determined by Landlord. Landlord shall not be obligated to relet the Premises to (y) any Tenant's Affiliate or (z) any party (i) unacceptable to a Lender, (ii) that requires Landlord to make improvements to or re-demise the Premises, (iii) that desires to change the Permitted Use, (iv) that desires to lease the Premises for more or less than the remaining Term or (v) to whom Landlord or an affiliate of Landlord may desire to lease other available space in the Project or at another property owned by Landlord or an affiliate of Landlord.

31.11 Landlord's termination of (a) this Lease or (b) Tenant's right to possession of the Premises shall not relieve Tenant of any liability to Landlord that has previously accrued or that shall arise based upon events that occurred prior to the later to occur of (y) the date of Lease termination and (z) the date Tenant surrenders possession of the Premises.

31.12 To the extent permitted by Applicable Laws, Tenant waives any and all rights of redemption granted by or under any present or future Applicable Laws if Tenant is evicted or dispossessed for any cause, or if Landlord obtains possession of the Premises due to Tenant's default hereunder or otherwise.

31.13 Landlord shall not be in default or liable for damages under this Lease unless Landlord fails to perform obligations required of Landlord within a reasonable time, but in no event shall such failure continue for more than thirty (30) days after written notice from Tenant specifying the nature of Landlord's failure; provided, however, that if the nature of Landlord's obligation is such that more than thirty (30) days are required for its performance, then Landlord shall not be in default if Landlord commences performance within such thirty (30) day period and thereafter diligently prosecutes the same to completion. In no event shall Tenant have the right to terminate or cancel this Lease or to withhold or abate rent or to set off any Claims against Rent as a result of any default or breach by Landlord of any of its covenants, obligations, representations, warranties or promises hereunder, except as may otherwise be expressly set forth in this Lease.

31.14 In the event of any default by Landlord, Tenant shall give notice by registered or certified mail to any (a) beneficiary of a deed of trust or (b) mortgagee under a mortgage covering the Premises, the Building or the Project and to any landlord of any lease of land upon or within which the Premises, the Building or the Project is located, and shall offer such beneficiary, mortgagee or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Building or the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided that Landlord shall furnish to Tenant in writing, upon written request by Tenant, the names and addresses of all such persons who are to receive such notices.

32. Bankruptcy. In the event a debtor, trustee or debtor in possession under the Bankruptcy Code, or another person with similar rights, duties and powers under any other Applicable Laws, proposes to cure any default under this Lease or to assume or assign this Lease and is obliged to provide adequate assurance to Landlord that (a) a default shall be cured, (b) Landlord shall be compensated for its damages arising from any breach of this Lease and (c) future performance of Tenant's obligations under this Lease shall occur, then such adequate assurances shall include any or all of the following, as designated by Landlord in its sole and absolute discretion:

32.1 Those acts specified in the Bankruptcy Code or other Applicable Laws as included within the meaning of "adequate assurance," even if this Lease does not concern a shopping center or other facility described in such Applicable Laws;

32.2 A prompt cash payment to compensate Landlord for any monetary defaults or actual damages arising directly from a breach of this Lease;

32.3 A cash deposit in an amount at least equal to the then-current amount of the Security Deposit; or

32.4 The assumption or assignment of all of Tenant's interest and obligations under this Lease.

33. Brokers.

33.1 Tenant represents and warrants that it has had no dealings with any real estate broker or agent in connection with the negotiation of this Lease other than Kidder Mathews (“Broker”), and that it knows of no other real estate broker or agent that is or might be entitled to a commission in connection with this Lease. Landlord shall compensate Broker in relation to this Lease pursuant to a separate agreement between Landlord and Broker.

33.2 Tenant represents and warrants that no broker or agent has made any representation or warranty relied upon by Tenant in Tenant’s decision to enter into this Lease, other than as contained in this Lease.

33.3 Tenant acknowledges and agrees that the employment of brokers by Landlord is for the purpose of solicitation of offers of leases from prospective tenants and that no authority is granted to any broker to furnish any representation (written or oral) or warranty from Landlord unless expressly contained within this Lease. Landlord is executing this Lease in reliance upon Tenant’s representations, warranties and agreements contained within Sections 33.1 and 33.2.

33.4 Tenant agrees to Indemnify the Landlord Indemnitees from any and all cost or liability for compensation claimed by any broker or agent, other than Broker, employed or engaged by Tenant or claiming to have been employed or engaged by Tenant.

34. Definition of Landlord. With regard to obligations imposed upon Landlord pursuant to this Lease, the term “Landlord,” as used in this Lease, shall refer only to Landlord or Landlord’s then-current successor-in-interest. In the event of any transfer, assignment or conveyance of Landlord’s interest in this Lease or in Landlord’s fee title to or leasehold interest in the Property, as applicable, Landlord herein named (and in case of any subsequent transfers or conveyances, the subsequent Landlord) shall be automatically freed and relieved, from and after the date of such transfer, assignment or conveyance, from all liability for the performance of any covenants or obligations contained in this Lease thereafter to be performed by Landlord and, without further agreement, the transferee, assignee or conveyee of Landlord’s in this Lease or in Landlord’s fee title to or leasehold interest in the Property, as applicable, shall be deemed to have assumed and agreed to observe and perform any and all covenants and obligations of Landlord hereunder during the tenure of its interest in the Lease or the Property. Landlord or any subsequent Landlord may transfer its interest in the Premises or this Lease without Tenant’s consent.

35. Limitation of Landlord’s Liability.

35.1 If Landlord is in default under this Lease and, as a consequence, Tenant recovers a monetary judgment against Landlord, the judgment shall be satisfied only out of (a) the proceeds of sale received on execution of the judgment and levy against the right, title and interest of Landlord in the Building and the Project, (b) rent or other income from such real property receivable by Landlord or (c) the consideration received by Landlord from the sale, financing, refinancing or other disposition of all or any part of Landlord’s right, title or interest in the Building or the Project.

35.2 Neither Landlord nor any of its affiliates, nor any of their respective partners, shareholders, directors, officers, employees, members or agents shall be personally liable for Landlord's obligations or any deficiency under this Lease, and service of process shall not be made against any shareholder, director, officer, employee or agent of Landlord or any of Landlord's affiliates. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be sued or named as a party in any suit or action, and service of process shall not be made against any partner or member of Landlord except as may be necessary to secure jurisdiction of the partnership, joint venture or limited liability company, as applicable. No partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates shall be required to answer or otherwise plead to any service of process, and no judgment shall be taken or writ of execution levied against any partner, shareholder, director, officer, employee, member or agent of Landlord or any of its affiliates.

35.3 Each of the covenants and agreements of this Article shall be applicable to any covenant or agreement either expressly contained in this Lease or imposed by Applicable Laws and shall survive the expiration or earlier termination of this Lease.

36. Joint and Several Obligations. If more than one person or entity executes this Lease as Tenant, then

36.1 Each of them is jointly and severally liable for the keeping, observing and performing of all of the terms, covenants, conditions, provisions and agreements of this Lease to be kept, observed or performed by Tenant, and such terms, covenants, conditions, provisions and agreements shall be binding with the same force and effect upon each and all of the persons executing this Agreement as Tenant; and

36.2 The term "Tenant," as used in this Lease, shall mean and include each of them, jointly and severally. The act of, notice from, notice to, refund to, or signature of any one or more of them with respect to the tenancy under this Lease, including any renewal, extension, expiration, termination or modification of this Lease, shall be binding upon each and all of the persons executing this Lease as Tenant with the same force and effect as if each and all of them had so acted, so given or received such notice or refund, or so signed.

37. Representations. Tenant guarantees, warrants and represents that (a) Tenant is duly incorporated or otherwise established or formed and validly existing under the laws of its state of incorporation, establishment or formation, (b) Tenant has and is duly qualified to do business in the state in which the Property is located, (c) Tenant has full corporate, partnership, trust, association or other appropriate power and authority to enter into this Lease and to perform all Tenant's obligations hereunder, (d) each person (and all of the persons if more than one signs) signing this Lease on behalf of Tenant is duly and validly authorized to do so and (e) neither (i) the execution, delivery or performance of this Lease nor (ii) the consummation of the transactions contemplated hereby will violate or conflict with any provision of documents or instruments under which Tenant is constituted or to which Tenant is a party. In addition, Tenant guarantees, warrants and represents that none of (x) it, (y) its affiliates or partners nor (z) to the best of its knowledge, its members, shareholders or other equity owners or any of their respective employees, officers, directors, representatives or agents is a person or entity with whom U.S. persons or entities are restricted from doing business under regulations of the Office of Foreign

Asset Control (“OFAC”) of the Department of the Treasury (including those named on OFAC’s Specially Designated and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism) or other similar governmental action.

38. Confidentiality. Tenant shall keep the terms and conditions of this Lease and any information provided to Tenant or its employees, agents or contractors pursuant to Article 9 confidential and shall not (a) disclose to any third party any terms or conditions of this Lease or any other Lease-related document (including subleases, assignments, work letters, construction contracts, letters of credit, subordination agreements, non-disturbance agreements, brokerage agreements or estoppels) or the contents of any documents, reports, surveys or evaluations related to the Project or any portion thereof or (b) provide to any third party an original or copy of this Lease (or any Lease-related document or other document referenced in Subsection 38(a)). Landlord shall not release to any third party any non-public financial information or non-public information about Tenant’s ownership structure that Tenant gives Landlord. Notwithstanding the foregoing, confidential information under this Section may be released by Landlord or Tenant under the following circumstances: (x) if required by Applicable Laws or in any judicial proceeding; provided that the releasing party has given the other party reasonable notice of such requirement, if feasible, (y) to a party’s attorneys, accountants, brokers, lenders, potential lenders, investors, potential investors and other bona fide consultants or advisers (with respect to this Lease only); provided such third parties agree to be bound by this Section or (z) to bona fide prospective assignees or subtenants of this Lease; provided they agree in writing to be bound by this Section.

39. Notices. Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given hereunder shall be in writing and shall be given by (a) personal delivery, (b) overnight delivery with a reputable international overnight delivery service, such as FedEx, or (c) facsimile or email transmission, so long as such transmission is followed within one (1) business day by delivery utilizing one of the methods described in Subsection 39(a) or (b). Any such notice, consent, demand, invoice, statement or other communication shall be deemed delivered (x) upon receipt, if given in accordance with Subsection 39(a); (y) one (1) business day after deposit with a reputable international overnight delivery service, if given in accordance with Subsection 39(b); or (z) upon transmission, if given in accordance with Subsection 39(c). Except as otherwise stated in this Lease, any notice, consent, demand, invoice, statement or other communication required or permitted to be given pursuant to this Lease shall be addressed to Tenant at the Premises, or to Landlord or Tenant at the addresses shown in Sections 2.9 and 2.10 or 2.11, respectively. Either party may, by notice to the other given pursuant to this Section, specify additional or different addresses for notice purposes.

40. Miscellaneous.

40.1 Landlord reserves the right to change the name of the Building or the Project in its sole discretion.

40.2 To induce Landlord to enter into this Lease, Tenant agrees that it shall furnish to Landlord, from time to time, within ten (10) business days after receipt of Landlord's written request, the most recent year-end unconsolidated financial statements reflecting Tenant's current financial condition audited by a nationally recognized accounting firm. Tenant shall, within ninety (90) days after the end of Tenant's financial year, furnish Landlord with a certified copy of Tenant's year-end unconsolidated financial statements for the previous year audited by a nationally recognized accounting firm. Tenant represents and warrants that all financial statements, records and information furnished by Tenant to Landlord in connection with this Lease are true, correct and complete in all respects. If audited financials are not otherwise prepared, unaudited financials complying with generally accepted accounting principles and certified by the chief financial officer of Tenant as true, correct and complete in all respects shall suffice for purposes of this Section. If Tenant fails to deliver to Landlord any financial statement within the time period required under this Section, then Tenant shall be required to pay to Landlord an administrative fee equal to One Thousand Dollars (\$1,000) within five (5) business days after receiving written notice from Landlord advising Tenant of such failure (provided, however, that Landlord's acceptance of such fee shall not prevent Landlord from pursuing any other rights or remedies under this Lease, at law or in equity). The provisions of this Section shall not apply at any time while Tenant is a corporation whose shares are traded on any nationally recognized stock exchange.

40.3 Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease, and shall not be effective as a lease or otherwise until execution by and delivery to both Landlord and Tenant.

40.4 The terms of this Lease are intended by the parties as a final, complete and exclusive expression of their agreement with respect to the terms that are included herein, and may not be contradicted or supplemented by evidence of any other prior or contemporaneous agreement.

40.5 Landlord may, but shall not be obligated to, record a short form or memorandum hereof without Tenant's consent. Within ten (10) days after receipt of written request from Landlord, Tenant shall execute a termination of any short form or memorandum of lease recorded with respect hereto. Tenant shall be responsible for the cost of recording any short form or memorandum of this Lease, including any transfer or other taxes incurred in connection with such recordation. Neither party shall record this Lease.

40.6 Where applicable in this Lease, the singular includes the plural and the masculine or neuter includes the masculine, feminine and neuter. The words "include," "includes," "included" and "including" mean 'include,' etc., without limitation." The word "shall" is mandatory and the word "may" is permissive. The word "business day" means a calendar day other than any national or local holiday on which federal government agencies in the County of San Diego are closed for business, or any weekend. The section headings of this Lease are not a part of this Lease and shall have no effect upon the construction or interpretation of any part of this Lease. Landlord and Tenant have each participated in the drafting and negotiation of this Lease, and the language in all parts of this Lease shall be in all cases construed as a whole according to its fair meaning and not strictly for or against either Landlord or Tenant.

40.7 Except as otherwise expressly set forth in this Lease, each party shall pay its own costs and expenses incurred in connection with this Lease and such party's performance under this Lease; provided that, if either party commences an action, proceeding, demand, claim, action, cause of action or suit against the other party arising from or in connection with this Lease, then the substantially prevailing party shall be reimbursed by the other party for all reasonable costs and expenses, including reasonable attorneys' fees and expenses, incurred by the substantially prevailing party in such action, proceeding, demand, claim, action, cause of action or suit, and in any appeal in connection therewith (regardless of whether the applicable action, proceeding, demand, claim, action, cause of action, suit or appeal is voluntarily withdrawn or dismissed). In addition, Landlord shall, upon demand, be entitled to all reasonable attorneys' fees and all other reasonable costs incurred in the preparation and service of any notice or demand hereunder, regardless of whether a legal action is subsequently commenced, or incurred in connection with any contested matter or other proceeding in bankruptcy court concerning this Lease.

40.8 Time is of the essence with respect to the performance of every provision of this Lease.

40.9 Each provision of this Lease performable by Tenant shall be deemed both a covenant and a condition.

40.10 Notwithstanding anything to the contrary contained in this Lease, Tenant's obligations under this Lease are independent and shall not be conditioned upon performance by Landlord.

40.11 Whenever consent or approval of either party is required, that party shall not unreasonably withhold, condition or delay such consent or approval, except as may be expressly set forth to the contrary.

40.12 Any provision of this Lease that shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and all other provisions of this Lease shall remain in full force and effect and shall be interpreted as if the invalid, void or illegal provision did not exist.

40.13 Each of the covenants, conditions and agreements herein contained shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs; legatees; devisees; executors; administrators; and permitted successors and assigns. This Lease is for the sole benefit of the parties and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns, and nothing in this Lease shall give or be construed to give any other person or entity any legal or equitable rights. Nothing in this Section shall in any way alter the provisions of this Lease restricting assignment or subletting.

40.14 This Lease shall be governed by, construed and enforced in accordance with the laws of the state in which the Premises are located, without regard to such state's conflict of law principles.

40.15 Tenant guarantees, warrants and represents that the individual or individuals signing this Lease have the power, authority and legal capacity to sign this Lease on behalf of

and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

40.16 This Lease may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document.

40.17 No provision of this Lease may be modified, amended or supplemented except by an agreement in writing signed by Landlord and Tenant.

40.18 No waiver of any term, covenant or condition of this Lease shall be binding upon Landlord unless executed in writing by Landlord. The waiver by Landlord of any breach or default of any term, covenant or condition contained in this Lease shall not be deemed to be a waiver of any preceding or subsequent breach or default of such term, covenant or condition or any other term, covenant or condition of this Lease.

40.19 To the extent permitted by Applicable Laws, the parties waive trial by jury in any action, proceeding or counterclaim brought by the other party hereto related to matters arising from or in any way connected with this Lease; the relationship between Landlord and Tenant; Tenant's use or occupancy of the Premises; or any claim of injury or damage related to this Lease or the Premises.

41. Rooftop Installation Area.

41.1 Tenant may use those portions of the Building identified by Landlord from time to time as a "Rooftop Installation Area" (any such areas, collectively, the "Rooftop Installation Area") solely to operate, maintain, repair and replace rooftop antennae, mechanical equipment, communications antennas and other equipment installed by Tenant in the Rooftop Installation Area in accordance with this Article ("Tenant's Rooftop Equipment"). Tenant's Rooftop Equipment shall be only for Tenant's use of the Premises for the Permitted Use.

41.2 Tenant shall install Tenant's Rooftop Equipment at its sole cost and expense, at such times and in such manner as Landlord may reasonably designate, and in accordance with this Article and the applicable provisions of this Lease regarding Alterations. Tenant's Rooftop Equipment and the installation thereof shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld. Among other reasons, Landlord may withhold approval if the installation or operation of Tenant's Rooftop Equipment could reasonably be expected to damage the structural integrity of the Building or to transmit vibrations or noise or cause other adverse effects beyond the Premises to an extent not customary in first class laboratory buildings, unless Tenant implements measures that are acceptable to Landlord in its reasonable discretion to avoid any such damage or transmission.

41.3 Tenant shall comply with any roof or roof-related warranties. Tenant shall obtain a letter from Landlord's roofing contractor within thirty (30) days after completion of any Tenant work on the rooftop stating that such work did not affect any such warranties. Tenant, at its sole cost and expense, shall inspect the Rooftop Installation Area at least annually, and correct any loose bolts, fittings or other appurtenances and repair any damage to the roof arising from the installation or operation of Tenant's Rooftop Equipment. Tenant shall not permit the installation, maintenance or operation of Tenant's Rooftop Equipment to violate any Applicable Laws or

constitute a nuisance. Tenant shall pay Landlord within thirty (30) days after demand (a) all applicable taxes, charges, fees or impositions imposed on Landlord by Governmental Authorities as the result of Tenant's use of the Rooftop Installation Areas in excess of those for which Landlord would otherwise be responsible for the use or installation of Tenant's Rooftop Equipment and (b) the amount of any increase in Landlord's insurance premiums as a result of the installation of Tenant's Rooftop Equipment. Upon Tenant's written request to Landlord, Landlord shall use commercially reasonable efforts to cause other tenants to remedy any interference in the operation of Tenant's Rooftop Equipment arising from any such tenants' equipment installed after the applicable piece of Tenant's Rooftop Equipment; provided, however, that Landlord shall not be required to request that such tenants waive their rights under their respective leases.

41.4 If Tenant's Equipment (a) causes physical damage to the structural integrity of the Building, (b) interferes with any telecommunications, mechanical or other systems located at or near or servicing the Building or the Project that were installed prior to the installation of Tenant's Rooftop Equipment, (c) interferes with any other service provided to other tenants in the Building or the Project by rooftop or penthouse installations that were installed prior to the installation of Tenant's Rooftop Equipment or (d) interferes with any other tenants' business, in each case in excess of that permissible under Federal Communications Commission regulations, then Tenant shall cooperate with Landlord to determine the source of the damage or interference and promptly repair such damage and eliminate such interference, in each case at Tenant's sole cost and expense, within ten (10) days after receipt of notice of such damage or interference (which notice may be oral; provided that Landlord also delivers to Tenant written notice of such damage or interference within twenty-four (24) hours after providing oral notice).

41.5 Landlord reserves the right to cause Tenant to relocate Tenant's Rooftop Equipment to comparably functional space on the roof or in the penthouse of the Building by giving Tenant prior written notice thereof Landlord agrees to pay the reasonable costs thereof. Tenant shall arrange for the relocation of Tenant's Rooftop Equipment within sixty (60) days after receipt of Landlord's notification of such relocation. In the event Tenant fails to arrange for relocation within such sixty (60)-day period, Landlord shall have the right to arrange for the relocation of Tenant's Rooftop Equipment in a manner that does not unnecessarily interrupt or interfere with Tenant's use of the Premises for the Permitted Use,

42. Option to Extend Term. Tenant shall have the option ("Option") to extend the Term by sixty (60) months as to the entire Premises (and no less than the entire Premises) upon the following terms and conditions. Any extension of the Term pursuant to the Option shall be on all the same terms and conditions as this Lease, except as follows:

42.1 Base Rent at the commencement of the Option term shall equal the then-current fair market value for comparable office and laboratory space in the Sorrento Mesa submarket of comparable age, quality, level of finish and proximity to amenities and public transit, and containing the systems and improvements present in the Premises as of the date that Tenant gives Landlord written notice of Tenant's election to exercise the Option ("FMV"), and shall be further increased on each annual anniversary of the Option term commencement date by three percent (3%). Tenant may, no more than twelve (12) months prior to the date the Term is then scheduled

to expire, request Landlord's estimate of the FMV for the Option term. Landlord shall, within fifteen (15) days after receipt of such request, give Tenant a written proposal of such FMV. If Tenant gives written notice to exercise the Option, such notice shall specify whether Tenant accepts Landlord's proposed estimate of FMV. If Tenant does not accept the FMV, then the parties shall endeavor to agree upon the FMV, taking into account all relevant factors, including (a) the size of the Premises, (b) the length of the Option term, (c) rent in comparable buildings in the relevant submarket, including concessions offered to new tenants, such as free rent, tenant improvement allowances and moving allowances, (d) Tenant's creditworthiness and (e) the quality and location of the Building and the Project. In the event that the parties are unable to agree upon the FMV within thirty (30) days after Tenant notifies Landlord that Tenant is exercising the Option, then either party may request that the same be determined as follows: a senior officer of a nationally recognized leasing brokerage firm with local knowledge of the Sorrento Mesa laboratory/research and development leasing submarket (the "Baseball Arbitrator") shall be selected and paid for jointly by Landlord and Tenant. If Landlord and Tenant are unable to agree upon the Baseball Arbitrator, then the same shall be designated by the local chapter of the Judicial Arbitration and Mediation Services or any successor organization thereto (the "JAMS"). The Baseball Arbitrator selected by the parties or designated by JAMS shall (y) have at least ten (10) years' experience in the leasing of laboratory/research and development space in the Sorrento Mesa submarket and (z) not have been employed or retained by either Landlord or Tenant or any affiliate of either for a period of at least ten (10) years prior to appointment pursuant hereto. Each of Landlord and Tenant shall submit to the Baseball Arbitrator and to the other party its determination of the FMV. The Baseball Arbitrator shall grant to Landlord and Tenant a hearing and the right to submit evidence. The Baseball Arbitrator shall determine which of the two (2) FMV determinations more closely represents the actual FMV. The arbitrator may not select any other FMV for the Premises other than one submitted by Landlord or Tenant. The FMV selected by the Baseball Arbitrator shall be binding upon Landlord and Tenant and shall serve as the basis for determination of Base Rent payable for the Option term. If, as of the commencement date of the Option term, the amount of Base Rent payable during the Option term shall not have been determined, then, pending such determination, Tenant shall pay Base Rent equal to the Base Rent payable with respect to the last year of the then-current Term. After the final determination of Base Rent payable for the Option term, the parties shall promptly execute a written amendment to this Lease specifying the amount of Base Rent to be paid during the Option term. Any failure of the parties to execute such amendment shall not affect the validity of the FMV determined pursuant to this Section.

42.2 The Option is not assignable separate and apart from this Lease.

42.3 The Option is conditional upon Tenant giving Landlord written notice of its election to exercise the Option at least nine (9) months prior to the end of the expiration of the then-current Term. Time shall be of the essence as to Tenant's exercise of the Option. Tenant assumes full responsibility for maintaining a record of the deadlines to exercise the Option. Tenant acknowledges that it would be inequitable to require Landlord to accept any exercise of the Option after the date provided for in this Section.

42.4 Notwithstanding anything contained in this Article to the contrary, Tenant shall not have the right to exercise the Option:

(a) During the time commencing from the date Landlord delivers to Tenant a written notice that Tenant is in default under any provisions of this Lease and continuing until Tenant has cured the specified default to Landlord's reasonable satisfaction; or

(b) At any time after any Default as described in Article 31 of the Lease (provided, however, that, for purposes of this Section 42.4(b), Landlord shall not be required to provide Tenant with notice of such Default) and continuing until Tenant cures any such Default, if such Default is susceptible to being cured; or

(c) In the event that Tenant has defaulted in the performance of its obligations under this Lease three (3) or more times during the twelve (12)-month period immediately prior to the date that Tenant intends to exercise the Option, whether or not Tenant has cured such defaults.

42.5 The period of time within which Tenant may exercise the Option shall not be extended or enlarged by reason of Tenant's inability to exercise such Option because of the provisions of Section 42.4.

42.6 All of Tenant's rights under the provisions of the Option shall terminate and be of no further force or effect even after Tenant's due and timely exercise of the Option if, after such exercise, but prior to the commencement date of the new term, (a) Tenant fails to pay to Landlord a monetary obligation of Tenant for a period of twenty (20) days after written notice from Landlord to Tenant, (b) Tenant fails to commence to cure a default (other than a monetary default) within thirty (30) days after the date Landlord gives notice to Tenant of such default or (c) Tenant has defaulted under this Lease two (2) or more times and a service or late charge under Section 31.1 has become payable for any such default, whether or not Tenant has cured such defaults.

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IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date first above written.

LANDLORD:

BMR-WAPLES LP,
a Delaware limited partnership

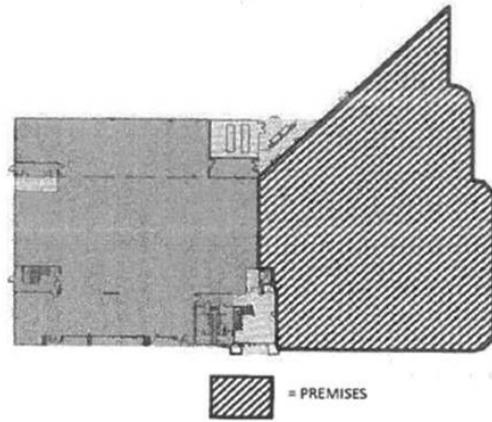
By: /s/ Marie Lewis
Name: Marie Lewis
Title: Vice President, Legal

TENANT:

SGI-DNA, INC.,
a Delaware corporation

By: /s/ Todd R. Nelson
Name: Todd R. Nelson
Title: CEO

EXHIBIT A
PREMISES



A-1

EXHIBIT B

WORK LETTER

This Work Letter (this "Work Letter") is made and entered into as of the 04th day of April, 2019, by and between BMR-WAPLES LP, a Delaware limited partnership ("Landlord"), and SGI-DNA, INC., a Delaware corporation ("Tenant"), and is attached to and made a part of that certain Lease dated of even date herewith (as the same may be amended, amended and restated, supplemented or otherwise modified from time to time, the "Lease"), by and between Landlord and Tenant for the Premises located at 9535 Waples Street, San Diego, California. All capitalized terms used but not otherwise defined herein shall have the meanings given them in the Lease.

1. General Requirements.

1.1 Authorized Representatives.

(a) Landlord designates, as Landlord's authorized representative ("Landlord's Authorized Representative"), (i) John Moshy as the person authorized to initial plans, drawings, approvals and to sign change orders pursuant to this Work Letter and (ii) an officer of Landlord as the person authorized to sign any amendments to this Work Letter or the Lease. Tenant shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by the appropriate Landlord's Authorized Representative. Landlord may change either Landlord's Authorized Representative upon one (1) business day's prior written notice to Tenant.

(b) Tenant designates Tom Braden ("Tenant's Authorized Representative") as the person authorized to initial and sign all plans, drawings, change orders and approvals pursuant to this Work Letter. Landlord shall not be obligated to respond to or act upon any such item until such item has been initialed or signed (as applicable) by Tenant's Authorized Representative. Tenant may change Tenant's Authorized Representative upon one (1) business day's prior written notice to Landlord.

1.2 Schedule. The schedule for design and development of the Tenant Improvements, including the time periods for preparation and review of construction documents, approvals and performance, shall be in accordance with a schedule to be prepared by Tenant (the "Schedule"). Tenant shall prepare the Schedule so that it is a reasonable schedule for the completion of the Tenant Improvements. The Schedule shall clearly identify all activities requiring Landlord participation, including specific dates and time periods when Tenant's contractor will require access to areas of the Project outside of the Premises. As soon as the Schedule is completed, Tenant shall deliver the same to Landlord for Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. Such Schedule shall be approved or disapproved by Landlord within ten (10) business days after delivery to Landlord. Landlord's failure to respond within such ten (10) business day period shall be deemed approval by Landlord. If Landlord disapproves the Schedule, then Landlord shall notify Tenant in writing of its objections to such Schedule, and the parties shall confer and negotiate in good faith to reach agreement on

the Schedule. The Schedule shall be subject to adjustment as mutually agreed upon in writing by the parties, or as provided in this Work Letter.

1.3 Tenant's Architects, Contractors and Consultants. The architect, engineering consultants, design team, general contractor and subcontractors responsible for the construction of the Tenant Improvements shall be selected by Tenant and approved by Landlord, which approval Landlord shall not unreasonably withhold, condition or delay. Landlord may refuse to use any architects, consultants, contractors, subcontractors or material suppliers that Landlord reasonably believes could cause labor disharmony or may not have sufficient experience, in Landlord's reasonable opinion, to perform work in an occupied Class "A" laboratory research building and in tenant-occupied lab areas. All Tenant contracts related to the Tenant Improvements shall provide that Tenant may assign such contracts and any warranties with respect to the Tenant Improvements to Landlord at any time.

2. Tenant Improvements. All Tenant Improvements shall be performed by Tenant's contractor, at Tenant's sole cost and expense (subject to Landlord's obligations with respect to any portion of the TI Allowance) and in accordance with the Approved Plans (as defined below), the Lease and this Work Letter. To the extent that the total projected cost of the Tenant Improvements (as projected by Landlord) exceeds the T1 Allowance (such excess, the "Excess TI Costs"), Tenant shall advance to Landlord any Excess TI Costs within ten (10) days after receipt of an invoice therefor, but in any case before Tenant commences the Tenant Improvements. If the actual Excess TI Costs are less than the Excess TI Costs paid by Tenant to Landlord, Landlord shall credit Tenant with the overage paid by Tenant against Tenant's Rent obligations, beginning after Landlord has completed the final accounting for the Tenant Improvements. If the cost of the Tenant Improvements (as projected by Landlord) increases over Landlord's initial projection, then Landlord may notify Tenant and Tenant shall deposit any additional Excess TI Costs with Landlord in the same way that Tenant deposited the initial Excess TI Costs. If Tenant fails to pay, or is late in paying, any sum due to Landlord under this Work Letter, then Landlord shall have all of the rights and remedies set forth in the Lease for nonpayment of Rent (including the right to interest and the right to assess a late charge), and for purposes of any litigation instituted with regard to such amounts the same shall be considered Rent. All material and equipment furnished by Tenant or its contractors as the Tenant Improvements shall be new or "like new;" the Tenant Improvements shall be performed in a first-class, workmanlike manner; and the quality of the Tenant Improvements shall be of a nature and character not less than the Building Standard. Tenant shall take, and shall require its contractors to take, commercially reasonable steps to protect the Premises during the performance of any Tenant Improvements, including covering or temporarily removing any window coverings so as to guard against dust, debris or damage. All Tenant Improvements shall be performed in accordance with Article 17 of the Lease; provided that, notwithstanding anything in the Lease or this Work Letter to the contrary, in the event of a conflict between this Work Letter and Article 17 of the Lease, the terms of this Work Letter shall govern.

2.1 Work Plans. Tenant shall prepare and submit to Landlord for approval schematics covering the Tenant Improvements prepared in conformity with the applicable provisions of this Work Letter (the "Draft Schematic Plans"). The Draft Schematic Plans shall contain sufficient information and detail to accurately describe the proposed design to Landlord and such other

information as Landlord may reasonably request. Landlord shall notify Tenant in writing within ten (10) business days after receipt of the Draft Schematic Plans whether Landlord approves or objects to the Draft Schematic Plans and of the manner, if any, in which the Draft Schematic Plans are unacceptable. Landlord's failure to respond within such ten (10) business day period shall be deemed approval by Landlord. If Landlord reasonably objects to the Draft Schematic Plans, then Tenant shall revise the Draft Schematic Plans and cause Landlord's objections to be remedied in the revised Draft Schematic Plans. Tenant shall then resubmit the revised Draft Schematic Plans to Landlord for approval, such approval not to be unreasonably withheld, conditioned or delayed. Landlord's approval of or objection to revised Draft Schematic Plans and Tenant's correction of the same shall be in accordance with this Section until Landlord has approved the Draft Schematic Plans in writing or been deemed to have approved them. The iteration of the Draft Schematic Plans that is approved or deemed approved by Landlord without objection shall be referred to herein as the "Approved Schematic Plans."

2.2 Construction Plans. Tenant shall prepare final plans and specifications for the Tenant Improvements that (a) are consistent with and are logical evolutions of the Approved Schematic Plans and (b) incorporate any other Tenant-requested (and Landlord-approved) Changes (as defined below). As soon as such final plans and specifications ("Construction Plans") are completed, Tenant shall deliver the same to Landlord for Landlord's approval, which approval shall not be unreasonably withheld, conditioned or delayed. All such Construction Plans shall be submitted by Tenant to Landlord in electronic .pdf, CADD and full-size hard copy formats, and shall be approved or disapproved by Landlord within ten (10) business days after delivery to Landlord. Landlord's failure to respond within such ten (10) business day period shall be deemed approval by Landlord. If the Construction Plans are disapproved by Landlord, then Landlord shall notify Tenant in writing of its objections to such Construction Plans, and the parties shall confer and negotiate in good faith to reach agreement on the Construction Plans. Promptly after the Construction Plans are approved by Landlord and Tenant, two (2) copies of such Construction Plans shall be initialed and dated by Landlord and Tenant, and Tenant shall promptly submit such Construction Plans to all appropriate Governmental Authorities for approval. The Construction Plans so approved, and all change orders specifically permitted by this Work Letter, are referred to herein as the "Approved Plans."

2.3 Changes to the Tenant Improvements. Any changes to the Approved Plans (each, a "Change") shall be requested and instituted in accordance with the provisions of this Article 2 and shall be subject to the written approval of the non-requesting party in accordance with this Work Letter.

(a) Change Request. Either Landlord or Tenant may request Changes after Landlord approves the Approved Plans by notifying the other party thereof in writing in substantially the same form as the MA standard change order form (a "Change Request"), which Change Request shall detail the nature and extent of any requested Changes, including (a) the Change, (b) the party required to perform the Change and (c) any modification of the Approved Plans and the Schedule, as applicable, necessitated by the Change. If the nature of a Change requires revisions to the Approved Plans, then the requesting party shall be solely responsible for the cost and expense of such revisions and any increases in the cost of the Tenant Improvements

as a result of such Change. Change Requests shall be signed by the requesting party's Authorized Representative.

(b) Approval of Changes. All Change Requests shall be subject to the other party's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed. The non-requesting party shall have five (5) business days after receipt of a Change Request to notify the requesting party in writing of the non-requesting party's decision either to approve or object to the Change Request. The non-requesting party's failure to respond within such five (5) business day period shall be deemed approval by the non-requesting party.

2.4 Preparation of Estimates. Tenant shall, before proceeding with any Change, using its best efforts, prepare as soon as is reasonably practicable (but in no event more than five (5) business days after delivering a Change Request to Landlord or receipt of a Change Request) an estimate of the increased costs or savings that would result from such Change, as well as an estimate of such Change's effects on the Schedule. Landlord shall have five (5) business days after receipt of such information from Tenant to (a) in the case of a Tenant-initiated Change Request, approve or reject such Change Request in writing, or (b) in the case of a Landlord-initiated Change Request, notify Tenant in writing of Landlord's decision either to proceed with or abandon the Landlord-initiated Change Request.

2.5 Quality Control Program; Coordination. Tenant shall provide Landlord with information regarding the following (together, the "QCP"): (a) Tenant's general contractor's quality control program and (b) evidence of subsequent monitoring and action plans. The QCP shall be subject to Landlord's reasonable review and approval and shall specifically address the Tenant Improvements. Tenant shall ensure that the QCP is regularly implemented on a scheduled basis and shall provide Landlord with reasonable prior notice and access to attend all inspections and meetings between Tenant and its general contractor. At the conclusion of the Tenant Improvements, Tenant shall deliver the quality control log to Landlord, which shall include all records of quality control meetings and testing and of inspections held in the field, including inspections relating to concrete, steel roofing, piping pressure testing and system commissioning.

3. Completion of Tenant Improvements. Tenant, at its sole cost and expense (except for the TI Allowance), shall perform and complete the Tenant Improvements in all respects (a) in substantial conformance with the Approved Plans, (b) otherwise in compliance with provisions of the Lease and this Work Letter and (c) in accordance with Applicable Laws, the requirements of Tenant's insurance carriers, the requirements of Landlord's insurance carriers (to the extent Landlord provides its insurance carriers' requirements to Tenant) and the board of fire underwriters having jurisdiction over the Premises. The Tenant Improvements shall be deemed completed at such time as Tenant shall furnish to Landlord (t) evidence satisfactory to Landlord that (i) all Tenant Improvements have been completed and paid for in full (which shall be evidenced by the architect's certificate of completion and the general contractor's and each subcontractor's and material supplier's final unconditional waivers and releases of liens, each in a form acceptable to Landlord and complying with Applicable Laws, and a Certificate of Substantial Completion in the form of the American Institute of Architects document G704, executed by the project architect and the general contractor, together with a statutory notice of substantial completion from the general contractor), (ii) all Tenant Improvements have been

accepted by Landlord, (iii) any and all liens related to the Tenant Improvements have either been discharged of record (by payment, bond, order of a court of competent jurisdiction or otherwise) or waived by the party filing such lien and (iv) no security interests relating to the Tenant Improvements are outstanding, (u) all certifications and approvals with respect to the Tenant Improvements that may be required from any Governmental Authority and any board of fire underwriters or similar body for the use and occupancy of the Premises (including a certificate of occupancy (or its substantial equivalent) for the Premises for the Permitted Use), (v) certificates of insurance required by the Lease to be purchased and maintained by Tenant, (w) an affidavit from Tenant's architect certifying that all work performed in, on or about the Premises is in accordance with the Approved Plans, (x) complete "as built" drawing print sets, project specifications and shop drawings and electronic CADD files on disc (showing the Tenant Improvements as an overlay on the Building "as built" plans (provided that Landlord provides the Building "as-built" plans provided to Tenant) of all contract documents for work performed by their architect and engineers in relation to the Tenant Improvements, (y) a commissioning report prepared by a licensed, qualified commissioning agent hired by Tenant and approved by Landlord for all new or affected mechanical, electrical and plumbing systems (which report Landlord may hire a licensed, qualified commissioning agent to peer review, and whose reasonable recommendations Tenant's commissioning agent shall perform and incorporate into a revised report) and (z) such other "close out" materials as Landlord reasonably requests consistent with Landlord's own requirements for its contractors, such as copies of manufacturers' warranties, operation and maintenance manuals and the like.

4. Insurance.

4.1 Property Insurance. At all times during the period beginning with commencement of construction of the Tenant Improvements and ending with final completion of the Tenant Improvements, Tenant shall maintain, or cause to be maintained (in addition to the insurance required of Tenant pursuant to the Lease), property insurance insuring Landlord and the Landlord Parties, as their interests may appear. Such policy shall, on a completed replacement cost basis for the full insurable value at all times, insure against loss or damage by fire, vandalism and malicious mischief and other such risks as are customarily covered by the so-called "broad form extended coverage endorsement" upon all Tenant Improvements and the general contractor's and any subcontractors' machinery, tools and equipment, all while each forms a part of, or is contained in, the Tenant Improvements or any temporary structures on the Premises, or is adjacent thereto; provided that, for the avoidance of doubt, insurance coverage with respect to the general contractor's and any subcontractors' machinery, tools and equipment shall be carried on a primary basis by such general contractor or the applicable subcontractor(s). Tenant agrees to pay any deductible, and Landlord is not responsible for any deductible, for a claim under such insurance.

4.2 Workers' Compensation Insurance. At all times during the period of construction of the Tenant Improvements, Tenant shall, or shall cause its contractors or subcontractors to, maintain statutory workers' compensation insurance as required by Applicable Laws.

4.3 Waivers of Subrogation. Any insurance provided pursuant to this Article shall waive subrogation against the Landlord Parties and Tenant shall hold harmless and indemnify the

Landlord Parties for any loss or expense incurred as a result of a failure to obtain such waivers of subrogation from insurers.

5. Liability. Tenant assumes sole responsibility and liability for any and all injuries or the death of any persons, including Tenant's contractors and subcontractors and their respective employees, agents and invitees, and for any and all damages to property arising from any act or omission on the part of Tenant, Tenant's contractors or subcontractors, or their respective employees, agents and invitees in the prosecution of the Tenant Improvements. Tenant agrees to Indemnify the Landlord Indemnitees from and against all Claims due to, because of or arising from any and all such injuries, death or damage, whether real or alleged, and Tenant and Tenant's contractors and subcontractors shall assume and defend at their sole cost and expense all such Claims; provided, however, that nothing contained in this Work Letter shall be deemed to Indemnify Landlord from or against liability to the extent arising directly from Landlord's negligence or willful misconduct. Any deficiency in design or construction of the Tenant Improvements shall be solely the responsibility of Tenant, notwithstanding the fact that Landlord may have approved of the same in writing.

6. TI Allowance.

6.1. Application of TI Allowance. Landlord shall contribute the TI Allowance and any Excess TI Costs advanced by Tenant to Landlord toward the costs and expenses incurred in connection with the performance of the Tenant Improvements, in accordance with Article 4 of the Lease. If the entire TI Allowance is not applied toward or reserved for the costs of the Tenant Improvements, then Tenant shall not be entitled to a credit of such unused portion of the TI Allowance. If the entire Excess TI Costs advanced by Tenant to Landlord are not applied toward the costs of the Tenant Improvements, then Landlord shall promptly return such excess to Tenant following completion of the Tenant Improvements. Tenant may apply the TI Allowance for the payment of construction and other costs in accordance with the terms and provisions of the Lease.

6.2. Approval of Budget for the Tenant Improvements. Notwithstanding anything to the contrary set forth elsewhere in this Work Letter or the Lease, Landlord shall not have any obligation to expend any portion of the TI Allowance until Landlord and Tenant shall have approved in writing the budget for the Tenant Improvements (the "Approved Budget"). Prior to Landlord's approval of the Approved Budget, Tenant shall pay all of the costs and expenses incurred in connection with the Tenant Improvements as they become due. Landlord shall not be obligated to reimburse Tenant for costs or expenses relating to the Tenant Improvements that exceed the amount of the TI Allowance. Landlord shall not unreasonably withhold, condition or delay its approval of any budget for Tenant Improvements that is proposed by Tenant.

6.3. Fund Requests. Upon submission by Tenant to Landlord as of or prior to the TI Deadline of (a) a statement (a "Fund Request") setting forth the total amount of the TI Allowance requested, (b) a summary of the Tenant Improvements performed using AIA standard form Application for Payment (G 702) executed by the general contractor and by the architect, (c) invoices from the general contractor, the architect, and any subcontractors, material suppliers and other parties requesting payment with respect to the amount of the TI Allowance then being requested, and (d) unconditional lien releases from the general contractor and each subcontractor

and material supplier with respect to previous payments made by either Landlord or Tenant for the Tenant Improvements in a form acceptable to Landlord and complying with Applicable Laws and (e) conditional lien releases from the general contractor and each subcontractor and material supplier with respect to the Tenant Improvements performed that correspond to the Fund Request each in a form acceptable to Landlord and complying with Applicable Laws, then Landlord shall, within thirty (30) days following receipt by Landlord of a Fund Request and the accompanying materials required by this Section, pay to (as elected by Landlord) the applicable contractors, subcontractors and material suppliers or Tenant (for reimbursement for payments made by Tenant to such contractors, subcontractors or material suppliers either prior to Landlord's approval of the Approved TI Budget or as a result of Tenant's decision to pay for the Tenant Improvements itself and later seek reimbursement from Landlord in the form of one lump sum payment in accordance with the Lease and this Work Letter), the amount of Tenant Improvement costs set forth in such Fund Request or Landlord's pari passu share thereof if Excess TI Costs exist based on the Approved Budget; provided, however, that Landlord shall not be obligated to make any payments under this Section until the budget for the Tenant Improvements is approved in accordance with Section 6.2, and any Fund Request under this Section shall be submitted as of or prior to the TI Deadline and shall be subject to the payment limits set forth in Section 6.2 above and Article 4 of the Lease. Notwithstanding anything in this Section to the contrary, Tenant shall not submit a Fund Request after the TI Deadline or more often than every thirty (30) days. Any additional Fund Requests submitted by Tenant after the TI Deadline or more often than every thirty (30) days shall be void and of no force or effect.

6.4. Accrual Information. In addition to the other requirements of this Section 6, Tenant shall, no later than the second (2nd) business day of each month until the Tenant Improvements are complete, provide Landlord with an estimate of (a) the percentage of design and other soft cost work that has been completed, (b) design and other soft costs spent through the end of the previous month, both from commencement of the Tenant Improvements and solely for the previous month, (c) the percentage of construction and other hard cost work that has been completed, (d) construction and other hard costs spent through the end of the previous month, both from commencement of the Tenant Improvements and solely for the previous month, and (e) the date of Substantial Completion of the Tenant Improvements.

7. Miscellaneous.

7.1. Incorporation of Lease Provisions. Sections 40.6 through 40.19 of the Lease are incorporated into this Work Letter by reference, and shall apply to this Work Letter in the same way that they apply to the Lease.

7.2. General. Except as otherwise set forth in the Lease or this Work Letter, this Work Letter shall not apply to improvements performed in any additional premises added to the Premises at any time or from time to time, whether by any options under the Lease or otherwise; or to any portion of the Premises or any additions to the Premises in the event of a renewal or extension of the original Term, whether by any options under the Lease or otherwise, unless the Lease or any amendment or supplement to the Lease expressly provides that such additional premises are to be delivered to Tenant in the same condition as the initial Premises.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Work Letter to be effective on the date first above written.

LANDLORD:

BMR-WAPLES LP,
a Delaware limited partnership

By: /s/ Marie Lewis
Name: Marie Lewis
Title: Vice President, Legal

TENANT:

SGI-DNA, INC.,
a Delaware corporation

By: /s/ Todd R. Nelson
Name: Todd R. Nelson
Title: CEO

EXHIBIT B-1

TENANT WORK INSURANCE SCHEDULE

Tenant shall be responsible for requiring all of Tenant contractors doing construction or renovation work to purchase and maintain such insurance as shall protect it from the claims set forth below which may arise out of or result from any Tenant Work whether such Tenant Work is completed by Tenant or by any Tenant contractors or by any person directly or indirectly employed by Tenant or any Tenant contractors, or by any person for whose acts Tenant or any Tenant contractors may be liable:

1. Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Tenant Work to be performed.
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees under any applicable employer's liability law.
3. Claims for damages because of bodily injury, or death of any person other than Tenant's or any Tenant contractors' employees.
4. Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by Tenant or any Tenant contractors or (b) by any other person.
5. Claims for damages, other than to the Tenant Work itself, because of injury to or destruction of tangible property, including loss of use therefrom.
6. Claims for damages because of bodily injury or death of any person or property damage arising from the ownership, maintenance or use of any motor vehicle.

Tenant contractors' Commercial General Liability Insurance shall include premises/operations (including explosion, collapse and underground coverage if such Tenant Work involves any underground work), elevators, independent contractors, products and completed operations, and blanket contractual liability on all written contracts, all including broad form property damage coverage.

Tenant contractors' Commercial General, Automobile, Employers and Umbrella Liability Insurance shall be written for not less than limits of liability as follows:

- a. Commercial General Liability:
Bodily Injury and Property Damage
- Not less than (a) for the general contractor, \$2,000,000 per occurrence and \$5,000,000 general aggregate, with \$5,000,000 products and completed operations aggregate, and (b) for all other Contractors and subcontractors, \$1,000,000 per occurrence and \$2,000,000 general aggregate, with \$2,000,000 products and completed operations aggregate
- b. Commercial Automobile Liability:
Bodily Injury and Property Damage
- Coverage for liability arising from the use or operation of any auto on behalf of Tenant or invited by Tenant (including those owned, hired, rented, leased, borrowed, scheduled or non-owned). Coverage shall be on a broad-based occurrence form in an amount not less than \$2,000,000 combined single limit per accident. Such coverage shall apply to all vehicles and persons, whether accessing the property with active or passive consent
- c. Employer's Liability:
- | | |
|-------------------------|-------------|
| Each Accident | \$1,000,000 |
| Disease — Policy Limit | \$1,000,000 |
| Disease — Each Employee | \$1,000,000 |
- d. Umbrella Liability:
Bodily Injury and Property Damage
- (Excess of coverages a, b and c above) of not less than \$5,000,000 per occurrence / aggregate
- e. Workers' Compensation:
- As required by Applicable Laws

All subcontractors for Tenant contractors shall carry the same coverages and limits as specified above, unless different limits are reasonably approved by Landlord. The foregoing policies shall contain a provision that coverages afforded under the policies shall not be canceled or not renewed until at least thirty (30) days' prior written notice has been given to the Landlord. Certificates of insurance including required endorsements showing such coverages to be in force shall be filed with Landlord prior to the commencement of any Tenant Work and prior to each renewal. Coverage for completed operations must be maintained for the lesser of ten (10) years and the applicable statute of repose following completion of the Tenant Work, and certificates evidencing this coverage must be provided to Landlord. The minimum A.M. Best's rating of each insurer shall be A- VII. the Landlord Parties shall be named as an additional insureds under Tenant contractors' Commercial General Liability, Commercial Automobile Liability, Umbrella

Liability and, to the extent required by the Lease, the Work Letter or this Exhibit, Pollution Legal Liability Insurance policies as respects liability arising from work or operations performed, or ownership, maintenance or use of any autos, by or on behalf of such contractors. Each contractor and its insurers shall provide waivers of subrogation with respect to all insurance required by the Lease, the Work Letter or this Exhibit.

If any contractor's work involves the handling or removal of asbestos, lead or other Hazardous Materials (as determined by Landlord in its sole and absolute discretion), such contractor shall also carry Pollution Legal Liability insurance. Such coverage shall include bodily injury, sickness, disease, death or mental anguish or shock sustained by any person; property damage, including physical injury to or destruction of tangible property (including the resulting loss of use thereof), clean-up costs and the loss of use of tangible property that has not been physically injured or destroyed; and defense costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such damages. Coverage shall apply to both sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water. Claims-made coverage is permitted, provided the policy retroactive date is continuously maintained prior to the Term Commencement Date, and coverage is continuously maintained during all periods in which Tenant occupies the Premises. Coverage shall be maintained with limits of not less than \$1,000,000 per incident with a \$2,000,000 policy aggregate.

EXHIBIT C

**ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE
AND TERM EXPIRATION DATE**

THIS ACKNOWLEDGEMENT OF TERM COMMENCEMENT DATE AND TERM EXPIRATION DATE is entered into as of [____], 20[____], with reference to that certain Lease (the "Lease") dated as of [____], 20[____], by SGI-DNA, INC., a Delaware corporation ("Tenant"), in favor of BMR-WAPLES LP, a Delaware limited partnership ("Landlord"). All capitalized terms used herein without definition shall have the meanings ascribed to them in the Lease.

Tenant hereby confirms the following:

1. Tenant accepted possession of the Premises for construction of improvements or the installation of personal or other property on [____], 20[____], and for use in accordance with the Permitted Use on [____], 20[____]. Tenant first occupied the Premises for the Permitted Use on [____], 20[____].
2. The Premises are in good order, condition and repair.
3. The Tenant Improvements are Substantially Complete.
4. All conditions of the Lease to be performed by Landlord as a condition to the full effectiveness of the Lease have been satisfied, and Landlord has fulfilled all of its duties in the nature of inducements offered to Tenant to lease the Premises.
5. In accordance with the provisions of Article 4 of the Lease, the Term Commencement Date is [____], 20[____], and, unless the Lease is terminated prior to the Term Expiration Date pursuant to its terms, the Term Expiration Date shall be [____], 20[____].
6. The Lease is in full force and effect, and the same represents the entire agreement between Landlord and Tenant concerning the Premises[, except [_____]].
7. Tenant has no existing defenses against the enforcement of the Lease by Landlord, and there exist no offsets or credits against Rent owed or to be owed by Tenant.
8. The obligation to pay Rent is presently in effect and all Rent obligations on the part of Tenant under the Lease commenced to accrue on [____], 20[____], with Base Rent payable on the dates and amounts set forth in the chart below:

Dates	Approximate Square Feet of Rentable Area	Base Rent per Square Foot of Rentable Area	Monthly Base Rent	Annual Base Rent
[__]/[__]/[__]- [__]/[__]/[__]	[]	[\$____] [monthly][OR][annually]	[]	[]

9. The undersigned Tenant has not made any prior assignment, transfer, hypothecation or pledge of the Lease or of the rents thereunder or sublease of the Premises or any portion thereof.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, Tenant has executed this Acknowledgment of Term Commencement Date and Term Expiration Date as of the date first written above.

TENANT:

SGI-DNA, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____

EXHIBIT D
DESIGNATED FUME HOODS

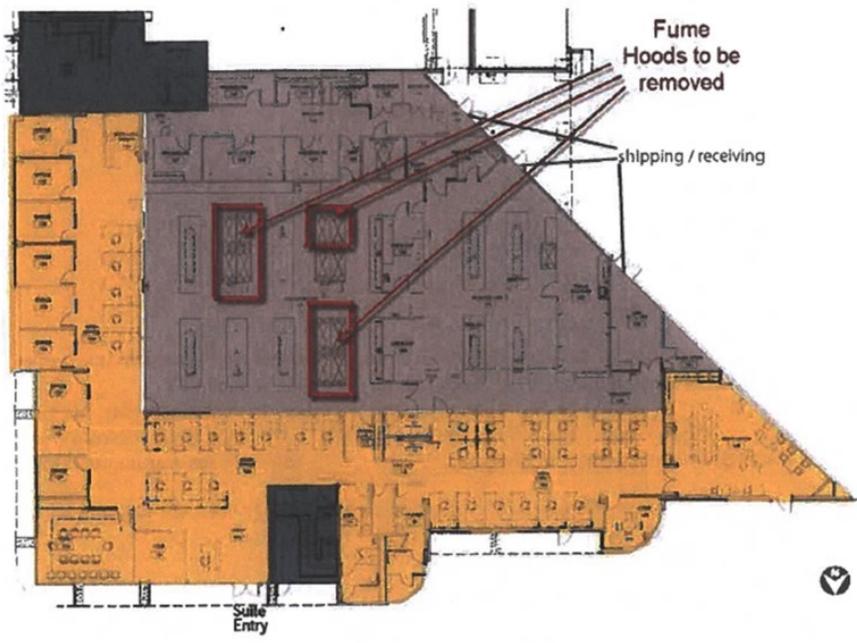


EXHIBIT E

FORM OF LETTER OF CREDIT

[On letterhead or L/C letterhead of Issuer]

LETTER OF CREDIT

Date: _____, 20 ____

_____ (the "Beneficiary")

Attention: _____

L/C. No.:

Loan No. :

Ladies and Gentlemen:

We establish in favor of Beneficiary our irrevocable and unconditional Letter of Credit numbered as identified above (the "L/C") for an aggregate amount of \$____, expiring at __:00 p.m. on _____ or, if such day is not a Banking Day, then the next succeeding Banking Day (such date, as extended from time to time, the "Expiry Date"). "Banking Day" means a weekday except a weekday when commercial banks in _____ are authorized or required to close.

We authorize Beneficiary to draw on us (the "Issuer") for the account of _____ (the "Account Party"), under the terms and conditions of this L/C.

Funds under this L/C are available by presenting the following documentation (the "Drawing Documentation"): (a) the original L/C and (b) a sight draft substantially in the form of Attachment 1, with blanks filled in and bracketed items provided as appropriate. No other evidence of authority, certificate, or documentation is required.

Drawing Documentation must be presented at Issuer's office at _____ on or before the Expiry Date by personal presentation, courier or messenger service, or fax. Presentation by fax shall be effective upon electronic confirmation of transmission as evidenced by a printed report from the sender's fax machine. After any fax presentation, but not as a condition to its effectiveness, Beneficiary shall with reasonable promptness deliver the original Drawing Documentation by any other means. Issuer will on request issue a receipt for Drawing Documentation.

We agree, irrevocably, and irrespective of any claim by any other person, to honor drafts drawn under and in conformity with this L/C, within the maximum amount of this L/C, presented to us on or before the Expiry Date, provided we also receive (on or before the Expiry Date) any other Drawing Documentation this L/C requires.

We shall pay this L/C only from our own funds by check or wire transfer, in compliance with the Drawing Documentation.

If Beneficiary presents proper Drawing Documentation to us on or before the Expiry Date, then we shall pay under this L/C at or before the following time (the "Payment Deadline"): (a) if presentment is made at or before noon of any Banking Day, then the close of such Banking Day; and (b) otherwise, the close of the next Banking Day. We waive any right to delay payment beyond the Payment Deadline. If we determine that Drawing Documentation is not proper, then we shall so advise Beneficiary in writing, specifying all grounds for our determination, within one Banking Day after the Payment Deadline.

Partial drawings are permitted. This L/C shall, except to the extent reduced thereby, survive any partial drawings.

We shall have no duty or right to inquire into the validity of or basis for any draw under this L/C or any Thawing Documentation. We waive any defense based on fraud or any claim of fraud.

The Expiry Date shall automatically be extended by one year (but never beyond ____ (the "Outside Date")) unless, on or before the date 90 days before any Expiry Date, we have given Beneficiary notice that the Expiry Date shall not be so extended (a "Nonrenewal Notice"). We shall promptly upon request confirm any extension of the Expiry Date under the preceding sentence by issuing an amendment to this L/C, but such an amendment is not required for the extension to be effective. We need not give any notice of the Outside Date.

Beneficiary may from time to time without charge transfer this L/C, in whole but not in part, to any transferee (the "Transferee"). Issuer shall look solely to Account Party for payment of any fee for any transfer of this L/C. Such payment is not a condition to any such transfer. Beneficiary or Transferee shall consummate such transfer by delivering to Issuer the original of this L/C and a Transfer Notice substantially in the form of Attachment 2, purportedly signed by Beneficiary, and designating Transferee. Issuer shall promptly reissue or amend this L/C in favor of Transferee as Beneficiary. Upon any transfer, all references to Beneficiary shall automatically refer to Transferee, who may then exercise all rights of Beneficiary. Issuer expressly consents to any transfers made from time to time in compliance with this paragraph.

Any notice to Beneficiary shall be in writing and delivered by hand with receipt acknowledged or by overnight delivery service such as FedEx (with proof of delivery) at the above address, or such other address as Beneficiary may specify by written notice to Issuer. A copy of any such notice shall also be delivered, as a condition to the effectiveness of such notice, to: _____ (or such replacement as Beneficiary designates from time to time by written notice).

No amendment that adversely affects Beneficiary shall be effective without Beneficiary's written consent.

This L/C is subject to and incorporates by reference: (a) the International Standby Practices 98 ("ISP 98"); and (b) to the extent not inconsistent with ISP 98, Article 5 of the Uniform Commercial Code of the State of New York.

Very truly yours,

[Issuer Signature]

ATTACHMENT 1 TO EXHIBIT E
FORM OF SIGHT DRAFT
[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer]

SIGHT DRAFT

AT SIGHT, pay to the Order of _____, the sum of _____ United States Dollars (\$_____). Drawn under [Issuer] Letter of Credit No. _____ dated _____

[Issuer is hereby directed to pay the proceeds of this Sight Draft solely to the following account:
_____]

[Name and signature block, with signature or purported signature of Beneficiary]

Date: _____

ATTACHMENT 2 TO EXHIBIT E
FORM OF TRANSFER NOTICE
[BENEFICIARY LETTERHEAD]

TO:

[Name and Address of Issuer] (the "Issuer")

TRANSFER NOTICE

By signing below, the undersigned, Beneficiary (the "Beneficiary") under Issuer's Letter of Credit No. _____ dated _____ (the "L/C"), transfers the L/C to the following transferee (the "Transferee"):

[Transferee Name and Address]

The original L/C is enclosed. Beneficiary directs Issuer to reissue or amend the L/C in favor of Transferee as Beneficiary. Beneficiary represents and warrants that Beneficiary has not transferred, assigned, or encumbered the L/C or any interest in the L/C, which transfer, assignment, or encumbrance remains in effect.

[Name and signature block, with signature or purported signature of Beneficiary]

Date: _____]

EXHIBIT F

RULES AND REGULATIONS

NOTHING IN THESE RULES AND REGULATIONS (“**RULES AND REGULATIONS**”) SHALL SUPPLANT ANY PROVISION OF THE LEASE. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN THESE RULES AND REGULATIONS AND THE LEASE, THE LEASE SHALL PREVAIL.

1. No Tenant Party shall encumber or obstruct the common entrances, lobbies, elevators, sidewalks and stairways of the Building(s) or the Project or use them for any purposes other than ingress or egress to and from the Building(s) or the Project.
2. Except as specifically provided in the Lease, no sign, placard, picture, advertisement, name or notice shall be installed or displayed on any part of the outside of the Premises or the Building(s) without Landlord’s prior written consent. Landlord shall have the right to remove, at Tenant’s sole cost and expense and without notice, any sign installed or displayed in violation of this rule.
3. If Landlord objects in writing to any curtains, blinds, shades, screens, hanging plants or other similar objects attached to or used in connection with any window or door of the Premises or placed on any windowsill, and (a) such window, door or windowsill is visible from the exterior of the Premises and (b) such curtain, blind, shade, screen, hanging plant or other object is not included in plans approved by Landlord, then Tenant shall promptly remove such curtains, blinds, shades, screens, hanging plants or other similar objects at its sole cost and expense.
4. No deliveries shall be made that impede or interfere with other tenants in or the operation of the Project. Movement of furniture, office equipment or any other large or bulky material(s) through the Common Area shall be restricted to such hours as Landlord may designate and shall be subject to reasonable restrictions that Landlord may impose. A temporary loading permit is required for all temporary parking and such permit, which permit Landlord may provide in its sole and absolute discretion.
5. Tenant shall not place a load upon any floor of the Premises that exceeds the load per square foot that (a) such floor was designed to carry or (b) is allowed by Applicable Laws. Fixtures and equipment that cause noises or vibrations that may be transmitted to the structure of the Building(s) to such a degree as to be objectionable to other tenants shall be placed and maintained by Tenant, at Tenant’s sole cost and expense, on vibration eliminators or other devices sufficient to eliminate such noises and vibrations to levels reasonably acceptable to Landlord and the affected tenants of the Project.
6. Tenant shall not use any method of HVAC other than that present at the Project and serving the Premises as of the Execution Date.
7. Tenant shall not install any radio, television or other antennae; cell or other communications equipment; or other devices on the roof or exterior walls of the Premises except in accordance with the Lease. Tenant shall not interfere with radio, television or other digital or electronic communications at the Project or elsewhere.

8. Canvassing, peddling, soliciting and distributing handbills or any other written material within, on or around the Project (other than within the Premises) are prohibited. Tenant shall cooperate with Landlord to prevent such activities by any Tenant Party.
9. Tenant shall store all of its trash, garbage and Hazardous Materials in receptacles within its Premises or in receptacles designated by Landlord outside of the Premises. Tenant shall not place in any such receptacle any material that cannot be disposed of in the ordinary and customary manner of trash, garbage and Hazardous Materials disposal. Any Hazardous Materials transported through Common Area shall be held in secondary containment devices. Tenant shall be responsible, at its sole cost and expense, for Tenant's removal of its trash, garbage and Hazardous Materials. Tenant is encouraged to participate in the waste removal and recycling program in place at the Project.
10. The Premises shall not be used for lodging or for any improper, immoral or objectionable purpose. No cooking shall be done or permitted in the Premises; provided, however, that Tenant may use (a) equipment approved in accordance with the requirements of insurance policies that Landlord or Tenant is required to purchase and maintain pursuant to the Lease for brewing coffee, tea, hot chocolate and similar beverages, (b) microwave ovens for employees' use and (c) equipment shown on Tenant Improvement plans approved by Landlord; provided, further, that any such equipment and microwave ovens are used in accordance with Applicable Laws.
11. Tenant shall not, without Landlord's prior written consent, use the name of the Project, if any, in connection with or in promoting or advertising Tenant's business except as Tenant's address.
12. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any Governmental Authority.
13. Tenant assumes any and all responsibility for protecting the Premises from theft, robbery and pilferage, which responsibility includes keeping doors locked and other means of entry to the Premises closed.
14. Tenant shall not modify any locks to the Premises without Landlord's prior written consent, which consent Landlord shall not unreasonably withhold, condition or delay. Tenant shall furnish Landlord with copies of keys, pass cards or similar devices for locks to the Premises.
15. Tenant shall cooperate and participate in all reasonable security programs affecting the Premises.
16. Tenant shall not permit any animals in the Project, other than for service animals or for use in laboratory experiments.
17. Bicycles shall not be taken into the Building(s) (including the elevators and stairways of the Building) except into areas designated by Landlord.

18. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags or other substances shall be deposited therein.
19. Discharge of industrial sewage shall only be permitted if Tenant, at its sole expense, first obtains all necessary permits and licenses therefor from all applicable Governmental Authorities.
20. Smoking is prohibited at the Project.
21. The Project's hours of operation are currently 24 hours a day seven days a week.
22. Tenant shall comply with all orders, requirements and conditions now or hereafter imposed by Applicable Laws or Landlord ("Waste Regulations") regarding the collection, sorting, separation and recycling of waste products, garbage, refuse and trash generated by Tenant (collectively, "Waste Products"), including (without limitation) the separation of Waste Products into receptacles reasonably approved by Landlord and the removal of such receptacles in accordance with any collection schedules prescribed by Waste Regulations.
23. Tenant, at Tenant's sole cost and expense, shall cause the Premises to be exterminated on a monthly basis to Landlord's reasonable satisfaction and shall cause all portions of the Premises used for the storage, preparation, service or consumption of food or beverages to be cleaned daily in a manner reasonably satisfactory to Landlord, and to be treated against infestation by insects, rodents and other vermin and pests whenever there is evidence of any infestation. Tenant shall not permit any person to enter the Premises or the Project for the purpose of providing such extermination services, unless such persons have been approved by Landlord. If requested by Landlord, Tenant shall, at Tenant's sole cost and expense, store any refuse generated in the Premises by the consumption of food or beverages in a cold box or similar facility.
24. If Tenant desires to use any portion of the Common Area for a Tenant-related event, Tenant must notify Landlord in writing at least thirty (30) days prior to such event on the form attached as Attachment 1 to this Exhibit, which use shall be subject to Landlord's prior written consent, not to be unreasonably withheld, conditioned or delayed. Notwithstanding anything in this Lease or the completed and executed Attachment to the contrary, Tenant shall be solely responsible for setting up and taking down any equipment or other materials required for the event, and shall promptly pick up any litter and report any property damage to Landlord related to the event. Any use of the Common Area pursuant to this Section shall be subject to the provisions of Article 28 of the Lease.

Landlord may waive any one or more of these Rules and Regulations for the benefit of Tenant or any other tenant, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of Tenant or any other tenant, nor prevent Landlord from thereafter enforcing any such Rules and Regulations against any or all of the tenants of the Project, including Tenant. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in part, the terms covenants, agreements and conditions of the Lease. Landlord reserves the right to make such other and reasonable additional rules and regulations as, in its judgment, may from time to time be needed for safety and security, the care and cleanliness of the Project, or the preservation of good order therein; provided, however, that

Tenant shall not be obligated to adhere to such additional rules or regulations until Landlord has provided Tenant with written notice thereof. Tenant agrees to abide by these Rules and Regulations and any such additional rules and regulations issued or adopted by Landlord. Tenant shall be responsible for the observance of these Rules and Regulations by all Tenant Parties.

ATTACHMENT 1 TO EXHIBIT F
REQUEST FOR USE OF COMMON AREA
REQUEST FOR USE OF COMMON AREA

Date of Request: _____

Landlord/Owner: _____

Tenant/Requestor: _____

Property Location: _____

Event Description: _____

Proposed Plan for Security & Cleaning: _____

Date of Event: _____

Hours of Event: (to include set-up and take down): _____

Location at Property (see attached map): _____

Number of Attendees: _____

Open to the Public? YES NO

Food and/or Beverages? YES NO

If YES:

Will food be prepared on site? YES NO

Please describe: _____

Will alcohol be served? YES NO

Please describe: _____

Will attendees be charged for alcohol? YES NO

Is alcohol license or permit required? YES NO

Does caterer have alcohol license or permit: YES NO N/A

Other Amenities (tent, booths, band, food trucks, bounce house, etc.): _____

Other Event Details or Special Circumstances: _____

The undersigned certifies that the foregoing is true, accurate and complete and he/she is duly authorized to sign and submit this request on behalf of the Tenant/Requestor named above.

[INSERT NAME OF TENANT/REQUESTOR]

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT G

FF&E

[See attached]

9535 Waples Furniture Inventory (Vacant Suite 100)

Reception Area

- 1 wood reception desk with built in drawers
- 1 desk chair
- 1 telephone (Cisco IP 7945)
- 1 computer screen (HPO 11925 SN CW421050.6)
- 3. hands free color video monitor/intercom (Aiphone JF-2MED)
- 1 release button to open rear door (part of Aiphone system)

Large Conference Room

- 1 large rectangle wood conference room table
- 12 black leather conference room chairs
- 1 Polycom (Cisco IP Conference Station Model 7937)

Office 1.

No contents

Office 2

- 1 desk
- 1 side chair (Friant - Axiom White - Model B-J-S-AW)
- 1 telephone (Cisco IP Phone 7945)
- 1 keyboard holder (www.biofit.com)

Office 3

- 1 desk
- 1 side chair (Friant - Axiom White - Model B-J-S-AW)
- 1 telephone (Cisco IP Phone 7945)

Office 4

- 1 desk
- 1 telephone (Cisco IP Phone 7945)

Office 5

- 1. desk
- 1 desk chair
- 1 telephone (Cisco IP Phone SPA 52SG)

Office 6

- 1 beige 4 drawer metal file cabinet with 3 keys
- 1 black 4 drawer metal file cabinet with a broken lock (drawers don't open)

Office 7

- 1. desk
- 2 side chairs (Friant - Axiom White - Model B-J-S-AW)
- 1. telephone (Cisco IP SPA 504G)
- 1 trash bin
- 1 recycle bin

Office 8

- 1 desk
- 2 side chairs (Friant - Axiom White - Model 13-J-S-AW)

Office 9

- 1 desk
- 2 side chairs (Friant - Axiom White - Model B-J-S-AW)

Office 10

- 1 desk

Kitchenette

- No contents/No personal property

Small Conference Room

- 1 small round wood conference table
- 4 black leather conference room chairs

Cubicles (with drawers)

- 32 cubicles throughout space in various sizes and configurations
- 17 cubicle black desk chairs
- 17 telephones at cubicle desks (Qty. 16 - Cisco SPASO4G and Qty. 1- Cisco 7945)

Kitchen

- 2 bar height small square tables
- 10 bar stool type chairs
- 2 large/tall bar height square tables
- 2 large rectangle tables
- 1 small rectangle table
- 1 round table
- 16 black kitchen chairs
- 1 black whirlpool refrigerator with freezer on top (SN VS 12068949 - Model: WRT3L9SZYBOO)
- 1 silver and black GE electric stove with vent hood and light

Vivarium

- 2 black metal shelf units

Storage Area 1 (located in the Women's Room handicap stall)

- 1 metal shelf unit

-1 mop bucket and mop

Storage Area 2 (located in the Men's Room handicap stall)

-Misc. carpet stock, ceiling tiles

Server Room

-No contents

Glass Wash Room

- 1 bucket of soap for glass wash unit

- 1 Monitor (ACER)

- 1 HP Compaq hard drive (MXL526047 T) *BMS System installed on hard drive

- 1 metal shelf unit

Misc.

- Tenant's former access card readers are existing – Total 5

- Tenant's former video door station – Total 1 (Airphone)

EXHIBIT H
TENANT'S PROPERTY

None.

H-1

EXHIBIT I

FORM OF ESTOPPEL CERTIFICATE

To: BMR-Waples LP
17190 Bernardo Center Drive
San Diego, California 92128
Attention: Legal Department

BioMed Realty, L.P.
17190 Bernardo Center Drive
San Diego, California 92128

Re: Suite [____] (the "Premises") at 9535 Waples Street, San Diego, California (the "Property.")

The undersigned tenant ("Tenant") hereby certifies to you as follows:

1. Tenant is a tenant at the Property under a lease (the "Lease") for the Premises dated as of [____], 20[____]. The Lease has not been cancelled, modified, assigned, extended or amended [except as follows: [____]] and there are no other agreements, written or oral, affecting or relating to Tenant's lease of the Premises or any other space at the Property. The lease term expires on [____], 20[____].
2. Tenant took possession of the Premises, currently consisting of [____] square feet, on [____], 201 1, and commenced to pay rent on [____], 20[____]. Tenant has full possession of the Premises, has not assigned the Lease or sublet any part of the Premises, and does not hold the Premises under an assignment or sublease[, except as follows: [____]]
3. All base rent, rent escalations and additional rent under the Lease have been paid through [____], 20[____]. There is no prepaid rent[, except \$[____]][, and the amount of security deposit is \$[____]] [in cash][OR][in the form of a letter of credit]]. Tenant currently has no right to any future rent abatement under the Lease.
4. Base rent is currently payable in the amount of \$[____] per month.
5. Tenant is currently paying estimated payments of additional rent of \$[____] per month on account of real estate taxes, insurance, management fees and Common Area maintenance expenses.
6. All work to be performed for Tenant under the Lease has been performed as required under the Lease and has been accepted by Tenant[, except [____]], and all allowances to be paid to Tenant, including allowances for tenant improvements, moving expenses or other items, have been paid.
7. The Lease is in full force and effect, free from default and free from any event that could become a default under the Lease, and Tenant has no claims against the landlord or offsets or defenses against rent, and there are no disputes with the landlord. Tenant has received no notice

of prior sale, transfer, assignment, hypothecation or pledge of the Lease or of the rents payable thereunder[, except [_____].

8. [Tenant has the following expansion rights or options for leasing additional space at the Property: [_____] [OR] [Tenant has no rights or options to purchase the Property.]

9. To Tenant's knowledge, no hazardous wastes have been generated, treated, stored or disposed of by or on behalf of Tenant in, on or around the Premises or the Project in violation of any environmental laws.

10. The undersigned has executed this Estoppel Certificate with the knowledge and understanding that [INSERT NAME OF LANDLORD, PURCHASER OR LENDER, AS APPROPRIATE] or its assignee is [acquiring the Property/making a loan secured by the Property] in reliance on this certificate and that the undersigned shall be bound by this certificate. The statements contained herein may be relied upon by [INSERT NAME OF PURCHASER OR LENDER, AS APPROPRIATE], [LANDLORD], [BioMed Realty, L.P.] [OR] BioMed Realty II LP], [BRE Edison L.P.] [OR] BRE Edison II LP], and any [other]mortgagee of the Property and their respective successors and assigns.

Any capitalized terms not defined herein shall have the respective meanings given in the Lease.

Dated this [____] day of [____], 20[__]

[____],
a [_____]

By: _____
Name: _____
Title: _____

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE (this "Amendment") is entered into as of this 31st day of May, 2019 (the "First Amendment Execution Date"), by and between BMR- WAPLES LP, a Delaware limited partnership ("Landlord"), and SGI-DNA, INC., a Delaware corporation ("Tenant").

RECITALS

- A. WHEREAS, Landlord and Tenant are parties to that certain lease dated as of April 4, 2019 (as the same may have been amended, supplemented or modified from time to time, the "Existing Lease"), whereby Tenant leases certain premises (the "Existing Premises") from Landlord at 9535 Waples Street in San Diego, California (the "Building");
- B. WHEREAS, Landlord desires to lease to Tenant and Tenant desires to lease from Landlord additional premises in the Building;
- C. WHEREAS, Landlord and Tenant desire to extend the term of the Existing Lease; and
- D. WHEREAS, Landlord and Tenant desire to modify and amend the Existing Lease only in the respects and on the conditions hereinafter stated.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant, in consideration of the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound, agree as follows:

1. Definitions. For purposes of this Amendment, capitalized terms shall have the meanings ascribed to them in the Existing Lease unless otherwise defined herein. The Existing Lease, as amended by this Amendment, is referred to collectively herein as the "Lease." From and after the date hereof, the term "Lease," as used in the Existing Lease, shall mean the Existing Lease, as amended by this Amendment.

2. Existing Premises

2.1 Extension Term. The Term of the Existing Lease with respect to the Existing Premises is hereby extended by five (5) months, therefore the term "Term Expiration Date" is hereby modified to mean the date that is sixty-eight (68) months after the actual Term Commencement Date. The period of time from the date that is sixty-three (63) months after the actual Term Commencement Date through the new Term Expiration Date is referred to herein as the "Existing Premises Extension Term."

2.2 Base Rent. Tenant shall pay Base Rent for the Existing Premises during the Existing Premises Extension Term in the then-applicable escalated amounts for the Existing Premises, as calculated in accordance with Section 8.1 of the Lease. For purposes of clarity, prior to the commencement of the Existing Premises Extension Term, Tenant shall continue to

pay Base Rent for the Existing Premises in accordance with the terms and provisions of the Existing Lease.

2.3 Additional Rent. During the Existing Premises Extension Term, Tenant shall continue paying all Additional Rent for the Existing Premises in accordance with the terms and conditions of the Lease.

2.4 Condition of Existing Premises. Tenant acknowledges that (a) it is in possession of and is fully familiar with the condition of the Existing Premises and, notwithstanding anything contained in the Lease to the contrary, agrees to take the same in its condition "as is" as of the first day of the Existing Premises Extension Term, and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Existing Premises for Tenant's continued occupancy for the Existing Premises Extension Term or to pay for any improvements to the Existing Premises, except as may be expressly provided in the Lease.

3. Additional Premises.

3.1 Additional Premises. Effective as of June 1, 2019 (the "Additional Premises Commencement Date"), Landlord hereby leases to Tenant and Tenant hereby leases from Landlord, approximately nine thousand three hundred nine (9,309) square feet of Rentable Area located on the second (2nd) floor of the Building, as more particularly described on Exhibit A attached hereto (the "Additional Premises"). From and after the Additional Premises Commencement Date, the term "Premises" as used in the Lease shall mean the Existing Premises plus the Additional Premises. Tenant shall execute and deliver to Landlord written acknowledgment of the Additional Premises Commencement Date and the Term Expiration Date within ten (10) days after Tenant takes occupancy of the Additional Premises, in the form attached as Exhibit B hereto. Failure to execute and deliver such acknowledgment, however, shall not affect the Additional Premises Commencement Date or Landlord's or Tenant's liability hereunder. Failure by Tenant to obtain validation by any medical review board or other similar governmental licensing of the Additional Premises required for the Permitted Use by Tenant shall not serve to extend the Additional Premises Commencement Date.

3.2 Additional Premises Term. The Term with respect to the Additional Premises (the "Additional Premises Term") shall commence on the Additional Premises Commencement Date and shall expire on the Term Expiration Date (as amended in Section 2.1).

3.3 Base Rent. Tenant shall pay to Landlord as Base Rent for the Additional Premises, commencing on the Additional Premises Commencement Date, the amounts set forth in the chart below, subject to the annual upward rental adjustments provided in Section 8.1 of the Lease (for purposes of clarity, the annual Base Rent adjustment for the Additional Premises shall occur on the same dates that the Base Rent is adjusted for the Existing Premises). For the avoidance of doubt, Base Rent for the Additional Premises shall be in addition to the Base Rent payable by Tenant with respect to the Existing Premises.

Dates	Square Feet of Rentable Area	Base Rent per Square Foot of Rentable Area	Monthly Base Rent	Annual Base Rent
June 1, 2019- May 31, 2020	9,309	\$1.50 monthly	\$13,963.50	\$167,562.00

3.4 **Additional Rent.** Commencing on the Additional Premises Commencement Date, in addition to Additional Rent in connection with the Existing Premises, Tenant shall pay to Landlord any and all Additional Rent in connection with the Additional Premises.

3.5 **TI Allowance.** The first sentence of Section 4.2 of the Existing Lease is hereby amended and restated as follows:

"Tenant shall cause the work (the "Tenant Improvements") described in the Work Letter attached hereto as Exhibit B (the "Work Letter") to be constructed in the Premises pursuant to the Work Letter at a cost to Landlord not to exceed Three Hundred Twenty-Seven Thousand Five Hundred Seventy-Five Dollars (\$327,575) (the "TI Allowance")."

For purposes of clarity, the term "Premises" as used in the immediately preceding amended and restated sentence shall mean the Existing Premises and the Additional Premises collectively, not individually (i.e., the TI Allowance is an aggregate amount that may be applied across the Existing Premises and the Additional Premises collectively, and is not an amount that Tenant is entitled to for each of the Existing Premises and the Additional Premises individually). In no event shall Landlord be obligated to disburse a TI Allowance of more than Three Hundred Twenty-Seven Thousand Five Hundred Seventy-Five Dollars (\$327,575) in the aggregate. Tenant acknowledges that as of the First Amendment Execution Date, Tenant has previously used a portion of the TI Allowance and therefore less than the full TI Allowance remains available for use. Notwithstanding anything to the contrary in the Lease or the Work Letter, (a) Landlord shall not have any obligation to expend any further portion of the TI Allowance until Landlord and Tenant have approved in writing a revised Approved Budget (the "Revised Approved Budget") and (b) prior to Landlord's approval of the Revised Approved Budget, Tenant shall pay all of the costs and expenses incurred in connection with the Tenant Improvements as they become due. From and after the First, Amendment Execution Date, the term "Approved Budget" and "Approved T1 Budget" as used in the Work Letter shall mean the Revised Approved Budget.

3.6 **Work Letter.** For purposes of clarity, notwithstanding Section 7.2 of the Work Letter, the Work Letter shall apply to the Tenant Improvements to be constructed in the Additional Premises and the term "Premises" as used in the Work Letter shall, from and after the First Amendment Execution Date, mean the Existing Premises and the Additional Premises.

3.7 **Insurance.** Prior to entering upon the Additional Premises, Tenant shall furnish to Landlord evidence satisfactory to Landlord that insurance coverages required of Tenant under the provisions of Article 23 of the Lease are in effect, and such entry shall be subject to all the terms and conditions of the Lease. Prior to the Additional Premises Term Commencement Date,

Tenant shall not be permitted to conduct business operations in the Additional Premises or to use the Additional Premises for any purpose other than construction of the Tenant Improvements.

3.8 **Utilities.** Tenant shall pay all utility charges, together with any fees. Surcharges and taxes thereon (with respect to the Additional Premises) for the period beginning on the date that Tenant first accesses the Additional Premises for any reason after the First Amendment Execution Date.

3.9 **Condition of Additional Premises.** Tenant acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of the Additional Premises, the Building or the Project, or with respect to the suitability of the Additional Premises, the Building or the Project for the conduct of Tenant's business. Tenant acknowledges that (a) it is fully familiar with the condition of the Additional Premises and agrees to take the same in its condition "as is" as of the First Amendment Execution Date and (b) Landlord shall have no obligation to alter, repair or otherwise prepare the Additional Premises for Tenant's occupancy or to pay for or construct any improvements to the Premises, except with respect to payment of any remaining TI Allowance. Tenant's taking of possession of the Additional Premises shall, except as otherwise agreed to in writing by Landlord and Tenant, conclusively establish that the Additional Premises, the Building and the Project were at such time in good, sanitary and satisfactory condition and repair. The Additional Premises have not undergone inspection by a Certified Access Specialist.

3.10 **Miscellaneous.** For purposes of clarity, Sections 4.7 and 4.8 of the Existing Lease applied only to the Existing Premises and does not apply to the Additional Premises.

4. **Tenant's Pro Rata Share.** Effective as of the Additional Premises Commencement Date, the chart in Section 2.2 of the Existing Lease is hereby deleted in its entirety and replaced with the following:

Definition or Provision	Means the Following (As of the Additional Premises Commencement Date)
Approximate Rentable Area of Premises	28,103 square feet
Approximate Rentable Area of Project	50,055 square feet
Tenant's Pro Rata Share of Project	56.14%

5. **Additional Premises Base Rent Abatement.** Notwithstanding anything to the contrary contained in the Lease, and so long as no Default by Tenant has occurred, Tenant shall not be required to pay Base Rent (with respect to the Additional Premises only) for the period commencing on the Additional Premises Commencement Date and expiring on August 31, 2020 (such period, the "Additional Premises Free Rent Period"); provided, however, that the total amount of Base Rent abated during the Additional Premises Free Rent Period shall not exceed Two Hundred Ten Thousand Seven Hundred Nine and 22/100 Dollars (\$210,709.22) (the "Additional Premises Free Rent Cap"). During the Additional Premises Free Rent Period, Tenant shall continue to be responsible for the payment of all of Tenant's other Rent obligations under the Lease, including Base Rent for the Existing Premises (except as abated under

Section 8.2 of the Existing Lease), all Additional Rent such as Operating Expenses, the Property Management Fee, and costs of utilities for the Premises. Upon the occurrence of any Default, the Additional Premises Free Rent Period shall immediately expire, and Tenant shall no longer be entitled to any further abatement of Base Rent pursuant to this Section. In the event of any Default that results in termination of the Lease, then, as part of the recovery to which Landlord is entitled pursuant to the Lease, and in addition to any other rights or remedies to which Landlord may be entitled pursuant to the Lease (including Article 31) at law or in equity, Landlord shall be entitled to the immediate recovery, as of the day immediately prior to such termination of the Lease, of the unamortized amount of Base Rent that Tenant would have paid had the Additional Premises Free Rent Period not been in effect.

6. Existing Premises Base Rent Abatement. For purposes of clarity, the Base Rent abatement set forth in Section 8.2 of the Existing Lease shall apply only to the Existing Premises (and not to the Additional Premises).

7. Security Deposit. Effective as of the First Amendment Execution Date, the Security Deposit is hereby increased by Thirteen Thousand Nine Hundred Sixty-Three and 50/100 Dollars (\$13,963.50) (the "Additional Security Deposit") for a total Security Deposit of Seventy-Six Thousand Nine Hundred Sixty-Three and 50/100 (\$76,963.50). Tenant shall deposit with Landlord on or before the First Amendment Execution Date the Additional Security Deposit. The Additional Security Deposit shall become part of the Security Deposit and shall be subject to the terms and conditions of the Lease (including Article 11 of the Lease).

8. Broker. Tenant represents and warrants that it has not dealt with any broker or agent in the negotiation for or the obtaining of this Amendment, other than Kidder Mathews of California, Inc. ("Broker"), and agrees to reimburse, indemnify, save, defend (at Landlord's option and with counsel reasonably acceptable to Landlord, at Tenant's sole cost and expense) and hold harmless the Landlord Indemnitees for, from and against any and all cost or liability for compensation claimed by any such broker or agent, other than Broker, employed or engaged by it or claiming to have been employed or engaged by it. Broker is entitled to a leasing commission in connection with the making of this Amendment, and Landlord shall pay such commission to Broker pursuant to a separate agreement between Landlord and Broker.

9. No Default. Tenant represents, warrants and covenants that, to the best of Tenant's knowledge, Landlord and Tenant are not in default of any of their respective obligations under the Existing Lease and no event has occurred that, with the passage of time or the giving of notice (or both) would constitute a default by either Landlord or Tenant thereunder.

10. Notices. Tenant confirms that, notwithstanding anything in the Lease to the contrary, notices delivered to Tenant pursuant to the Lease should be sent to:

SIG-DNA, Inc.
9535 Waples Street, Suite 100
San Diego, California 92121.

11. Effect of Amendment. Except as modified by this Amendment, the Existing Lease and all the covenants, agreements, terms, provisions and conditions thereof shall remain in full force

and effect and are hereby ratified and affirmed. In the event of any conflict between the terms contained in this Amendment and the Existing Lease, the terms herein contained shall supersede and control the obligations and liabilities of the parties.

12. Successors and Assigns. Each of the covenants, conditions and agreements contained in this Amendment shall inure to the benefit of and shall apply to and be binding upon the parties hereto and their respective heirs, legatees, devisees, executors, administrators and permitted successors and assigns and sublessees. Nothing in this section shall in any way alter the provisions of the Lease restricting assignment or subletting,

13. Miscellaneous. This Amendment becomes effective only upon execution and delivery hereof by Landlord and Tenant. The captions of the paragraphs and subparagraphs in this Amendment are inserted and included solely for convenience and shall not be considered or given any effect in construing the provisions hereof. All exhibits hereto are incorporated herein by reference. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or option for a lease and shall not be effective as a lease, lease amendment or otherwise until execution by and delivery to both Landlord and Tenant.

14. Authority. Tenant guarantees, warrants and represents that the individual or individuals signing this Amendment have the power, authority and legal capacity to sign this Amendment on behalf of and to bind all entities, corporations, partnerships, limited liability companies, joint venturers or other organizations and entities on whose behalf such individual or individuals have signed.

15. Counterparts; Facsimile and PDF Signatures. This Amendment may be executed in one or more counterparts, each of which, when taken together, shall constitute one and the same document. A facsimile or portable document format (PDF) signature on this Amendment shall be equivalent to, and have the same force and effect as, an original signature.

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IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date and year first above written.

LANDLORD:

BMR-WAPLES LP,
a Delaware limited partnership

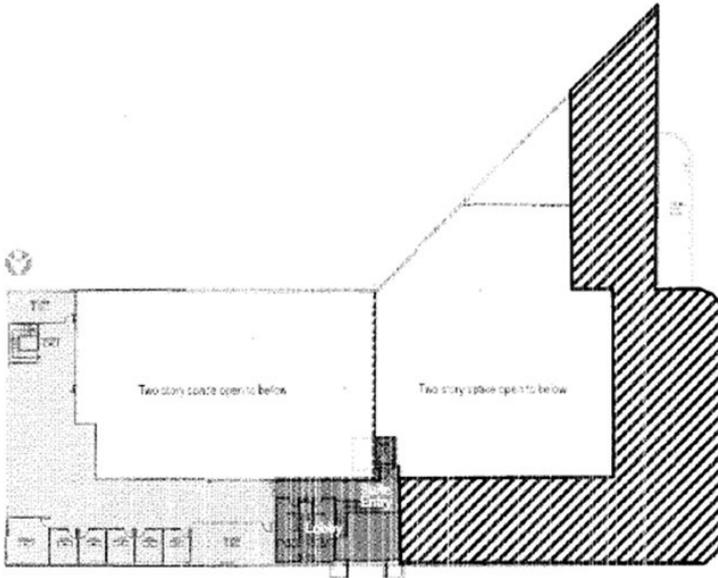
By: /s/ Marie Lewis
Name: Marie Lewis
Title: Vice President, Legal

TENANT:

SGI-DNA, INC.,
a Delaware corporation

By: /s/ Todd R. Nelson
Name: Todd R. Nelson
Title: CEO

EXHIBIT A
ADDITIONAL PREMISES



 = Additional Premises

EXHIBIT B

ACKNOWLEDGEMENT OF ADDITIONAL PREMISES COMMENCEMENT DATE AND TERM EXPIRATION DATE

THIS ACKNOWLEDGEMENT OF FERN COMMENCEMENT DATE AND TERM EXPIRATION DATE is entered into as of [____], 20[___], with reference to that certain First Amendment to Lease (the "Amendment") dated as of [____], 20[___], by SGI-DNA, INC., a Delaware corporation ("Tenant"), in favor of BMR-WAPLES LP, a Delaware limited partnership ("Landlord"). All capitalized terms used herein without definition shall have the meanings ascribed to them in the Amendment.

Tenant hereby confirms the following:

1. [Tenant accepted possession of the Additional Premises for use in accordance with the Permitted Use on [____], 20[____]. Tenant first occupied the Additional Premises for the Permitted Use on [____], 20[] [OR] [Tenant accepted possession of the Additional Premises for construction of improvements or the installation of personal or other property on [____], 20[___], and for use in accordance with the Permitted Use on [____], 20[___]. Tenant first occupied the Additional Premises for the Permitted Use on [____], 20[___].]
2. The Additional Premises are in good order, condition and repair.
3. [The Tenant Improvements are Substantially Complete.]
4. All conditions of the Lease to be performed by Landlord as a condition to the full effectiveness of the Lease have been satisfied, and Landlord has fulfilled all of its duties in the nature of inducements offered to Tenant to lease the Additional Premises.
5. In accordance with the provisions of Section 3.1 of the Amendment, the Additional Premises Commencement Date is June 1, 2019, and, unless the Lease is terminated prior to the Term Expiration Date pursuant to its terms, the "Term Expiration Date shall be [____], 20[___].
6. The Lease is in full force and effect, and the same represents the entire agreement between Landlord and 'tenant concerning the Premises.
7. Tenant has no existing defenses against the enforcement of the Lease by Landlord, and there exist no offsets or credits against Rent owed or to be owed by Tenant.
8. The obligation to pay Rent is presently in effect and all Rent obligations on the part of Tenant under the Lease commenced to accrue on [], 20[___], with Base Rent for the Additional Premises payable on the dates and amounts set forth in the chart below, subject to adjustment under the Lease (including, Article 8 of the Lease):

<u>Dates</u>	<u>Square Feet of Rentable Area</u>	<u>Base Rent per Square Foot of Rentable Area</u>	<u>Monthly Base Rent</u>	<u>Annual Base Rent</u>
June 1, 2019- May 31, 2020	9,309	\$1.50 monthly	\$13,963.50	\$167,562.00

9. The undersigned Tenant has not made any prior assignment, transfer, hypothecation or pledge of the Lease or of the rents thereunder or sublease of the Premises or any portion thereof.

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IN WITNESS WHEREOF, Tenant has executed this Acknowledgment of Additional Premises Commencement Date and Term Expiration Date as of the date first written above.

TENANT:
SGI-DNA, INC.,
a Delaware corporation

By: _____
Name: _____
Title: _____

SUPPLY AGREEMENT

This SUPPLY AGREEMENT (this "Agreement") is entered into as of October 26, 2015 (the "Effective Date") by and between SGI-DNA, Inc. a Delaware corporation having a principal address of 11099 North Torrey Pines Road, La Jolla, CA 92037 (the "SGI-DNA") and Integrated DNA Technologies, Inc., a Delaware corporation having a principal address of 1710 Commercial Park, Coralville, Iowa, 52241 ("IDT"). Each of IDT and SGI-DNA is sometimes referred to individually herein as a "Party" and collectively as the "Parties".

WHEREAS, SGI-DNA is engaged in the business of providing synthetic biology products and services; and

WHEREAS, IDT manufactures and sells oligonucleotides that can be used as reagents in SGI-DNA and its Affiliates' research and commercial operations; and

WHEREAS, SGI-DNA has requested IDT to supply Products to SGI-DNA and its Affiliates on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is acknowledged by the Parties, the Parties hereby agree as follows.

1. DEFINITIONS

Whenever used in this Agreement with an initial capital letter, the terms defined in this Section 1 shall have the meanings specified.

- 1.1 "**Affiliate**" shall mean any corporation, firm, partnership or other entity which directly or indirectly controls or is controlled by or is under common control with a Party to this Agreement. For purposes of this definition, "control" shall mean ownership, directly or through one or more Affiliates, of fifty percent (50%) or more of the shares of stock entitled to vote for the election of directors, in the case of a corporation, fifty percent (50%) or more of the equity interests in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby a Party controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity.
- 1.2 "**Confidential Information**" shall mean, with respect to a Party (the "Receiving Party") (i) all information (including but not limited to information about any element of the technology or business of the other Party) which is disclosed pursuant to this Agreement, whether in writing and marked as confidential at the time of disclosure to the Receiving Party or customarily considered to be confidential information or by oral disclosure reduced to a writing in English, by the other Party (the "Disclosing Party") to the Receiving Party or to any of its employees, consultants or Affiliates and (ii) all its proprietary intellectual property and related data and information developed in connection herewith, except to the extent that such information (a) as of the date of disclosure is demonstrably known to, or in the possession of, the Receiving Party or its Affiliates, as shown by written documentation, other than by virtue of a prior confidential disclosure by the Disclosing Party or its Affiliates; (b) as of the date of disclosure is in, or subsequently enters, the public domain, through no fault or omission of the Receiving

Party; (c) as of the date of disclosure or thereafter is obtained by the Receiving Party from a Third Party free from any obligation of confidentiality to the Disclosing Party and rightfully in possession of such information; (d) is independently developed by or for the Receiving Party or its Affiliates without reference to or in reliance upon any of the foregoing information as demonstrated by competent written records or (e) must legally be disclosed according to applicable laws and regulations; provided, however, that the Receiving Party first provides written notice to and reasonably cooperates with the Disclosing Party to enable the Disclosing Party to seek a protective order or otherwise take lawful measures to prevent or limit disclosure of such information.

- 1.3 “**Products**” shall mean the products set forth on Exhibit A hereto, as may be amended by the Parties from time to time, provided that any new Product can and will be added to Exhibit A only after the mutual agreement of the parties of the corresponding Product Requirements.
- 1.4 “**Product Requirements**” shall mean, with respect to a Product, the relevant Specifications (set forth in Exhibit B), instructions of SGI-DNA current and agreed standard operating procedures, applicable law, and any relevant warranties hereunder.
- 1.5 “**Term**” shall have the meaning set forth in Section 6.1.

1.6 SUPPLY OF PRODUCTS

- 2.1 **Terms of Sale.** Subject to the terms and conditions contained herein, IDT hereby agrees to sell to SGI-DNA and any of its Affiliates, and SGI-DNA and any of its Affiliates hereby agree to purchase from IDT, Products on the terms provided herein.
- 2.2 Supply Obligations for Products.
 - 2.2.1 **Product Supply.** Beginning on the Effective Date, IDT shall supply and deliver Products to SGI-DNA or any of its Affiliates, pursuant to purchase order(s) issued by SGI-DNA or any of its Affiliates and received by IDT, on the terms and conditions set forth in this Agreement.
 - 2.2.2 **Forecasts.** On at least a quarterly basis, SGI-DNA will provide a reasonable, good faith forecast of the Products to be supplied by IDT. The forecasts shall include a two-quarter rolling projection of product demand; the subsequent quarter of such forecast will be for planning purposes only, and shall not constitute a firm commitment to issue any purchase orders.
 - 2.2.3 **Order Placement.** Subject to the exceptions set forth herein, or as provided for in a separate written agreement, SGI-DNA shall submit all orders for IDT Products using IDT’s website. SGI-DNA acknowledges that IDT’s agreement to this Agreement is predicated in part on the efficient transfer of orders from the SGI-DNA to IDT using the website. As an exception to use of the IDT website, IDT will accept orders via e-mail (and prefers e-mail orders that use IDT’s e-mail order templates) from SGI-DNA in the following limited circumstances: (i) for any order for IDT Products requiring delivery in plates; (ii) for any order of products not supported by IDT’s website; and (iii) during any IDT website

service interruption. SGI-DNA agrees to provide IDT with specific shipping and delivery turnaround times for IDT Products.

- 2.2.4 **Default Manufacturing Rules.** Unless otherwise specified in SGI's purchase order designations, and provided such designations are consistent with capacity allocations stated in Exhibit A, IDT will at its reasonable discretion: (a) locate the manufacture of Products at the manufacturing locations of its choosing, including without limitation its headquarters in Coralville, Iowa; its West Coast Operation in San Diego, its European manufacturing facility in Leuven, Belgium, or its Asian manufacturing facility in Singapore, and (b) select the appropriate synthesis scales and cycles, processing conditions, and the preparative purification and quantification techniques necessary to make Products to the delivered specifications supplied by SGI-DNA. IDT shall at all times maintain a laboratory information management system that can identify for each Product made pursuant to this Agreement, the methods of manufacture, including the method of assessing purity, and the location of manufacture.
- 2.3 **Purchase Orders.** All of SGI-DNA's orders of Product shall be made pursuant to a written purchase order in a form mutually acceptable to the Parties and shall provide for shipment in compliance with Section 2.4. SGI-DNA shall place its firm order with IDT, setting forth delivery dates and shipping instructions with respect to each shipment of Product. IDT shall accept such orders from SGI-DNA, subject to the remaining terms and conditions of this Agreement and IDT shall use reasonable commercial efforts to deliver such quantities of Product on the specified delivery dates.
- 2.4 **Shipment; Delivery.** All Products delivered pursuant to the terms of this Agreement shall be suitably packed for shipment in IDT's standard containers, marked for shipment to the destination point indicated in SGI-DNA's purchase order. Product shall be shipped FCA, or as the Parties may mutually agree in writing for any particular order. IDT shall (a) include the following information with each shipment of the Product to SGI-DNA: (i) SGI-DNA purchase order number; (ii) IDT product number/sales order number; (iii) quantity; (iv) IDT lot number; and (v) certificate of compliance and inspection, and (b) mail or email SGI-DNA copies of each invoice and shipping information within 1 business day of shipment, and whenever possible prior to delivery of Products to SGI-DNA. With each shipment of Product, IDT shall furnish one copy of a certificate of analysis accompanied by the packing slip, and a Material Safety Data Sheet, if applicable.
- 2.5 **Inspection and Rejection.** In the event that any Product shipment fails to comply with the Product Requirements (set forth on Exhibit B) at the time of shipment to SGI-DNA or in the event that any Product shipment contains physical defects or is short with respect to the order, SGI-DNA shall notify IDT in writing within such ninety (90) day period. IDT shall, at its sole cost deliver replacement quantities of such Products to SGI-DNA or make up the shortage, as the case may be, as soon as practicable and in any event on or before fourteen (14) days after the date of receipt of such notice by SGI-DNA.
- 2.6 **Changes to Product.** In the event IDT proposes making any material changes in the manufacturing process or in the materials pertaining to the Product (including changes in manufacturing or quality control procedures, controls, standards, equipment,

specifications, grade or vendor or materials) or any changes that would change or otherwise affect the Specifications, IDT shall, whenever commercially practicable give SGI-DNA at least ninety (90) days' prior written notice of the proposed change.

- 2.7 **Failure to Supply.** IDT shall inform SGI-DNA promptly of any problems with Third Party suppliers or problems of IDT, in each case with respect to the manufacture or supply of the Products. In the event that IDT is unable, or notifies SGI-DNA that it is unable, for any reason (except for events of *Force Majeure*) to supply quantities of the Products pursuant to confirmed purchase orders in accordance with Section 2.3, IDT shall inform SGI-DNA promptly. The Parties will develop in good faith a plan to address the supply interruption.

3. PREPAYMENT, CREDIT, PRICING AND PAYMENT

- 3.1 **Prices for Products.** The prices ("Prices") for Products sold to SGI-DNA under this Agreement are set forth on Exhibit A attached hereto.
- 3.2 **Invoicing and Payment.** IDT will invoice SGI-DNA (i) with respect to purchases of Product, for the amount (based on the Price specified in Section 3.1) for each order of Products on the date of delivery of that order to the common carrier. Invoiced amounts not subject to a bona fide dispute shall be due and payable by SGI-DNA thirty (30) days after SGI-DNA's receipt of a valid invoice.
- 3.3 **Taxes.** All amounts payable by SGI-DNA hereunder are inclusive of insurance, transportation costs, import duties, sales and excise taxes, VAT and other taxes imposed by any government authority.
- 3.4 **Shipping.** SGI-DNA shall pay IDT for packing, handling, freight (shipping), insurance, and related charges at rates and in amounts reflecting IDT's corresponding costs, which costs will vary with the weight and volume of products and the conditions of shipment, and on other factors. These additional charges shall be set forth with specificity on IDT's invoices to SGI-DNA.

4. TREATMENT OF CONFIDENTIAL INFORMATION

- 4.1 **Confidentiality.**
- 4.1.1 **Confidentiality Obligations.** SGI-DNA and IDT each recognize that the Confidential Information of the other Party constitutes highly valuable and proprietary confidential information. SGI-DNA and IDT each agree that during the Term of this Agreement and for seven (7) years thereafter, it will keep confidential, and will cause its employees, consultants and Affiliates to keep confidential, all of the Confidential Information of the other Party. Neither SGI-DNA nor IDT nor any of their respective employees, consultants or Affiliates shall use the Confidential Information for any purpose except as expressly permitted in this Agreement.
- 4.1.2 **Limited Disclosure of Confidential Information.** SGI-DNA and IDT each agree that any disclosure of the Confidential Information to any of its employees, consultants or Affiliates shall be made only if and to the extent necessary to carry

out its rights and responsibilities under this Agreement, shall be limited to the maximum extent possible consistent with such rights and responsibilities and shall only be made to persons who are bound by written confidentiality obligations to maintain the confidentiality thereof and not to use such Confidential Information except as expressly permitted by this Agreement. SGI-DNA and IDT each agree not to disclose the Confidential Information to any Third Party under any circumstance without the prior written approval from the other Party, except as otherwise required by law, and except as otherwise expressly permitted by this Agreement. Each Party shall take such action, and shall cause its Affiliates to take such action, to preserve the confidentiality of the Confidential Information as it would customarily take to preserve the confidentiality of its own confidential materials, and in no event, less than reasonable and prudent care. Each Party, upon the other's request, will return all the Confidential Information disclosed to it by the other Party pursuant to this Agreement, including all copies and extracts of documents, within sixty (60) days of the request following the termination of this Agreement; provided, that, a Party may retain Confidential Information of the other Party relating to any license or right to use technology which survives such termination and one copy of all other Confidential Information may be retained in inactive archives solely for the purpose of establishing the contents thereof.

5. INTELLECTUAL PROPERTY

- 5.1 **IDT Intellectual Property.** All trade secrets (and data, information, reports and any and all documentation relating thereto), which have been independently developed, generated or derived, directly or indirectly by IDT relating to the process for manufacturing Products ("IDT Intellectual Property") are and shall remain the sole property of IDT.
- 5.2 **SGI-DNA Intellectual Property.** All intellectual property, data, information, reports and any and all related documentation, which are developed, generated or derived, directly or indirectly by SGI-DNA relating to the use of Products ("SGI-DNA Intellectual Property") are and shall remain the sole property of SGI-DNA and SGI-DNA shall have the right to use the same without restriction.
- 5.3 **Assignment.** With respect to all SGI-DNA Intellectual Property, IDT agrees to execute documents evidencing the rights set forth in this Section; and upon the request of SGI-DNA and at the sole expense, discretion and exclusive control of SGI-DNA, to assist and cooperate with SGI-DNA in applying for, letters patent or like corresponding legal protection of any of the foregoing in the United States and all foreign countries (and for any extension, continuation, validation, reissue or renewal thereof).
- 5.4 **Trademark and Copyright Use.** IDT understands and agrees that use of SGI-DNA trademarks in connection with the Products shall not create any right, title, or interest, in or to the trademarks, and that all uses and goodwill associated with SGI-DNA trademarks will inure to the benefit of SGI-DNA. IDT shall not register nor attempt to register, nor aid any third party in the foreign registration of any trademarks used by SGI-DNA in connection with Products. IDT shall not publish any structural or formula information for Products supplied under this Agreement, without written permission from SGI-DNA. Technical documents and publications created and supplied by SGI-DNA are protected

by copyright. IDT shall not duplicate or distribute such publications in whole or in part, or modify any such publication, without the express written permission of SGI-DNA.

- 5.5 **Enforcement.** SGI-DNA shall have the right but not the obligation to prosecute third parties for the infringing use of SGI-DNA's trademarks, copyrights and patents (including SGI-DNA Intellectual Property and Developed Intellectual Property) or other rights relating to Products. IDT shall provide SGI-DNA all requested information by SGI-DNA related to such infringement and reasonably cooperate with SGI-DNA in connection with such matters.

6. TERM; TERMINATION

- 6.1 **Term.** This Agreement shall commence on the Effective Date and continue for a period of five (5) years, unless earlier terminated as set forth in this Section 6 (the "Term"). The agreement will automatically renew for consecutive one (1) year terms unless a cancellation notice is given 90 days before the end of the 5 year initial term, or before anniversaries of the Effective Date thereafter.

6.2 **Termination.**

6.2.1 **Termination for Breach.** In the event that a Party breaches any material term of this Agreement, the other Party shall have the right to terminate this Agreement by giving forty-five (45) days' written notice to the breaching Party; provided, however, that in the case of a breach capable of being cured, if the breaching Party cures such breach within the relevant notice period, then the notice shall not be effective.

6.2.2 **Termination for Bankruptcy.** In the event that either Party files for protection under bankruptcy laws, makes an assignment for the benefit of creditors, appoints or suffers appointment of a receiver or trustee over its property, files a petition under any bankruptcy or insolvency act or has any such petition filed against it which is not discharged within ninety (90) days of such action, then the other Party may terminate this Agreement effective immediately upon written notice to such Party.

- 6.3 **Effect of Termination.** Upon expiration or termination of this Agreement for any reason (a) each Party shall, except as otherwise provided in this Agreement, return or destroy all Confidential Information of the other Party; provided, that, each Party may retain one copy for archival purposes solely to confirm compliance with this Section 6.3; (b) except for a termination for failure of SGI-DNA to pay, SGI-DNA's orders for Products received by IDT prior to the effective date of termination shall be fulfilled in accordance with their terms and the terms and conditions of this Agreement; and (c) SGI-DNA shall pay all amounts due IDT in accordance with this Agreement for all Products delivered through the date of such termination.

- 6.4 **Surviving Provisions.** Termination of this Agreement for any reason shall be without prejudice to rights which expressly survive termination in accordance with the terms of this Agreement, including without limitation, the rights and obligations of the Parties provided in Sections 4 and 5, all of which shall survive such termination.

7. REPRESENTATIONS AND WARRANTIES

7.1 **Mutual Representations and Warranties.** SGI-DNA and IDT each represents and warrants to the other as follows:

- 7.1.1 **Organization.** It is a corporation duly organized, validly existing and is in good standing under the laws of the jurisdiction of organization, is qualified to do business and is in good standing as a foreign corporation in each jurisdiction in which the performance of its obligations hereunder requires such qualification and has all requisite power and authority, corporate or otherwise, to conduct its business as now being conducted, to own, lease and operate its properties and to execute, deliver and perform this Agreement.
- 7.1.2 **Authorization.** The execution, delivery and performance by it of this Agreement have been duly authorized by all necessary corporate action and do not and will not (a) require any consent or approval of its stockholders or (b) violate any provision of any law, rule, regulation, order, writ, judgment, injunction, decree, determination or award presently in effect having applicability to it or any provision of its charter documents.
- 7.1.3 **No Inconsistent Obligation.** It is not under any obligation to any person, or entity, contractual or otherwise, that is conflicting or inconsistent in any respect with the terms of this Agreement or that would impede the diligent and complete fulfillment of its obligations.

7.2 **Further Representations, Warranties and Covenants of IDT.**

- 7.2.1 **No Defects.** IDT hereby represents and warrants that all deliverables hereunder, including Product, shall be free of material workmanship or factory defects and compliant with the specifications provided in Exhibit B.
- 7.2.2 **Product Requirements and Title.**
- (a) All Products supplied to SGI-DNA hereunder will comply with all Product Requirements at the time of transfer to the agreed upon carrier for shipment to SGI-DNA.
- (b) Title to all Products shall pass to SGI-DNA in accordance with Section 2.4, concurrently with risk of loss, free and clear of all security interests, liens and other encumbrances.
- 7.2.3 **Reselling by IDT.** In situations when IDT provides Products manufactured by a third party, IDT represents and warrants that it has the requisite approvals and authority from such third party manufacturer to resell Products to SGI-DNA. IDT further represents and warrants that in so reselling Products to SGI-DNA, IDT is not infringing upon any rights of such third party manufacturer nor breaching any contractual right running to such third party manufacturer.
- 7.2.4 **Experience/Facilities/Timeliness.** IDT, its employees and agents, have and will continue to have the knowledge, experience, facilities, equipment and skill to

fulfill, and will fulfill, its obligations hereunder in a professional and timely manner.

7.2.5 **Information.** IDT shall provide to SGI-DNA copies of all relevant Product information in IDT's control upon the request of SGI-DNA within fourteen (14) days of such request. SGI-DNA may utilize such information in any way it deems legally appropriate.

7.2.6 **Books and Records.** IDT shall maintain true and accurate books, records, test data, reports, and all other information relating to its obligations performed under this Agreement, including all information required to be maintained by applicable laws.

8. **INSURANCE.**

8.1 IDT shall secure and maintain in full force and effect throughout the term of this Agreement policies of insurance for (a) workmen's compensation, (b) general liability, (c) automobile liability, (d) product liability and (e) business interruption having policy limits, deductibles and other terms appropriate to the conduct of IDT's business in IDT's reasonable judgment.

9. **WARRANTY.**

9.1 IDT warrants to SGI-DNA that the Products will conform to the applicable Specifications and shall be otherwise free of physical defects. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, IDT DOES NOT WARRANT THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS.

10. **INDEMNIFICATION.**

10.1 IDT shall indemnify, defend and hold harmless SGI-DNA from and against all damages based upon or arising out of physical defects or nonconformance to Product Requirements.

10.2 SGI-DNA shall indemnify, defend and hold harmless the IDT from and against any and all damages based upon or arising out of SGI-DNA's or its assignee's, import, sale or use of the Products except to the extent that such damages relate to or arise from physical defects or nonconformance to Product Requirements.

11. **LIMITED LIABILITY.**

EXCEPT IN CONNECTION WITH SECTION 4 (CONFIDENTIALITY) OR AMOUNTS PAYABLE UNDER SECTION 9 (WARRANTY) OR SECTION 10 (INDEMNITY) OF THIS AGREEMENT, NEITHER PARTY WILL BE LIABLE WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY PUNITIVE, MULTIPLE, OR EXEMPLARY DAMAGES, OR LOST PROFITS.

12. MISCELLANEOUS

12.1 **Notices.** All notices shall be in writing and delivered in person or via reputable overnight courier and addressed as follows:

If to SGI-DNA:
SGI-DNA, Inc.
11149 North Torrey Pines Road
La Jolla, CA 92037
Attn: Legal Department

If to IDT:
Integrated DNA Technologies, Inc.
1710 Commercial Park
Coralville, IA 52241
Attn: General Counsel

All notices shall be deemed delivered on receipt by addressee.

- 12.2 **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the application of principles of conflicts of law. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective legal representatives, successors and permitted assigns.
- 12.3 **Amendment; Waiver.** This Agreement may be amended, modified, superseded or canceled, and any of the terms may be waived, only by a written instrument executed by each Party or, in the case of waiver, by the Party or Parties waiving compliance.
- 12.4 **Force Majeure.** Neither IDT nor SGI-DNA shall be liable for failure of or delay in performing obligations set forth in this Agreement, and neither shall be deemed in breach of its obligations, if such failure or delay is due to natural disasters or any other causes beyond the reasonable control of IDT or SGI-DNA (a "Force Majeure") including any act of God or the elements, fire, flood, epidemic, quarantine restriction, war, terrorism, break down, accident to machinery, acts of civil or military authority, any civil commotion, riots, strikes, lock outs or other industrial dispute. In event of a Force Majeure, the Party affected thereby shall (a) promptly notify the other Party in writing and (b) use reasonable efforts to cure or overcome the same and resume performance of its obligations hereunder.
- 12.5 **Benefit and Assignment.** This Agreement and any rights or benefits hereunder shall be fully assignable or transferable by SGI-DNA or its Affiliates.
- 12.6 **Integration; Severability.** This Agreement is the sole agreement with respect to the subject matter hereof and supersedes all other agreements and understandings between the Parties with respect to same. If any provision of this Agreement is or becomes invalid or is ruled invalid by any court of competent jurisdiction or is deemed unenforceable, it is the intention of the Parties that the remainder of the Agreement shall not be affected.

IN WITNESS WHEREOF, the Parties have caused this Supply Agreement to be executed by their duly authorized representatives.

SGI-DNA, Inc.

By: /s/ Joseph Mahler

COO/CFO

SGI-DNA

Integrated DNA Technologies, Inc.

By: /s/ Roman Terrill

Roman Terrill

Senior Vice President & General Counsel

Regulatory and US

**Exhibit A
Products & Prices**

[***]

PRODUCT	MINIMUM ORDER	PRICE	Iowa Only
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	

Certain identified information marked with [***] has been excluded from this exhibit because it is not material and is of the type that the registrant treats as private and confidential.

FIRST AMENDMENT TO SUPPLY AGREEMENT

This First Amendment (“First Amendment”) entered into as of March 24th 2020 (“First Amendment Effective Date”) is by and between SGI-DNA, Inc., having its principal place of business at 9535 Waples Street, Ste 100, San Diego, CA 92037 (“SGI-DNA”), and Integrated DNA Technologies, Inc., an organization having its principal place of business at 1710 Commercial Park, Coralville, IA 52241 (“IDT”). Each of IDT and SGI-DNA is referred to individually herein as a “Party” and collectively as the “Parties”.

WHEREAS, the Parties have entered into a Supply Agreement (the “Agreement”) effective as of October 26, 2015, and

WHEREAS, the Parties to the Agreement wish to amend it pursuant to Section 12.3 thereof,

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained herein, the parties agree as follows:

1. The address for SGI-DNA in the first paragraph of the agreement is deleted and replaced with the following; 9535 Waples Street, Ste 100, San Diego, CA 92037.
2. The language found in the “Agreement” is deleted and replaced with the following: **3.2 Invoicing and Payment**. IDT will invoice SGI-DNA (i) with respect to purchases of Product, for the amount (based on the Price specified in Section 3.1) for each order of Products on the date of delivery of that order to the common carrier. Invoiced amounts not subject to a bona fide dispute shall be due and payable by SGI-DNA forty-five (45) days after SGI-DNA’s receipt of a valid invoice.
3. The chart displayed in Exhibit A of the Agreement is deleted and replaced with the following;

In the event that the below **Table I**’s minimum orders \$[***] are not met within [***] of the effective date of this agreement, the pricing will revert back to **Table II** below:

Table I

Product	Minimum Order	Price Per Base	Iowa Only
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	

TABLE II

Product	Minimum Order	Price Per Base	Iowa Only
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	
[***]	[***]	\$[***]	[***]
[***]	[***]	\$[***]	

3. Except as expressly stated above, the remainder of the Agreement shall remain unamended and in full force and effect, in accordance with its terms.

IN WITNESS WHEREOF, the parties have caused this Amendment to be executed as of the date written above.

SGI-DNA, Inc.

Signature: /s/ Thomas Braden
Name: Thomas Braden
Title: V.P. Global Operations
Date: March 26, 2020

Integrated DNA Technologies, Inc.

Signature: /s/ Bobbi Jenks
Name: Bobbi Jenks
Title: Senior Corporate Counsel
Date: March 26, 2020

Certain identified information marked with [***] has been excluded from this exhibit because it is not material and is of the type that the registrant treats as private and confidential.

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT (this “**Agreement**”) dated as of March 4, 2021 (the “**Effective Date**”), by and between SILICON VALLEY BANK, a California corporation (“**Bank**”), and CODEX DNA, INC., a Delaware corporation (“**Borrower**”), provides the terms on which Bank shall lend to Borrower and Borrower shall repay Bank. The parties agree as follows:

1. **ACCOUNTING AND OTHER TERMS**

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP (except, in each case, for (a) non-compliance with FAS 123R with respect to Monthly Financial Statements and (b) with respect to unaudited financial statements for the absence of footnotes and subject to year-end audit and purchase price accounting adjustments); provided that if at any time any change in GAAP would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either Borrower or Bank shall so request, Borrower and Bank shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP; provided, further, that, until so amended, (a) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (b) Borrower shall provide Bank financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP. Notwithstanding the foregoing, any obligations of a Person that are or would have been treated as operating leases for purposes of GAAP prior to the issuance by the Financial Accounting Standards Board on February 25, 2016 of an Accounting Standards Update (the “ASU”) shall continue to be accounted for as operating leases for purposes of all financial definitions, calculations and covenants for purpose of this Agreement (other than for purposes of the delivery of financial statements prepared in accordance with GAAP), whether or not such operating lease obligations were in effect on such date, notwithstanding the fact that such obligations are required in accordance with the ASU (on a prospective or retroactive basis or otherwise) to be treated as capitalized lease obligations in accordance with GAAP. Calculations and determinations must be made following GAAP. Notwithstanding the foregoing, all financial covenant (if any) and other financial calculations shall be computed with respect to Borrower only, and not on a consolidated basis. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein.

2. **LOAN AND TERMS OF PAYMENT**

2.1 **Promise to Pay.** Borrower hereby unconditionally promises to pay Bank the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.2 **Reserved.**

2.3 **Term Loan.**

(a) **Availability.** Subject to the terms and conditions of this Agreement, Borrower may request that Bank make certain term loan advances available to Borrower in an aggregate original principal amount not to exceed Twenty Million Dollars (\$20,000,000) (each such advance is referred to herein as a “**Term Loan Advance**” and, collectively, as the “**Term Loan Advances**”). The Term Loan Advances shall be available in two (2) tranches as follows: (i) the first (1st) tranche of the Term Loan Advances (“**Tranche One**”) shall be available to Borrower in a single advance of Fifteen Million Dollars (\$15,000,000) on or about the Effective Date, and (ii) provided that Bank provides its approval for a second tranche, which may be granted or withheld in Bank’s sole discretion, the second (2nd) tranche of the Term Loan Advances (“**Tranche Two**”) may be made available to Borrower by Bank on such later date as to be determined by Bank, in a single advance in the aggregate original principal amount not to exceed Five Million Dollars (\$5,000,000). Borrower acknowledges and agrees that Bank is under no obligation to make the Tranche Two Term Loan Advance available to Borrower and such Tranche Two will be subject to separate Bank credit approval to be determined by Bank (after the Effective Date) in its sole discretion. After repayment, no Term Loan Advance (or any portion thereof) may be reborrowed.

(b) Interest Payments. With respect to each Term Loan Advance, commencing on the first Payment Date following the Funding Date of such Term Loan Advance and continuing on the Payment Date of each month thereafter, Borrower shall make monthly payments of interest, in arrears, on the principal amount of such Term Loan Advance at the rate set forth in Section 2.5(a).

(c) Repayment. Commencing on the Term Loan Amortization Date and continuing on each Payment Date thereafter, Borrower shall repay each Term Loan Advance in (i) Applicable Number of equal monthly installments of principal, plus (ii) monthly payments of accrued interest at the rate set forth in Section 2.5(a). All outstanding principal and accrued and unpaid interest under each Term Loan Advance, and all other outstanding Obligations with respect to such Term Loan Advance, are due and payable in full on the Term Loan Maturity Date.

(d) Permitted Prepayment. Borrower shall have the option to prepay all, but not less than all, of the Term Loan Advances, provided Borrower (i) delivers written notice to Bank of its election to prepay the Term Loan Advances at least ten (10) days prior to such prepayment, and (ii) pays, on the date of such prepayment (A) the outstanding principal plus accrued and unpaid interest with respect to the Term Loan Advances, (B) the Prepayment Fee, (C) the Final Payment, and (D) all other sums, if any, that shall have become due and payable with respect to the Term Loan Advances, including interest at the Default Rate with respect to any past due amounts.

(e) Mandatory Prepayment Upon an Acceleration. If the Term Loan Advances are accelerated by Bank following the occurrence and during the continuance of an Event of Default, Borrower shall immediately pay to Bank an amount equal to the sum of (i) all outstanding principal plus accrued and unpaid interest with respect to the Term Loan Advances, (ii) the Final Payment, and (iii) all other sums, if any, that shall have become due and payable with respect to the Term Loan Advances, including interest at the Default Rate with respect to any past due amounts.

2.4 Reserved.

2.5 Payment of Interest on the Credit Extensions.

(a) Interest Rate. Subject to Section 2.5(b), the principal amount outstanding under each Term Loan Advance shall accrue interest at a floating per annum rate equal to the greater of (A) four percent (4.00%) above the Prime Rate and (B) seven and one quarter percent (7.25%), which interest shall be payable monthly in accordance with Section 2.5(d) below.

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is five percent (5.0%) above the rate that is otherwise applicable thereto (the "**Default Rate**"). Fees and expenses which are required to be paid by Borrower pursuant to the Loan Documents (including, without limitation, Bank Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 2.5(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

(c) Adjustment to Interest Rate. Changes to the interest rate of any Credit Extension based on changes to the Prime Rate shall be effective on the effective date of any change to the Prime Rate and to the extent of any such change.

(d) Payment; Interest Computation. Interest is payable monthly on the Payment Date of each month and shall be computed on the basis of a 360-day year for the actual number of days elapsed. In computing interest, (i) all payments received after 12:00 p.m. Pacific time on any day shall be deemed received at the opening of business on the next Business Day, and (ii) the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension.

2.6 Fees. Borrower shall pay to Bank:

- (a) Good Faith Deposit. Borrower has paid to Bank a deposit of Thirty Five Thousand Dollars (\$35,000) (the “**Good Faith Deposit**”) to initiate Bank’s due diligence review process. Any portion of the Good Faith Deposit not utilized to pay Bank Expenses through the Effective Date will be deposited into Borrower’s Designated Deposit Account;
- (b) Prepayment Fee. The Prepayment Fee, when due hereunder;
- (c) Final Payment. The Final Payment, when due hereunder;
- (d) Bank Expenses. All Bank Expenses (including reasonable attorneys’ fees and expenses for documentation and negotiation of this Agreement incurred through and after the Effective Date, when due (or, if no stated due date, upon demand by Bank); and
- (e) Fees Fully Earned. Unless otherwise provided in this Agreement or in a separate writing by Bank, Borrower shall not be entitled to any credit, rebate, or repayment of any fees earned by Bank pursuant to this Agreement notwithstanding any termination of this Agreement or the suspension or termination of Bank’s obligation to make loans and advances hereunder. Bank may deduct amounts owing by Borrower under the clauses of this Section 2.6 pursuant to the terms of Section 2.7(c). Bank shall provide Borrower written notice of deductions made from the Designated Deposit Account pursuant to the terms of the clauses of this Section 2.6.

2.7 Payments; Application of Payments; Debit of Accounts.

- (a) All payments to be made by Borrower under any Loan Document shall be made in immediately available funds in Dollars, without setoff or counterclaim, before 12:00 p.m. Pacific time on the date when due. Payments of principal and/or interest received after 12:00 p.m. Pacific time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.
- (b) Bank has the exclusive right to determine the order and manner in which all payments with respect to the Obligations may be applied. Borrower shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Borrower to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.
- (c) Bank may debit any of Borrower’s deposit accounts (other than Excluded Accounts maintained in accordance with this Agreement), including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes Bank when due. These debits shall not constitute a set-off.

2.8 Withholding. Payments received by Bank from Borrower under this Agreement will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Authority (including any interest, additions to tax or penalties applicable thereto). Specifically, however, if at any time any Governmental Authority, applicable law, regulation or international agreement requires Borrower to make any withholding or deduction from any such payment or other sum payable hereunder to Bank, Borrower hereby covenants and agrees that the amount due from Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, Bank receives a net sum equal to the sum which it would have received had no withholding or deduction been required, and Borrower shall pay the full amount withheld or deducted to the relevant Governmental Authority. Borrower will, upon request, furnish Bank with proof reasonably satisfactory to Bank indicating that Borrower has made such withholding payment; provided, however, that Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate and timely proceedings and as to which payment in full is bonded or reserved against by Borrower. The agreements and obligations of Borrower contained in this Section 2.8 shall survive the termination of this Agreement.

3. CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Bank's obligation to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

- (a) duly executed signatures to the Loan Documents;
- (b) duly executed signatures to the Warrant, together with a capitalization table and copies of Borrower's equity documents;
- (c) the Operating Documents and long-form good standing certificates of Borrower certified by the Secretary of State (or equivalent agency) of Borrower's jurisdiction of organization or formation and each jurisdiction in which Borrower is qualified to conduct business, each as of a date no earlier than thirty (30) days prior to the Effective Date;
- (d) a secretary's certificate of Borrower with respect to such Borrower's Operating Documents, incumbency, specimen signatures and resolutions authorizing the execution and delivery of this Agreement and the other Loan Documents to which it is a party;
- (e) duly executed signatures to the completed Borrowing Resolutions for Borrower;
- (f) certified copies, dated as of a recent date, of financing statement searches, as Bank may request, accompanied by written evidence (including any UCC termination statements) that the Liens indicated in any such financing statements either constitute Permitted Liens or have been or, in connection with the initial Credit Extension, will be terminated or released;
- (g) the Perfection Certificate of Borrower, together with the duly executed signature thereto;
- (h) a landlord's consent in favor of Bank for Borrower's leased location at 9535 Waples Street, San Diego, California, by the respective landlord thereof, together with the duly executed original signatures thereto;
- (i) a bailee's waiver in favor of Bank for the location where Borrower maintains property with C&M Relocation Systems in Ramona, California, by such third party, together with the duly executed original signatures thereto;
- (j) evidence satisfactory to Bank that the insurance policies and endorsements required by Section 6.7 hereof are in full force and effect; and
- (k) payment of the fees and Bank Expenses then due as specified in Section 2.6 hereof.

3.2 Conditions Precedent to all Credit Extensions. Bank's obligations to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

- (a) timely receipt of an executed Payment/Advance Form and any materials and documents required by Section 3.4;
- (b) the representations and warranties in this Agreement shall be true, accurate, and complete in all material respects on the date of the Payment/Advance Form, and on the Funding Date of each Credit Extension; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement remain true, accurate, and complete in all material respects;

provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date; and

(c) Bank determines to its satisfaction that there has not been any material impairment in the general affairs, management, results of operation, or financial condition of Borrower or the prospect of repayment of the Obligations, nor any material adverse deviation by Borrower from the most recent business plan of Borrower presented to and accepted by Bank.

3.3 Covenant to Deliver. (a) Borrower agrees to deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

(b) Unless otherwise provided in writing, within sixty (60) days after the Effective Date, Bank shall have received, in form and substance reasonably satisfactory to Bank:

(i) appropriate evidence showing lender loss payable and/or additional insured clauses or endorsements and waiver of subrogation endorsements in favor of Bank; and

3.4 Procedures for Borrowing.

(a) Term Loan Advances. Subject to the prior satisfaction of all other applicable conditions to the making of a Term Loan Advance set forth in this Agreement, to obtain a Term Loan Advance, Borrower (via an individual duly authorized by an Administrator) shall notify Bank (which notice shall be irrevocable) by electronic mail by 12:00 noon Pacific time on the Funding Date of the Term Loan Advance. Such notice shall be made by Borrower through Bank's online banking program, provided, however, if Borrower is not utilizing Bank's online banking program, then such notice shall be in a written format acceptable to Bank that is executed by an Authorized Signer. Bank shall have received satisfactory evidence that the Board has approved that such Authorized Signer may provide such notices and request Term Loan Advances. In connection with such notification, Borrower must promptly deliver to Bank by electronic mail or through Bank's online banking program a completed Payment/Advance Form executed by an Authorized Signer together with such other reports and information, as Bank may request in its sole discretion. Bank shall credit proceeds of any Term Loan Advance to the Designated Deposit Account. Bank may make Term Loan Advances under this Agreement based on instructions from an Authorized Signer or without instructions if the Term Loan Advances are necessary to meet Obligations which have become due.

4. CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Bank, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Bank, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof.

Borrower acknowledges that it previously has entered, and/or may in the future enter, into Bank Services Agreements with Bank. Regardless of the terms of any Bank Services Agreement, Borrower agrees that any amounts Borrower owes Bank thereunder shall be deemed to be Obligations hereunder and that it is the intent of Borrower and Bank to have all such Obligations secured by the first priority perfected security interest in the Collateral granted herein (provided that the Collateral may also be subject to Permitted Liens).

If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations (other than inchoate indemnity obligations) and at such time as Bank's obligation to make Credit Extensions has terminated, Bank shall, at the sole cost and expense of Borrower, release its Liens in the Collateral and all rights therein shall revert to Borrower. In the event (x) all Obligations (other than inchoate indemnity obligations), except

for Bank Services, are satisfied in full, and (y) this Agreement is terminated, Bank shall terminate the security interest granted herein upon Borrower providing cash collateral acceptable to Bank in its good faith business judgment for Bank Services, if any. In the event such Bank Services consist of outstanding Letters of Credit, Borrower shall provide to Bank cash collateral in an amount equal to (x) if such Letters of Credit are denominated in Dollars, then at least one hundred five percent (105.0%); and (y) if such Letters of Credit are denominated in a Foreign Currency, then at least one hundred ten percent (110.0%), of the Dollar Equivalent of the face amount of all such Letters of Credit plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its business judgment), to secure all of the Obligations relating to such Letters of Credit.

4.2 Priority of Security Interest. Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (provided that the Collateral may also be subject to Permitted Liens). If Borrower shall acquire a commercial tort claim, Borrower shall promptly notify Bank in a writing signed by Borrower of the general details thereof and grant to Bank in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Bank.

4.3 Authorization to File Financing Statements. Borrower hereby authorizes Bank to file financing statements, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Bank's interest or rights hereunder, including a notice that any disposition of the Collateral, by either Borrower or any other Person, shall be deemed to violate the rights of Bank under the Code. Such financing statements may indicate the Collateral as "all assets of the Debtor" or words of similar effect, or as being of an equal or lesser scope, or with greater detail, all in Bank's discretion.

5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 Due Organization, Authorization; Power and Authority. Borrower is duly existing and in good standing as a Registered Organization in its jurisdiction of formation and is qualified and licensed to do business and is in good standing in any jurisdiction in which the conduct of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's business. In connection with this Agreement, Borrower has delivered to Bank a completed certificate signed by Borrower, entitled "Perfection Certificate" (the "**Perfection Certificate**"). Borrower represents and warrants to Bank that, except to the extent notified to Bank from time to time pursuant to Section 7.2, (a) Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (b) Borrower is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) the Perfection Certificate accurately sets forth Borrower's organizational identification number or accurately states that Borrower has none; (d) the Perfection Certificate accurately sets forth Borrower's place of business, or, if more than one, its chief executive office as well as Borrower's mailing address (if different than its chief executive office); (e) Borrower (and each of its predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, organizational type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificate pertaining to Borrower and each of its Subsidiaries is accurate and complete in all material respects (it being understood and agreed that Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement).

The execution, delivery and performance by Borrower of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict with or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect), or (v) conflict with, contravene, constitute a default or breach under, or result in or permit the termination or acceleration of, any material agreement by which Borrower is bound. Borrower is not in default

under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on Borrower's business.

5.2 Collateral. Borrower has good title to, rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Borrower has no Collateral Accounts at or with any bank or financial institution other than Bank or Bank's Affiliates except for Collateral Accounts maintained in compliance with Section 6.8 and for which Borrower has taken such actions as are necessary to give Bank a perfected security interest therein, pursuant to Section 6.8(b). The Accounts are bona fide, existing obligations of the Account Debtors.

The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate. None of the components of the Collateral shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2.

All Inventory is in all material respects of good and marketable quality, free from material defects.

Borrower is the sole owner of the Intellectual Property which it owns or purports to own except for (a) non-exclusive licenses granted to its customers in the ordinary course of business, (b) over-the-counter software that is commercially available to the public, (c) licenses that are Permitted Liens, and (d) material Intellectual Property licensed to Borrower and noted on the Perfection Certificate. Each Patent which it owns or purports to own and which is material to Borrower's business is valid and enforceable, and no part of the Intellectual Property which Borrower owns or purports to own and which is material to Borrower's business has been judged invalid or unenforceable, in whole or in part. To the best of Borrower's knowledge, no written claim has been made that any part of the Intellectual Property owned by Borrower violates the rights of any third party except to the extent such claim would not reasonably be expected to have a material adverse effect on Borrower's business.

Except as noted on the Perfection Certificate, Borrower is not a party to, nor is it bound by, any Restricted License.

5.3 Reserved.

5.4 Reserved.

5.5 Litigation. Except as disclosed in the Perfection Certificate or pursuant to Section 6.2(h), there are no actions or proceedings pending or, to the knowledge of any Responsible Officer, threatened in writing by or against Borrower or any of its Subsidiaries that could reasonably be expected to result in damages to Borrower or any of its Subsidiaries of more than, individually or in the aggregate, Two Hundred Fifty Thousand Dollars (\$250,000).

5.6 Financial Statements; Financial Condition. All consolidated financial statements for Borrower and any of its Subsidiaries delivered to Bank by submission to the Financial Statement Repository or otherwise submitted to Bank fairly present in all material respects the consolidated financial condition of Borrower and its Subsidiaries as of the respective dates thereof and the consolidated results of operations of Borrower and its Subsidiaries for the periods covered thereby, subject, solely in the case of interim financial statements, to the absence of footnotes and to normal year-end audit adjustments. There has not been any material deterioration in Borrower's consolidated financial condition since the date of the most recent financial statements submitted to the Financial Statement Repository or otherwise submitted to Bank.

5.7 Solvency. The fair salable value of Borrower's consolidated assets (including goodwill minus disposition costs) exceeds the fair value of Borrower's liabilities; Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Borrower is able to pay its debts (including trade debts) as they mature.

5.8 Regulatory Compliance. Borrower is not an "investment company" or a company "controlled" by an "investment company" or required to register as an "investment company" under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock

(under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower (a) has complied with all Requirements of Law applicable to Borrower except to the extent that any failure to do so could not reasonably be expected to have a material adverse effect on its business, and (b) has not violated any Requirements of Law the violation of which could reasonably be expected to have a material adverse effect on its business. None of Borrower's or any of its Subsidiaries' properties or assets has been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

5.9 Subsidiaries; Investments. Borrower does not own any stock, partnership interests, or other ownership interest or other equity securities except for Permitted Investments.

5.10 Tax Returns and Payments; Pension Contributions. Borrower has timely filed all required foreign, federal, state and local tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except (a) to the extent such taxes, assessments, deposits and/or contributions are being contested in good faith by appropriate proceedings promptly instituted and diligently conducted, so long as such reserve or other appropriate provision, if any, as shall be required in conformity with GAAP shall have been made therefor, or (b) if such taxes, assessments, deposits and contributions do not, individually or in the aggregate, exceed Fifty Thousand Dollars (\$50,000).

To the extent Borrower defers payment of any contested taxes, Borrower shall notify Bank in writing of the commencement of, and any material development in, the proceedings, and post bonds or take any other steps required to prevent the Governmental Authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien." Borrower is unaware of any claims or adjustments proposed for any of Borrower's prior tax years which could result in additional taxes becoming due and payable by Borrower in excess of Fifty Thousand Dollars (\$50,000). Borrower has paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

5.11 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely as working capital and to fund its general corporate purposes and not for personal, family, household or agricultural purposes.

5.12 Full Disclosure. No written representation, warranty or other statement of Borrower in any report, certificate, or written statement submitted to the Financial Statement Repository or otherwise submitted to Bank, as of the date such representation, warranty, or other statement was made, taken together with all such written reports, written certificates, and written statements submitted to the Financial Statement Repository or otherwise submitted to Bank by or on behalf of Borrower, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the reports, certificates, or written statements not misleading (it being recognized by Bank that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.13 Definition of "Knowledge." For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower's knowledge or awareness, to the "best of" Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of any Responsible Officer.

6. AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 **Government Compliance.**

(a) Except for mergers permitted by Section 7.3, maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on Borrower's business or operations. Borrower shall comply in all material respects, and have each Subsidiary comply, with all laws, ordinances and regulations to which it is subject.

(b) Obtain all of the Governmental Approvals necessary for the performance by Borrower of its obligations under the Loan Documents to which it is a party and the grant of a security interest to Bank in the Collateral. Borrower shall promptly provide copies of any such obtained, Governmental Approvals to Bank.

6.2 **Financial Statements, Reports.** Provide Bank with the following by submitting to the Financial Statement Repository or otherwise submitting to Bank:

(a) as soon as available, but no later than thirty (30) days after the last day of each month, a company prepared consolidated balance sheet and income statement covering the consolidated operations of Borrower and its Subsidiaries for such month in a form acceptable to Bank (the "**Monthly Financial Statements**");

(b) within thirty (30) days after the last day of each month and together with the Monthly Financial Statements, a duly completed Compliance Statement, certifying that as of the end of such month, Borrower was in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Bank may reasonably request, including, without limitation, a statement that at the end of such month there were no held checks;

(c) within thirty (30) days after the end of each fiscal year of Borrower, and contemporaneously with any updates or amendments thereto, (A) annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the current fiscal year of Borrower, and (B) annual financial projections for the current fiscal year (on a quarterly basis), in each case as approved by the Board, together with any related business forecasts used in the preparation of such annual financial projections;

(d) as soon as available, and in any event within one hundred eighty (180) days following the end of Borrower's fiscal year, beginning with fiscal year 2020, audited consolidated financial statements prepared under GAAP, consistently applied, together with an unqualified opinion (other than a qualification with respect to going concern typical for venture backed companies similar to Borrower) on the financial statements from an independent certified public accounting firm reasonably acceptable to Bank;

(e) prompt written notice of any changes to the beneficial ownership information set out in items 14(a) through 14(d) of the Perfection Certificate. Borrower understands and acknowledges that Bank relies on such true, accurate and up-to-date beneficial ownership information to meet Bank's regulatory obligations to obtain, verify and record information about the beneficial owners of its legal entity customers.

(f) in the event that Borrower becomes subject to the reporting requirements under the Exchange Act within five (5) days of filing, copies of all periodic and other reports, proxy statements and other materials filed by Borrower and/or any Guarantor with the SEC, any Governmental Authority succeeding to any or all of the functions of the SEC or with any national securities exchange, or distributed to its shareholders, as the case may be. Documents required to be delivered pursuant to the terms hereof (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower posts such documents, or provides a link thereto, on Borrower's website on the internet at Borrower's website address; provided, however, Borrower shall promptly notify Bank in writing (which may be by electronic mail) of the posting of any such documents;

(g) within five (5) days of delivery, copies of all statements, reports and notices made available (i) generally to Borrower's stockholders, (ii) to the Borrower's Major Investors (as defined in Borrower's Amended and Restated Investor Rights Agreement dated as of December 19, 2019, as may be amended from time to time), or (iii) to any holders of Borrower's Subordinated Debt;

(h) prompt report of any legal actions pending or threatened in writing against Borrower or any of its Subsidiaries that could reasonably be expected to result in damages or costs to Borrower or any of its Subsidiaries of, individually or in the aggregate, Two Hundred Fifty Thousand Dollars (\$250,000) or more; and

(i) promptly, from time to time, such other information regarding Borrower or compliance with the terms of any Loan Documents as reasonably requested by Bank.

Any submission by Borrower of a Compliance Statement or any other financial statement submitted to the Financial Statement Repository pursuant to this Section 6.2 or otherwise submitted to Bank shall be deemed to be a representation by Borrower that (i) as of the date of such Compliance Statement or other financial statement, the information and calculations set forth therein are true, accurate and correct in all material respects, (ii) as of the end of the compliance period set forth in such submission, Borrower is in complete compliance with all required covenants in any Loan Documents except as noted in such Compliance Statement or other financial statement, as applicable, (iii) as of the date of such submission, no Events of Default have occurred and are continuing, except as noted in such Compliance Statement or other financial statement, as applicable, (iv) all representations and warranties other than any representations or warranties that are made as of a specific date in Section 5 remain true and correct in all material respects as of the date of such submission except as noted in such Compliance Statement or other financial statement, as applicable, (v) as of the date of such submission, except as noted in such Compliance Statement or other financial statement, as applicable, Borrower and each of its Subsidiaries has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.9, and (vi) as of the date of such submission, except as noted in such Compliance Statement or other financial statement, as applicable, no Liens have been levied or claims made in writing against Borrower or any of its Subsidiaries relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Bank.

6.3 Reserved.

6.4 Reserved.

6.5 Taxes; Pensions. Timely file, and require each of its Subsidiaries to timely file, all required foreign, federal, state and local tax returns and reports and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower and each of its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.10 hereof, and shall deliver to Bank, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

6.6 Access to Collateral; Books and Records. At reasonable times, on one (1) Business Day's notice (provided no notice is required if an Event of Default has occurred and is continuing), Bank, or its agents, shall have the right to inspect the Collateral and the right to audit and copy Borrower's Books. Such inspections and audits shall be conducted no more often than once every fiscal year unless (or more frequently as Bank in its sole discretion determines that conditions warrant), unless an Event of Default has occurred and is continuing in which case such inspections shall occur as often as Bank shall determine is necessary; provided, Borrower shall not be required to reimburse Bank for more than one inspection or audit in any fiscal year so long as no Event of Default has occurred and is continuing. The foregoing inspections and audits shall be conducted at Borrower's expense and the charge therefor shall be One Thousand Dollars (\$1,000.00) per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus reasonable out-of-pocket expenses. In the event Borrower and Bank schedule an audit more than eight (8) days in advance, and Borrower cancels or seeks to or reschedules the audit with less than eight (8) days written notice to Bank, then (without limiting any of Bank's rights

or remedies) Borrower shall pay Bank a fee of Two Thousand Dollars (\$2,000.00) plus any out-of-pocket expenses incurred by Bank to compensate Bank for the anticipated costs and expenses of the cancellation or rescheduling.

6.7 Insurance.

(a) Keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location and as Bank may reasonably request. Insurance policies shall be in a form, with financially sound and reputable insurance companies that are not Affiliates of Borrower, and in amounts that are reasonably satisfactory to Bank. All property policies shall have a lender's loss payable endorsement showing Bank as the sole lender's loss payee. All liability policies shall show, or have endorsements showing, Bank as an additional insured. Bank shall be named as lender loss payee and/or additional insured with respect to any such insurance providing coverage in respect of any Collateral.

(b) Ensure that proceeds payable under any property policy are, at Bank's option, payable to Bank on account of the Obligations. Notwithstanding the foregoing, (i) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to Five Hundred Thousand Dollars (\$500,000) in the aggregate for all losses under all casualty policies during any fiscal year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (A) shall be of equal or like value as the replaced or repaired Collateral and (B) shall be deemed Collateral in which Bank has been granted a first priority security interest, and (ii) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Bank, be payable to Bank on account of the Obligations.

(c) At Bank's request, Borrower shall deliver certified copies of insurance policies and evidence of all premium payments. Each provider of any such insurance required under this Section 6.7 shall agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to Bank, that it will give Bank thirty (30) days prior written notice before any such policy or policies shall be materially altered or canceled. If Borrower fails to obtain insurance as required under this Section 6.7 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 6.7, and take any action under the policies Bank deems prudent.

6.8 Accounts.

(a) Borrower and any Guarantor shall maintain all of its operating accounts and excess cash with Bank or Bank's Affiliates. Notwithstanding the foregoing, Borrower and any Guarantor shall be permitted to open accounts outside of Bank in jurisdictions in which Bank cannot provide such accounts so long as the aggregate balance in all such accounts at no time exceeds Two Hundred Fifty Thousand Dollars (\$250,000), and such accounts are maintained in compliance with Section 6.8(b).

(b) In addition to and without limiting the restrictions in clause (a), Borrower shall provide Bank five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution other than Bank or Bank's Affiliates. For each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Bank. The provisions of the previous sentence shall not apply to deposit accounts exclusively used for payroll, payroll taxes, and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Bank by Borrower as such (such deposit accounts, "Excluded Accounts").

(c) Borrower and any Subsidiary of Borrower and any Guarantor shall obtain any business credit card and letter of credit exclusively from Bank.

(d) Foreign Subsidiaries shall maintain no greater than \$250,000 in any Deposit Account, Securities Account, or Commodity Account at any time.

6.9 Financial Covenants.

(a) Minimum Revenue. Maintain as of the last day of each month, unless otherwise noted, on a consolidated basis with respect to Borrower, minimum revenue (determined in accordance with GAAP) of at least the following amounts measured on a trailing three (3) month basis for the period then ended:

<u>Trailing Three Month Period Ending:</u>	<u>Minimum Revenue</u>
February 28, 2021	\$[***]
March 31, 2021	\$[***]
April 30, 2021	\$[***]
May 31, 2021	\$[***]
June 30, 2021	\$[***]
July 31, 2021	\$[***]
August 31, 2021	\$[***]
September 30, 2021	\$[***]
October 31, 2021	\$[***]
November 30, 2021	\$[***]
December 31, 2021	\$[***]
January 31, 2022	\$[***]
February 28, 2022	\$[***]
March 31, 2022	\$[***]
April 30, 2022	\$[***]
May 31, 2022	\$[***]
June 30, 2022	\$[***]
July 31, 2022	\$[***]
August 31, 2022	\$[***]
September 30, 2022	\$[***]
October 31, 2022	\$[***]
November 30, 2022	\$[***]
December 31, 2022	\$[***]

Commencing with the month ending January 31, 2023, and as of the last day of each month thereafter during Borrower's 2023 and 2024 fiscal years, respectively, (i) the minimum revenue covenant set forth in this Section 6.9(a) (the "**2023 Minimum Revenue Covenant**") shall be calculated based on Borrower's projected performance as set forth in Borrower's annual financial projections approved by Borrower's Board for the 2023 fiscal year and delivered to Bank not later than January 30, 2023 (the "**2023 Projections**"), and shall be equal to the greater of (i) eighty percent (80%) of the projected revenues as set forth in the 2023 Projections or (ii) ten percent (10%) year-over-year growth as set forth in the 2023 Projections, and (ii) the minimum revenue covenant set forth in this Section 6.9(a) (the "**2024 Minimum Revenue Covenant**") shall be calculated based on Borrower's projected performance as set forth in Borrower's annual financial projections approved by Borrower's Board for the 2024 fiscal year and delivered to Bank not later than January 30, 2024 (the "**2024 Projections**"), and shall be equal to the

greater of (i) eighty percent (80%) of the projected revenues as set forth in the 2024 Projections or (ii) ten percent (10%) year-over-year growth as set forth in the 2024 Projections. Borrower's failure to reach an agreement with Bank on (i) the 2023 Minimum Revenue Covenant on or before February 28, 2023 and to execute and deliver to Bank an amendment to this Agreement which provides the terms for such 2023 Minimum Revenue Covenant mutually agreeable to Borrower and Bank on or prior to February 28, 2023, or (ii) the 2024 Minimum Revenue Covenant on or before February 28, 2024 and to execute and deliver to Bank an amendment to this Agreement which provides the terms for such 2024 Minimum Revenue Covenant mutually agreeable to Borrower and Bank on or prior to February 28, 2024, shall constitute an immediate Event of Default under this Agreement.

6.10 Protection of Intellectual Property Rights.

(a) (i) Protect, defend and maintain the validity and enforceability of its Intellectual Property material to Borrower's business; (ii) promptly advise Bank in writing of material infringements or any other event that could reasonably be expected to materially and adversely affect the value of its Intellectual Property; and (iii) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Bank's written consent.

(b) Provide written notice to Bank within ten (10) days of entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public). Borrower shall take such steps as Bank reasonably requests to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) any Restricted License to be deemed "Collateral" and for Bank to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (ii) Bank to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Bank's rights and remedies under this Agreement and the other Loan Documents.

6.11 Litigation Cooperation. From the date hereof and continuing through the termination of this Agreement, at Bank's request, make available to Bank, without expense to Bank, Borrower and its officers, employees and agents and Borrower's books and records, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to Borrower.

6.12 Online Banking.

(a) Utilize Bank's online banking platform for all matters requested by Bank which shall include, without limitation (and without request by Bank for the following matters), uploading information pertaining to Accounts and Account Debtors, requesting approval for exceptions, requesting Credit Extensions, and uploading financial statements and other reports required to be delivered by this Agreement (including, without limitation, those described in Section 6.2 of this Agreement).

(b) Comply with the terms of Bank's Online Banking Agreement as in effect from time to time and ensure that all persons utilizing Bank's online banking platform are duly authorized to do so by an Administrator. Bank shall be entitled to assume the authenticity, accuracy and completeness on any information, instruction or request for a Credit Extension submitted via Bank's online banking platform and to further assume that any submissions or requests made via Bank's online banking platform have been duly authorized by an Administrator.

6.13 Formation or Acquisition of Subsidiaries. Notwithstanding and without limiting the negative covenants contained in Sections 7.3 and 7.7 hereof, at the time that Borrower or any Guarantor forms any direct or indirect Subsidiary or acquires any direct or indirect Subsidiary after the Effective Date (including, without limitation, pursuant to a Division), Borrower and such Guarantor shall, at Bank's request in its sole discretion, (a) cause such new Subsidiary to provide to Bank a joinder to this Agreement to become a co-borrower hereunder or a Guaranty to become a Guarantor hereunder, together with such appropriate financing statements and/or Control Agreements, all in form and substance satisfactory to Bank (including being sufficient to grant Bank a first priority Lien (subject to Permitted Liens) in and to the assets of such newly formed or acquired Subsidiary); provided that no Foreign Subsidiary shall be required to be a Guarantor or Borrower if Borrower can demonstrate to Bank's

satisfaction, determined in its good faith business judgment, that the joinder of, or Guaranty by, such Foreign Subsidiary would cause an adverse tax consequence to Borrower under the Internal Revenue Code of 1986, as amended, (b) provide to Bank appropriate certificates and powers and financing statements, pledging all of the direct or beneficial ownership interest in such new Subsidiary, in form and substance satisfactory to Bank (provided, however, if Borrower can demonstrate to Bank's satisfaction, determined in its good faith business judgment, that pledging in excess of sixty-five percent (65%) of the capital stock of any Foreign Subsidiary would cause an adverse tax consequence for Borrower or such new Foreign Subsidiary, then Borrower shall be required to pledge only sixty-five percent (65%) of the stock of such newly created Foreign Subsidiary); and (c) provide to Bank all other documentation in form and substance satisfactory to Bank, which in its opinion is appropriate with respect to the execution and delivery of the applicable documentation referred to above. Any document, agreement, or instrument executed or issued pursuant to this Section 6.13 shall be a Loan Document.

6.14 Further Assurances. Execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's Lien in the Collateral or to effect the purposes of this Agreement. Deliver to Bank, within five (5) days after the same are sent or received, copies of all correspondence, reports, documents and other filings with any Governmental Authority regarding compliance with or maintenance of Governmental Approvals or Requirements of Law or that could reasonably be expected to have a material effect on any of the Governmental Approvals or otherwise on the operations of Borrower or any of its Subsidiaries.

7. NEGATIVE COVENANTS

Borrower shall not do any of the following without Bank's prior written consent:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (including, without limitation, pursuant to a Division) (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn-out, surplus or obsolete Equipment that is, in the reasonable judgment of Borrower, no longer economically practicable to maintain or useful in the ordinary course of business of Borrower; (c) consisting of Permitted Liens and Permitted Investments; (d) consisting of Borrower's use or transfer of money or Cash Equivalents in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents; and (e) in an aggregate amount not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in any fiscal year.

7.2 Changes in Business, Management, Control, or Business Locations. (a) Engage in or permit any of its Subsidiaries to engage in any business other than the businesses currently engaged in by Borrower and such Subsidiary, as applicable, or reasonably related or incidental thereto; (b) liquidate or dissolve; (c) fail to provide notice to Bank, within five Business Days of such departure or cessation, if the Key Person departs from or ceases to be employed by Borrower; or (d) permit or suffer any Change in Control.

Borrower shall not, without at least twenty (20) days' prior written notice to Bank: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Two Hundred Fifty Thousand Dollars (\$250,000) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of than Two Hundred Fifty Thousand Dollars (\$250,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate or previously notified to Bank in accordance with this paragraph, (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, or (5) change any organizational number (if any) assigned by its jurisdiction of organization. If Borrower intends to add any new offices or business locations, including warehouses, containing in excess of than Two Hundred Fifty Thousand Dollars (\$250,000) of Borrower's assets or property, then Borrower will use its commercially reasonable efforts to cause the landlord of any such new offices or business locations, including warehouses, to execute and deliver a landlord consent in form and substance reasonably satisfactory to Bank. If Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of than Two Hundred Fifty Thousand Dollars (\$250,000) to a bailee, and Bank and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Borrower intends to deliver the Collateral, then Borrower will first receive the written consent of Bank, and such bailee shall execute and deliver a bailee agreement in form and substance satisfactory to Bank.

7.3 Mergers or Acquisitions. Except for an IPO pursuant to clause (c) of such definition for which Borrower has provided Bank with at least twenty (20) days' prior written notice, merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock, shares or property of another Person (including, without limitation, by the formation of any Subsidiary or pursuant to a Division). A Subsidiary may merge or consolidate into another Subsidiary or into Borrower.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of its property, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, permit any Collateral not to be subject to the first priority security interest granted herein (provided the Collateral may also be subject to Permitted Liens), or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Intellectual Property in favor of Bank, except (i) as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens" herein, (ii) customary restrictions on assignment, transfer and encumbrances in license agreements under which Borrower or any Subsidiary is the licensee or for covenants with such restrictions in merger or acquisition agreements; provided that such covenants do not prohibit Borrower or any Subsidiary from granting a security interest in Borrower's or any such Subsidiary's Intellectual Property in favor of Bank; and provided further that the counter-parties to such covenants are not permitted to receive a security interest in Borrower's or any Subsidiary's Intellectual Property.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.8(b) hereof.

7.7 Distributions; Investments. (a) Pay any dividends or make any distribution or payment or redeem, retire or purchase any capital stock of Borrower, provided that (i) Borrower may convert any of its convertible securities into other securities pursuant to the terms of such convertible securities or otherwise in exchange thereof and pay cash in lieu of the issuance of fractional shares in connection with such conversion, (ii) Borrower may pay dividends solely in common stock; and (iii) Borrower may repurchase the stock of former employees, directors or consultants pursuant to stock repurchase agreements so long as an Event of Default does not exist at the time of such repurchase and would not exist after giving effect to such repurchase, provided that the aggregate amount of all such repurchases does not exceed Two Hundred Fifty Thousand Dollars (\$250,000) per fiscal year; or (b) directly or indirectly make any Investment (including, without limitation, by the formation of any Subsidiary) other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower, except for (a) transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, (b) transactions between and Borrower and any of its Subsidiaries which are otherwise expressly permitted hereunder, (c) transactions expressly permitted by Sections 7.1, 7.3, and/or 7.7, (d) employment and compensation arrangements of officers or directors approved by the Board, all to the extent in the ordinary course of business, and (e) Subordinated Debt financings with existing investors that are, in each case, approved by Borrower's board of directors.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof, provide for earlier or greater principal, interest, or other payments thereon, or adversely affect the subordination thereof to Obligations owed to Bank, except, in each case, in accordance with the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject.

7.10 Compliance. Become an “investment company,” required to register as an “investment company,” or is company controlled by an “investment company” under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on Borrower’s business, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

8. EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an “**Event of Default**”) under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on any Credit Extension when due, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Term Loan Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default. Borrower (a) fails or neglects to perform any obligation in Sections 6.2, 6.5, 6.6, 6.7, 6.8 6.9, 6.10, 6.11, 6.12 or 6.14 of this Agreement or violates any covenant in Section 7 of this Agreement or (b) fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents and as to any default (other than those specified in clause (a) or Section 8.1) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) Business Days after the occurrence thereof; provided, however, grace and cure period provided under this Section 8.2 shall not apply to any covenants set forth in clause (a).

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or of any Subsidiary, or (ii) a notice of lien or levy is filed against any of Borrower’s assets with a value in excess of Five Hundred Thousand Dollars (\$500,000) by any Governmental Authority, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; or

(b) (i) any material portion of Borrower’s assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower from conducting all or any material part of its business and such order is not discharged or stayed within ten (10) days after the occurrence thereof;

8.5 Insolvency. (a) Borrower or any of its Subsidiaries is unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent; (b) Borrower or any of its Subsidiaries begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower or any of its Subsidiaries and is not dismissed or stayed within forty-five (45) days (but no Credit Extensions shall be made while any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is, under any agreement to which Borrower or any Guarantor is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not

exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Five Hundred Thousand Dollars (\$500,000); or (b) any breach or default by Borrower or Guarantor, the result of which could reasonably be expected to have a material adverse effect on Borrower's or any Guarantor's business;

8.7 Judgments; Penalties. One or more fines, penalties or final judgments, orders or decrees for the payment of money in an amount, individually or in the aggregate, of at least Five Hundred Thousand Dollars (\$500,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower by any Governmental Authority, and the same are not, within ten (10) days after the entry, assessment or issuance thereof, discharged, satisfied, or paid, or after execution thereof, stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the satisfaction, payment, discharge, stay, or bonding of such fine, penalty, judgment, order or decree);

8.8 Misrepresentations. Borrower or any Person acting for Borrower makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt. Any document, instrument, or agreement evidencing the subordination of any Subordinated Debt shall for any reason be revoked or invalidated or otherwise cease to be in full force and effect, any Person (other than Bank) shall be in breach thereof or contest in any manner the validity or enforceability thereof or deny that it has any further liability or obligation thereunder, or the Obligations shall not for any reason have the payment and/or lien priority contemplated by this Agreement, the Loan Documents, or by any applicable subordination or intercreditor agreement;

8.10 Guaranty. (a) Any guaranty of any Obligations by a Guarantor terminates or ceases for any reason to be in full force and effect; (b) any Guarantor does not perform any obligation or covenant under any guaranty of the Obligations; (c) any circumstance described in Sections 8.3, 8.4, 8.5, 8.6, 8.7, or 8.8 of this Agreement occurs with respect to any Guarantor, (d) the death, liquidation, winding up, or termination of existence of any Guarantor (other than as permitted by Section 7.1 or 7.3); or (e)(i) a material impairment in the perfection or priority of Bank's Lien in the collateral provided by Guarantor or in the value of such collateral or (ii) a material adverse change in the business, operations or financial condition or the prospect of repayment of the Obligations occurs with respect to any Guarantor; or

8.11 Governmental Approvals. Any Governmental Approval shall have been (a) revoked, rescinded, suspended, modified in an adverse manner or not renewed in the ordinary course for a full term or (b) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Governmental Approval or that could reasonably be expected to result in the Governmental Authority taking any of the actions described in clause (a) above, and such decision or such revocation, rescission, suspension, modification or non-renewal (i) causes, or could reasonably be expected to cause, a Material Adverse Change, or (ii) materially and adversely affects the legal qualifications of Borrower or any of its Subsidiaries to hold such Governmental Approval in any applicable jurisdiction and such revocation, rescission, suspension, modification or non-renewal could reasonably be expected to materially and adversely affect the status of or legal qualifications of Borrower or any of its Subsidiaries to hold any material Governmental Approval in any other material jurisdiction.

9. BANK'S RIGHTS AND REMEDIES

9.1 Rights and Remedies. Upon the occurrence and during the continuance of an Event of Default, Bank may, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;

(c) demand that Borrower (i) deposit cash with Bank in an amount equal to at least (A) one hundred five percent (105.0%) of the Dollar Equivalent of the aggregate face amount of all Letters of Credit denominated in Dollars remaining undrawn, and (B) one hundred ten percent (110.0%) of the Dollar Equivalent of the aggregate face amount of all Letters of Credit denominated in a Foreign Currency remaining undrawn (plus, in each case, all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment)), to secure all of the Obligations relating to such Letters of Credit, as collateral security for the repayment of any future drawings under such Letters of Credit, and Borrower shall forthwith deposit and pay such amounts, and (ii) pay in advance all letter of credit fees scheduled to be paid or payable over the remaining term of any Letters of Credit;

(d) terminate any FX Contracts;

(e) verify the amount of, demand payment of and performance under, and collect any Accounts and General Intangibles, settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, and notify any Person owing Borrower money of Bank's security interest in such funds. Borrower shall collect all payments in trust for Bank and, if requested by Bank, immediately deliver the payments to Bank in the form received from the Account Debtor, with proper endorsements for deposit;

(f) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(g) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) amount held by Bank owing to or for the credit or the account of Borrower;

(h) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section 9.1, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit;

(i) place a "hold" on any account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(j) demand and receive possession of Borrower's Books; and

(k) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

9.2 Power of Attorney. Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact to: (a) exercisable following the occurrence of and during the continuance of an Event of Default: (i) sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (ii) demand, collect, sue, and give releases to any Account Debtor for monies due, settle and adjust disputes and claims about the Accounts directly with Account Debtors, and compromise, prosecute, or defend any action, claim, case, or proceeding about any Collateral (including filing a claim or voting a claim in any bankruptcy case in Bank's or Borrower's name, as Bank chooses); (iii) make, settle, and adjust all claims under Borrower's insurance policies; (iv) pay, contest or settle any Lien, charge, encumbrance, security interest, or other claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (v) transfer the Collateral into the name of Bank or a third party as the Code permits; and (vi) receive, open and dispose of mail addressed to Borrower; and

(b) regardless of whether an Event of Default has occurred, (i) endorse Borrower's name on any checks, payment instruments, or other forms of payment or security; and (ii) notify all Account Debtors to pay Bank directly. Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Bank's security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations (other than inchoate indemnity obligations, and any other obligations which, by their terms, are to survive the termination of this Agreement) have been satisfied in full and the Loan Documents have been terminated. Bank's foregoing appointment as Borrower's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until all Obligations (other than inchoate indemnity obligations, and any other obligations which, by their terms, are to survive the termination of this Agreement) have been fully repaid and performed and the Loan Documents have been terminated.

9.3 Protective Payments. If Borrower fails to obtain the insurance called for by Section 6.7 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document or which may be required to preserve the Collateral, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Borrower with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default.

9.4 Application of Payments and Proceeds. Bank shall have the right to apply in any order any funds in its possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations. Bank shall pay any surplus to Borrower by credit to the Designated Deposit Account or to other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If Bank, directly or indirectly, enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

9.5 Bank's Liability for Collateral. So long as Bank complies with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Bank, Bank shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Bank's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

10. NOTICES

All notices, consents, requests, approvals, demands, or other communication by any party to this Agreement or any other Loan Document must be in writing and shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, first

class, registered or certified mail return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by electronic mail or facsimile transmission; (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address, facsimile number, or email address indicated below. Bank or Borrower may change its mailing or electronic mail address or facsimile number by giving the other party written notice thereof in accordance with the terms of this Section 10

If to Borrower: CODEX DNA, INC.
9535 Waples Street, Ste 100
San Diego, CA 92121
Attn: Todd Nelson
Email: todd@codexdna.com

If to Bank: Silicon Valley Bank
4370 La Jolla Village Drive, #1050
San Diego, California 92122
Attn: Brendan Crawford, Vice President
Email: bcrawford@svb.com

11. CHOICE OF LAW, VENUE, JURY TRIAL WAIVER AND JUDICIAL REFERENCE

Except as otherwise expressly provided in any of the Loan Documents, California law governs the Loan Documents without regard to principles of conflicts of law. Borrower and Bank each submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Bank from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Bank. Borrower expressly submits and consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in, or subsequently provided by Borrower in accordance with, Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY, if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with California Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of California Code of Civil Procedure Sections 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently

sealed. If during the course of any dispute, a party desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then such party may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and orders applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to California Code of Civil Procedure Section 644(a). Nothing in this paragraph shall limit the right of any party at any time to exercise self-help remedies, foreclose against collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

This Section 11 shall survive the termination of this Agreement.

12. GENERAL PROVISIONS

12.1 Termination Prior to Maturity Date; Survival. All covenants, representations and warranties made in this Agreement shall continue in full force until this Agreement has terminated pursuant to its terms and all Obligations have been satisfied. So long as Borrower has satisfied the Obligations (other than inchoate indemnity obligations, and any other obligations which, by their terms, are to survive the termination of this Agreement, and any Obligations under Bank Services Agreements that are cash collateralized in accordance with Section 4.1 of this Agreement), this Agreement may be terminated prior to the Term Loan Maturity Date by Borrower, effective three (3) Business Days after written notice of termination is given to Bank. Those obligations that are expressly specified in this Agreement as surviving this Agreement's termination shall continue to survive notwithstanding this Agreement's termination.

12.2 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's discretion). Bank has the right, without the consent of or notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents (other than the Warrant, as to which assignment, transfer and other such actions are governed by the terms thereof).

12.3 Indemnification. Borrower agrees to indemnify, defend and hold Bank and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing Bank (each, an "**Indemnified Person**") harmless against: (i) all obligations, demands, claims, and liabilities (collectively, "**Claims**") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (ii) all losses or expenses (including Bank Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Bank and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct.

This Section 12.3 shall survive until all statutes of limitation with respect to the Claims, losses, and expenses for which indemnity is given shall have run.

12.4 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.5 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.6 Correction of Loan Documents. Bank may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties.

12.7 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.8 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.9 Confidentiality. In handling any confidential information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Bank's Subsidiaries or Affiliates (such Subsidiaries and Affiliates, together with Bank, collectively, "**Bank Entities**"); (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use its best efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required in connection with Bank's examination or audit; (e) as Bank considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank, or becomes part of the public domain (other than as a result of its disclosure by Bank in violation of this Agreement) after disclosure to Bank; or (ii) disclosed to Bank by a third party, if Bank does not know that the third party is prohibited from disclosing the information.

Bank Entities may use anonymous forms of confidential information for aggregate datasets, for analyses or reporting, and for any other uses not expressly prohibited in writing by Borrower. The provisions of the immediately preceding sentence shall survive the termination of this Agreement.

12.10 Attorneys' Fees, Costs and Expenses. In any action or proceeding between Borrower and Bank arising out of or relating to the Loan Documents, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled.

12.11 Electronic Execution of Documents. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.12 Right of Setoff. Borrower hereby grants to Bank a Lien and a right of setoff as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of Bank (including a subsidiary of Bank) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may setoff the same or any part thereof and apply the same to any liability or Obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER, ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.13 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.14 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.15 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.16 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

13. DEFINITIONS

13.1 Definitions. As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

"**2023 Minimum Revenue Covenant**" is defined in Section 6.9(a).

"**2024 Minimum Revenue Covenant**" is defined in Section 6.9(a).

"**2023 Projections**" is defined in Section 6.9(a).

"**2024 Projections**" is defined in Section 6.9(a).

"**Account**" is, as to any Person, any "**account**" of such Person as "**account**" is defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to such Person.

"**Account Debtor**" is any "**account debtor**" as defined in the Code with such additions to such term as may hereafter be made.

"**Administrator**" is an individual that is named:

(a) as an "Administrator" in the "SVB Online Services" form completed by Borrower with the authority to determine who will be authorized to use SVB Online Services (as defined in Bank's Online Banking Agreement as in effect from time to time) on behalf of Borrower; and

(b) as an Authorized Signer of Borrower in an approval by the Board.

"**Affiliate**" is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Agreement**" is defined in the preamble hereof.

"**Applicable Number**" means (a) twenty-four (24) if the Extension Milestone is not achieved, and (b) thirty (30) if the Extension Milestone is achieved.

“Authorized Signer” is any individual listed in Borrower’s Borrowing Resolution who is authorized to execute the Loan Documents, including making (and executing if applicable) any Credit Extension request, on behalf of Borrower.

“Bank” is defined in the preamble hereof.

“Bank Entities” is defined in Section 12.9.

“Bank Expenses” are all audit fees and expenses, costs, and expenses (including reasonable attorneys’ fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower or any Guarantor.

“Bank Services” are any products, credit services, and/or financial accommodations previously, now, or hereafter provided to Borrower or any of its Subsidiaries by Bank or any Bank Affiliate, including, without limitation, any letters of credit, cash management services (including, without limitation, merchant services, direct deposit of payroll, business credit cards, and check cashing services), interest rate swap arrangements, and foreign exchange services as any such products or services may be identified in Bank’s various agreements related thereto (each, a **“Bank Services Agreement”**).

“Bank Services Agreement” is defined in the definition of Bank Services.

“Board” is Borrower’s board of directors.

“Borrower” is defined in the preamble hereof.

“Borrower’s Books” are all Borrower’s books and records including ledgers, federal and state tax returns, records regarding Borrower’s assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

“Borrowing Resolutions” are, with respect to any Person, those resolutions adopted by such Person’s board of directors (and, if required under the terms of such Person’s Operating Documents, stockholders) and delivered by such Person to Bank approving the Loan Documents to which such Person is a party and the transactions contemplated thereby, together with a certificate executed by its secretary on behalf of such Person certifying (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (b) that set forth as a part of or attached as an exhibit to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Loan Documents, including making (and executing if applicable) any Credit Extension request, on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) that Bank may conclusively rely on such certificate unless and until such Person shall have delivered to Bank a further certificate canceling or amending such prior certificate.

“Business Day” is any day that is not a Saturday, Sunday or a day on which Bank is closed.

“Cash Equivalents” means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor’s Ratings Group or Moody’s Investors Service, Inc.; (c) Bank’s certificates of deposit issued maturing no more than one (1) year after issue; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

“Change in Control” means (a) at any time, any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act), shall become, or obtain rights (whether by means of warrants, options or otherwise) to become, the “beneficial owner” (as defined in Rules 13(d)-3 and 13(d)5 under the Exchange Act), directly or indirectly, of fifty percent (50%) or more of the ordinary voting power for the election of directors of Borrower (determined on a fully diluted basis) other than by the sale of Borrower’s equity securities in a

public offering (including an IPO) or to venture capital or private equity investors so long as Borrower identifies to Bank the venture capital or private equity investors at least seven (7) Business Days prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction; (b) during any period of twelve (12) consecutive months, a majority of the members of the board of directors or other equivalent governing body of Borrower cease to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body; or (c) except in connection with a transaction permitted by Section 7.3, at any time, Borrower shall cease to own and control, of record and beneficially, directly or indirectly, one hundred percent (100.0%) of each class of outstanding capital stock (other than directors' qualifying shares and other nominal amounts of capital stock that are required to be held by Person other than the Borrower and/or its Subsidiaries under applicable Requirements of Law) of each Subsidiary of Borrower free and clear of all Liens (except Liens created by this Agreement).

"Claims" is defined in Section 12.3.

"Code" is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the State of California; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the State of California, the term "Code" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"Collateral" is any and all properties, rights and assets of Borrower described on Exhibit A.

"Collateral Account" is any Deposit Account, Securities Account, or Commodity Account.

"Commodity Account" is any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"Compliance Statement" is that certain statement in the form attached hereto as Exhibit B.

"Contingent Obligation" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case, directly or indirectly guaranteed, endorsed, co made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"Control Agreement" is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

“**Copyrights**” are any and all copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

“**Credit Extension**” is any Term Loan Advance, or any other extension of credit by Bank for Borrower’s benefit.

“**Default Rate**” is defined in Section 2.5(b).

“**Deposit Account**” is any “**deposit account**” as defined in the Code with such additions to such term as may hereafter be made.

“**Designated Deposit Account**” is the account number ending 753 (last three digits) maintained by Borrower with Bank (provided, however, if no such account number is included, then the Designated Deposit Account shall be any deposit account of Borrower maintained with Bank as chosen by Bank).

“**Division**” means, in reference to any Person which is an entity, the division of such Person into two (2) or more separate Persons, with the dividing Person either continuing or terminating its existence as part of such division, including, without limitation, as contemplated under Section 18-217 of the Delaware Limited Liability Company Act for limited liability companies formed under Delaware law, or any analogous action taken pursuant to any other applicable law with respect to any corporation, limited liability company, partnership or other entity.

“**Dollars**,” “**dollars**” or use of the sign “\$” means only lawful money of the United States and not any other currency, regardless of whether that currency uses the “\$” sign to denote its currency or may be readily converted into lawful money of the United States.

“**Dollar Equivalent**” is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

“**Domestic Subsidiary**” means a Subsidiary organized under the laws of the United States or any state or territory thereof or the District of Columbia.

“**Effective Date**” is defined in the preamble hereof.

“**Equipment**” is all “**equipment**” as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“**ERISA**” is the Employee Retirement Income Security Act of 1974, and its regulations.

“**Event of Default**” is defined in Section 8.

“**Exchange Act**” is the Securities Exchange Act of 1934, as amended.

“**Extension Milestone**” means Bank’s receipt of evidence satisfactory to Bank, in its sole discretion, that Borrower has achieved at least Four Million Dollars (\$4,000,000) in trailing three (3) month instruments and reagents revenue (measured in accordance with GAAP) for any three month period occurring after the date hereof but ending prior to or on December 31, 2021, and confirmatory Bank calls with management and Investors.

“**Final Payment**” is a payment (in addition to and not a substitution for the regular monthly payments of principal plus accrued interest) due on the earliest to occur of (a) the Term Loan Maturity Date, or (b) the acceleration of the Term Loan Advances, or (c) the prepayment of the Term Loan Advances in full pursuant to Section 2.3(d) or 2.3(e), equal to Four Hundred Thousand Dollars (\$400,000).

“**Financial Statement Repository**” is each of (a) SWLSReporting@svb.com or such other means of collecting information approved and designated by Bank after providing notice thereof to Borrower from time to time and (b) Bank’s online banking platform as described in Section 6.12.

“**Foreign Currency**” means lawful money of a country other than the United States.

“**Foreign Subsidiary**” means any Subsidiary which is not a Domestic Subsidiary.

“**Funding Date**” is any date on which a Credit Extension is made to or for the account of Borrower which shall be a Business Day.

“**FX Contract**” is any foreign exchange contract by and between Borrower and Bank under which Borrower commits to purchase from or sell to Bank a specific amount of Foreign Currency on a specified date.

“**GAAP**” is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

“**General Intangibles**” is all “general intangibles” as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

“**Good Faith Deposit**” is defined in Section 2.6(a).

“**Governmental Approval**” is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

“**Governmental Authority**” is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

“**Guarantor**” is any Person providing a Guaranty in favor of Bank.

“**Guaranty**” is any guarantee of all or any part of the Obligations, as the same may from time to time be amended, restated, modified or otherwise supplemented.

“**Indebtedness**” is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

“**Indemnified Person**” is defined in Section 12.3.

“**Insolvency Proceeding**” is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

“**Intellectual Property**” means, with respect to any Person, all of such Person’s right, title, and interest in and to the following:

- (a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how and operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to such Person;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

“Inventory” is all **“inventory”** as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“Investment” is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

“IPO” means an initial public offering of common stock of Borrower pursuant to (a) an effective registration statement filed with the United States Securities and Exchange Commission in accordance with the Securities Act of 1933, as amended, (b) a direct listing in the United States, or (c) a reverse merger into a Publicly Reporting Company with shares of stock that are listed on a US national stock exchange and in which Borrower retains Control of (or is) the surviving entity.

“Key Person” is Todd Nelson.

“Letter of Credit” is a standby or commercial letter of credit issued by Bank upon request of Borrower based upon an application, guarantee, indemnity, or similar agreement.

“Lien” is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

“Loan Documents” are, collectively, this Agreement and any schedules, exhibits, certificates, notices, and any other documents related to this Agreement, the Warrant, any Bank Services Agreement, any subordination agreement, any note, or notes or guaranties executed by Borrower or any Guarantor, and any other present or future agreement by Borrower and/or any Guarantor with or for the benefit of Bank, all as amended, restated, or otherwise modified.

“Loan Party” means Borrower and any Guarantor.

“Material Adverse Change” is (a) a material impairment in the perfection or priority of Bank’s Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or financial condition of Borrower; or (c) a material impairment of the prospect of repayment of any portion of the Obligations.

“Monthly Financial Statements” is defined in Section 6.2(a).

“Obligations” are Borrower’s obligations to pay when due any debts, principal, interest, fees, Bank Expenses, the Prepayment Fee, the Final Payment, and other amounts Borrower owes Bank now or later, whether under this Agreement, the other Loan Documents (other than the Warrant), or otherwise, including, without limitation, all obligations relating to Bank Services and interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank, and to perform Borrower’s duties under the Loan Documents (other than the Warrant).

“**Operating Documents**” are, for any Person, such Person’s formation documents, as certified by the Secretary of State (or equivalent agency) of such Person’s jurisdiction of organization on a date that is no earlier than thirty (30) days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

“**Patents**” means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

“**Payment/Advance Form**” is that certain form in the form attached hereto as Exhibit C.

“**Payment Date**” is with respect to Term Loan Advances, the first (1st) calendar day of each month.

“**Perfection Certificate**” is defined in Section 5.1.

“**Permitted Indebtedness**” is:

- (a) Borrower’s Indebtedness to Bank under this Agreement and the other Loan Documents;
- (b) Indebtedness existing on the Effective Date which is shown on the Perfection Certificate;
- (c) Subordinated Debt;
- (d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business;
- (e) Indebtedness constituting a Permitted Investment;

(f) Indebtedness in respect of performance bonds, bid bonds, appeal bonds, surety bonds and similar obligations, in each case, provided in the ordinary course of business and not to exceed Fifty Thousand Dollars (\$50,000) in the aggregate at any time;

(g) (i) Indebtedness of a Loan Party to any other Loan Party; (ii) Indebtedness of a Loan Party owed to a Foreign Subsidiary; and (iii) Indebtedness of a Foreign Subsidiary owed to a Loan Party; provided, that (x) all such Indebtedness is unsecured, and (y) in the case of clause (iii), the aggregate principal amount of such new Indebtedness incurred after the Effective Date shall not exceed, in the aggregate (when calculated together with the amounts of Permitted Investments permitted pursuant to clause (f)(i) of such definition), Two Hundred Fifty Thousand Dollars (\$250,000.00) at any time;

(h) with Bank’s prior written consent (which may be withheld in Bank’s sole discretion), Indebtedness (i) in respect of corporate credit card in the ordinary course of business in jurisdictions in which Bank does not provide such services, (ii) arising from customary cash management and treasury services, and the honoring of a check, draft or similar instrument against insufficient funds or from the endorsement of instruments for collection or deposit, in each case, in the ordinary course of business, (iii) in connection with letters of credit, security deposits or other credit support for the benefit of any landlords of locations leased by Borrower or any of its Subsidiaries in connection with office leases in the ordinary course of business, and (iv) under currency hedging agreements not for speculative purposes;

- (i) other unsecured Indebtedness in an aggregate principal amount not to exceed Two Hundred Thousand Dollars (\$200,000) outstanding at any time; and

(j) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (c) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

“Permitted Investments” are:

- (a) Investments (including, without limitation, Subsidiaries) existing on the Effective Date which are shown on the Perfection Certificate; and
- (b) (i) Investments consisting of cash and Cash Equivalents, and (ii) any other Investments permitted by Borrower’s investment policy, as amended from time to time, provided that such investment policy (and any such amendment thereto) has been approved in writing by Bank;
- (c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower or its Subsidiaries;
- (d) Investments accepted in connection with Transfers permitted by Section 7.1;
- (e) Investments consisting of the creation of a Subsidiary for the purpose of consummating a merger transaction permitted by Section 7.3 of this Agreement, which is otherwise a Permitted Investment or an IPO, provided that such subsidiary is joined to the Loan Documents as a co-Borrower pursuant to Section 6.13 prior to the effectiveness of any such transaction or IPO;
- (f) Investments (i) by Borrower in Subsidiaries that are not a Loan Party not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in the aggregate in any fiscal year (when calculated together with the amounts of Permitted Indebtedness permitted pursuant to clause (g)(iii) of such definition), (ii) by Subsidiaries that are not a Loan Party in (A) other Subsidiaries that are not Loan Parties or (B) a Loan Party and (iii) by a Loan Party another Loan Party;
- (g) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower’s Board and, with respect to clauses (i) and (ii) collectively, in an aggregate amount not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) in any fiscal year;
- (h) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;
- (i) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (i) shall not apply to Investments of Borrower in any Subsidiary;
- (j) Investments consisting of deposit accounts (but only to the extent that Borrower is permitted to maintain such accounts pursuant to Section 6.6 of this Agreement) in which Bank has a first priority perfected security interest to the extent required pursuant to Section 6.6 of this Agreement; and
- (k) other Investments not otherwise permitted by the foregoing clauses (a) through (j) in an aggregate amount not to exceed Two Hundred Thousand Dollars (\$200,000) per fiscal year.

“Permitted Liens” are:

- (a) Liens existing on the Effective Date which are shown on the Perfection Certificate or arising under this Agreement or the other Loan Documents;
- (b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not delinquent or (ii) being contested in good faith and for which Borrower maintains adequate reserves on Borrower’s Books, provided that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) Liens securing capital leases and purchase money Liens (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment securing no more than Five Hundred Thousand Dollars (\$500,000) in the aggregate amount outstanding, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Two Hundred Fifty Thousand Dollars (\$250,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) Liens incurred in the extension, renewal or refinancing of the Indebtedness secured by Liens described in (a) through (c), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien (and any improvements thereto and any proceeds thereof) and the principal amount of the indebtedness may not increase;

(g) leases or subleases of real property granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), and leases, subleases, non-exclusive licenses or sublicenses of personal property (other than Intellectual Property) granted in the ordinary course of Borrower's business (or, if referring to another Person, in the ordinary course of such Person's business), if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest therein;

(h) non-exclusive licenses of Intellectual Property granted to third parties in the ordinary course of business, and licenses of Intellectual Property that could not reasonably be expected to result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory and that may be exclusive as to territory only as to discrete geographical areas outside of the United States;

(i) Liens representing the interest or title of a lessor, licensor, sublicensor or sublessor, provided such lease, sublease, license or sublicense is permitted hereunder;

(j) deposits to secure the performance of bids, trade contracts, leases (other than leases for real property), statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature, in each case in the ordinary course of business no to exceed Fifty Thousand Dollars (\$50,000) in the aggregate at any time;

(k) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(l) Liens in favor of other financial institutions arising in connection with Borrower's deposit and/or securities accounts held at such institutions, provided that Bank has a first priority perfected security interest in the amounts held in such deposit and/or securities accounts to the extent required pursuant to Section 6.8 and such accounts are permitted to be maintained pursuant to Section 6.8 of this Agreement; and

(m) Liens arising from attachments or judgments, orders, or decrees in circumstances not constituting an Event of Default under Sections 8.4 and 8.7.

"Person" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"Prepayment Fee" shall be an additional fee, payable to Bank, with respect to each Term Loan Advance, in an amount equal to (a) three percent (3.00%) of each outstanding Term Loan Advance if the prepayment is made on or before the first (1st) anniversary of the Effective Date, (b) two percent (2.00%) of each outstanding Term Loan

Advance if the prepayment is made after the first (1st) anniversary of the Effective Date, but on or before the second (2nd) anniversary of the Effective Date, and (c) one percent (1.00%) of each outstanding Term Loan Advance if the prepayment is made after the second (2nd) anniversary of the Effective Date, but on or before the Term Loan Maturity Date.

“**Prime Rate**” is the rate of interest per annum from time to time published in the money rates section of The Wall Street Journal or any successor publication thereto as the “prime rate” then in effect; provided that, in the event such rate of interest is less than zero, such rate shall be deemed to be zero for purposes of this Agreement; and provided further that if such rate of interest, as set forth from time to time in the money rates section of The Wall Street Journal, becomes unavailable for any reason as reasonably determined by Bank, the “Prime Rate” shall mean the rate of interest per annum announced by Bank as its prime rate in effect at its principal office in the State of California (such Bank announced Prime Rate not being intended to be the lowest rate of interest charged by Bank in connection with extensions of credit to debtors); provided that, in the event such rate of interest is less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

“**Publicly Reporting Company**” means an issuer generally subject to the public reporting requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Registered Organization**” is any “registered organization” as defined in the Code with such additions to such term as may hereafter be made.

“**Requirement of Law**” is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

“**Responsible Officer**” is any of the Chief Executive Officer, President, Chief Financial Officer and Controller of Borrower.

“**Restricted License**” is any material license agreement or similar agreement (excluding any “shrink wrap” or other end-user licenses that are over-the-counter and generally commercially available) with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower’s interest in such license or agreement or any other property in favor of Bank, or (b) for which a default under or termination of could reasonably be expected to interfere with Bank’s right to sell any Collateral.

“**SEC**” shall mean the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority.

“**Securities Account**” is any “securities account” as defined in the Code with such additions to such term as may hereafter be made.

“**Subordinated Debt**” is indebtedness incurred by Borrower subordinated to all of Borrower’s now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank.

“**Subsidiary**” is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower or Guarantor.

“**Term Loan Advance**” and “**Term Loan Advances**” are each defined in Section 2.3 of this Agreement.

“**Term Loan Amortization Date**” is (a) February 1, 2022 if the Extension Milestone is not achieved, and (b) August 1, 2022 if the Extension Milestone is achieved.

“**Term Loan Maturity Date**” means (a) January 1, 2024 if the Extension Milestone is not achieved, and (b) January 1, 2025 if the Extension Milestone is achieved.

“**Trademarks**” means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

“**Tranche One**” is defined in Section 2.3(a).

“**Tranche Two**” is defined in Section 2.3(a).

“**Transfer**” is defined in Section 7.1.

“**Warrant**” is that certain Warrant to Purchase Stock dated as of the Effective Date between Borrower and Bank, as amended, modified, supplemented and/or restated from time to time.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date.

BORROWER:

CODEX DNA, INC.

By: /s/ Todd Nelson
Name: Todd Nelson
Title: CEO

BANK:

SILICON VALLEY BANK

By: /s/ Brendan Crawford
Name: Brendan Crawford
Title: Vice President

[Signature Page to Loan and Security Agreement]

EXHIBIT A - COLLATERAL DESCRIPTION

The Collateral consists of all of Borrower's right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles (except as provided below), commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, certificates of deposit, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

All Borrower's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

Notwithstanding the foregoing, the Collateral does not include (a) with respect to stock in Foreign Subsidiaries, more than sixty-five percent (65.0%) of the presently existing and hereafter arising issued and outstanding shares of capital stock owned by Borrower of any Foreign Subsidiary which shares entitle the holder thereof to vote for directors or any other matter, if Borrower can demonstrate to Bank's satisfaction, determined in its good faith business judgment, that pledging in excess of sixty-five percent (65%) of the capital stock of any Foreign Subsidiary would cause an adverse tax consequence for Borrower or such new Foreign Subsidiary, (b) any rights or interest in any contract, lease, permit, license, or license agreement covering real or personal property of Borrower if under the terms of such contract, lease, permit, license, or license agreement, or applicable law with respect thereto, the grant of a security interest or lien therein is prohibited as a matter of law or under the terms of such contract, lease, permit, license, or license agreement and such prohibition or restriction has not been waived or the consent of the other party to such contract, lease, permit, license, or license agreement has not been obtained (provided, that the foregoing exclusions of this clause (b) shall in no way be construed (x) to apply to the extent that any described prohibition or restriction is ineffective under Section 9-406, 9-407, 9-408, or 9-409 of the Code or other applicable law, or (y) to apply to the extent that any consent or waiver has been obtained that would permit Bank's security interest or lien to attach notwithstanding the prohibition or restriction on the pledge of such contract, lease, permit, license, or license), and (c) any Intellectual Property, provided, however, the Collateral shall include all Accounts and all proceeds of Intellectual Property. If a judicial authority (including a U.S. Bankruptcy Court) would hold that a security interest in the underlying Intellectual Property is necessary to have a security interest in such Accounts and such property that are proceeds of Intellectual Property, then the Collateral shall automatically, and effective as of the Effective Date, include the Intellectual Property to the extent necessary to permit perfection of Bank's security interest in such Accounts and such other property of Borrower that are proceeds of the Intellectual Property.

Pursuant to the terms of a certain negative pledge arrangement with Bank, Borrower has agreed not to encumber any of its Intellectual Property without Bank's prior written consent.

Exhibit A

EXHIBIT B
COMPLIANCE STATEMENT

TO: SILICON VALLEY BANK
FROM: CODEX DNA, INC.

Date: _____

Under the terms and conditions of the Loan and Security Agreement between Borrower and Bank (the “**Agreement**”), Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below. Attached are the required documents evidencing such compliance, setting forth calculations prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under “Complies” column.

<u>Reporting Covenants</u>	<u>Required</u>	<u>Complies</u>
Monthly financial statements with Compliance Statement	Monthly within 30 days	Yes No
Annual financial statements (CPA Audited)*	FYE within 180 days	Yes No
10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes No
Board approved projections	With 30 days after FYE, and as amended/updated	Yes No

*including FYE 2020

<u>Financial Covenant</u>	<u>Required</u>	<u>Actual</u>	<u>Complies</u>
Maintain:			
Minimum Revenue	See schedule	See schedule	Yes No

The following financial covenant analyses and information set forth in Schedule 1 attached hereto are true and accurate as of the date of this Compliance Statement.

The following are the exceptions with respect to the certification above: (If no exceptions exist, state “No exceptions to note.”)

Exhibit A

Schedule 1 to Compliance Statement

Financial Covenants of Borrower

In the event of a conflict between this Schedule and the Agreement, the terms of the Agreement shall govern.

Dated: _____

I. Minimum Revenue (Section 6.9(a))

Required: Maintain as of the last day of each month, unless otherwise noted, on a consolidated basis with respect to Borrower, minimum Revenue of at least the following amounts measured on a trailing three (3) month basis for the period then ended:

<u>Trailing Three Month Period Ending:</u>	<u>Minimum Revenue</u>
February 28, 2021	\$[***]
March 31, 2021	\$[***]
April 30, 2021	\$[***]
May 31, 2021	\$[***]
June 30, 2021	\$[***]
July 31, 2021	\$[***]
August 31, 2021	\$[***]
September 30, 2021	\$[***]
October 31, 2021	\$[***]
November 30, 2021	\$[***]
December 31, 2021	\$[***]
January 31, 2022	\$[***]
February 28, 2022	\$[***]
March 31, 2022	\$[***]
April 30, 2022	\$[***]
May 31, 2022	\$[***]
June 30, 2022	\$[***]
July 31, 2022	\$[***]
August 31, 2022	\$[***]
September 30, 2022	\$[***]
October 31, 2022	\$[***]
November 30, 2022	\$[***]
December 31, 2022	\$[***]

Actual:

A. Revenue (determined in accordance with GAAP) for the applicable month ending: \$ _____

Is line A equal to or greater than the required amount set forth above for such month?

_____ No, not in compliance with Section 6.9(b) _____ Yes, in compliance with Section 6.9(b)

Exhibit A

EXHIBIT C

LOAN PAYMENT/ADVANCE REQUEST FORM

DEADLINE FOR SAME DAY PROCESSING IS NOON PACIFIC TIME

Fax To:

Date: _____

LOAN PAYMENT:	
CODEX DNA, INC. (Borrower)	
From Account # _____ (Deposit Account #)	To Account # _____ (Loan Account #)
Principal \$ _____	and/or Interest \$ _____
Authorized Signature: _____	Phone Number: _____
Print Name/Title: _____	

LOAN ADVANCE:	
Complete <i>Outgoing Wire Request</i> section below if all or a portion of the funds from this loan advance are for an outgoing wire.	
From Account # _____ (Loan Account #)	To Account # _____ (Deposit Account #)
Amount of Term Loan Advance \$ _____	
All Borrower's representations and warranties in the Loan and Security Agreement are true, correct and complete in all material respects on the date of the request for an advance; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date:	
Authorized Signature: _____	Phone Number: _____
Print Name/Title: _____	

OUTGOING WIRE REQUEST:
Complete only if all or a portion of funds from the loan advance above is to be wired.
Deadline for same day processing is noon, Pacific Time

Beneficiary Name: _____ Amount of Wire: \$ _____
Beneficiary Bank: _____ Account Number: _____
City and State: _____

Beneficiary Bank Transit (ABA) #: _____ Beneficiary Bank Code (Swift, Sort, Chip, etc.): _____
(For International Wire Only)

Intermediary Bank: _____ Transit (ABA) #: _____
For Further Credit to: _____

Special Instruction: _____

By signing below, I (we) acknowledge and agree that my (our) funds transfer request shall be processed in accordance with and subject to the terms and conditions set forth in the agreements(s) covering funds transfer service(s), which agreements(s) were previously received and executed by me (us).

Authorized Signature: _____ 2nd Signature (if required): _____
Print Name/Title: _____ Print Name/Title: _____
Telephone #: _____ Telephone #: _____

CONFIDENTIAL SETTLEMENT AGREEMENT

This Confidential Settlement Agreement ("Settlement Agreement") is entered into and effective as of the 20th day of September, 2017 (the "Effective Date"), by and between Synthetic Genomics, Inc. ("SGI") and New England BioLabs, Inc. ("NEB") (SGI and NEB are sometimes referred to herein individually as a "Party," and collectively as the "Parties").

WHEREAS, the Parties have entered into agreements with one another relating to a DNA assembly technique and products related thereto, with such agreements being collectively defined herein as "the Prior License Agreements";

WHEREAS, disputes have arisen between the Parties with respect to their rights and obligations under the Prior License Agreements, including claims and counterclaims asserted against one another in an ongoing proceeding administered by the American Arbitration Association ("AAA") under case number 01-17-0005-6947, which is styled *Synthetic Genomics, Inc. v. New England BioLabs, Inc.*;

WHEREAS, without admitting liability for any claims, and to avoid the expense and risk associated with further pursuit of the Arbitration, the Parties now desire to fully and completely resolve all claims, counterclaims, and disputes they have with one another related to the Prior License Agreements, including the Arbitration, as well as all demands, causes of action, liabilities, proceedings, obligations and disputes of any nature and description whatsoever (including, without limitation, direct or indirect claims or demands for damages, interest, attorneys' fees, expert or consulting fees, and any other costs, expenses, or liabilities whatsoever), in law or equity, whether or not concealed or hidden, that were or could have been raised by either Party in the Arbitration or otherwise based on actions or events occurring prior to the Effective Date, on the terms set forth below;

NOW, THEREFORE, in consideration of the covenants, representations, conditions, obligations, releases, and promises set forth herein, the sufficiency of which is hereby expressly acknowledged by both Parties, the Parties agree as follows:

1. Definitions. The following definitions shall apply to this Settlement Agreement and the Parties' rights and obligations hereunder:

a. "Prior License Agreements" shall refer collectively to: (1) a Confidential Information Agreement, dated July 27, 2010, attached hereto as Exhibit 1; (2) a License Agreement dated May 5, 2011, attached hereto as Exhibit 2; (3) an Amended and Restated License Agreement ("ARLA") dated December 10, 2012, attached hereto as Exhibit 3; and (4) Amendment No. 1 to the Amended and Restated License Agreement, attached hereto as Exhibit 4.

b. "Affiliate" shall mean any entity that controls, is controlled by, or is under common control with a Party; and "control" for purposes of this definition shall mean the

possession of the power to direct or cause the direction of the management and policies of an entity, whether through the ownership of voting stock, by contract, or otherwise.

c. "Royalty-Bearing Products" shall mean the following products currently marketed and sold by NEB: (1) the Gibson Assembly® Master Mix (NEB Product #E2611); (2) the Gibson Assembly® Cloning Kit (NEB Product #E5510); (3) the NEBuilder® HiFi Master Mix (NEB Products #E2621 and E2621B); (4) the NEBuilder® Hifi Cloning Kit (NEB Product #E5520); (5) the NEBuilder® Hifi DNA Assembly Bundle for Large Fragments (NEB Product #E2623S). "Royalty-Bearing Products" shall also mean any other DNA assembly product that may be sold by NEB or its Affiliates in the future that: (A) contains as one of its parts or components the Gibson Assembly® Master Mix, the Gibson Assembly® Cloning Kit, the NEBuilder® HiFi Master Mix, or the NEBuilder® Hifi DNA Assembly Bundle for Large Fragments; (B) practices the SGI Licensed Patents; or (C) is formulated using the same (or substantially the same) enzymes and/or methods as the foregoing products. For the avoidance of doubt, NEB's Golden Gate and USER DNA assembly products and any future versions thereof are not Royalty-Bearing Products.

d. "Net Sales of Royalty-Bearing Products" shall mean the gross amount invoiced or received by or on behalf of NEB or its Affiliates on sales, leases, or other transfers of Royalty-Bearing Products, less the following to the extent applicable on such sales, leases or other transfers of Royalty-Bearing Products and not previously deducted from the gross invoice price: (a) customary trade, quantity or cash discounts to the extent actually allowed and taken; (b) amounts actually repaid or credited by reason of rejection or return of any previously sold, leased or otherwise transferred Royalty-Bearing Products; (c) to the extent separately stated on purchase orders, invoices, or other documents of sales, any sales, value added or similar taxes, custom duties or other similar governmental charges levied directly on the production, sale, transportation, delivery, or use of Royalty-Bearing Products that are paid by or on behalf of NEB, but not including any tax levied with respect to income; and (d) royalties or similar fees paid by NEB to any third party for the inclusion of any component of the Royalty-Bearing Products.

e. "SGI Licensed Patents" shall mean (a) United States Patent Application Nos. 12/371,543 (now issued as U.S. Patent No. 8,968,999) and 11/502,746 (now issued as U.S. Patent No. 7,723,077), (b) Patent Cooperation Treaty Application No. WO2009/103027, (c) any divisions, continuations and continuation-in-part of the applications described in clauses (a) and (b) above, (c) any patents that issue from the applications described in clauses (a), (b), and (c) above, (d) reissues or reexaminations of the patents in clause (c) above; and (e) foreign counterparts, if any, of any of the foregoing.

f. "Royalty Term" shall mean the earlier of (a) the expiration of all SGI Licensed Patents; or (b) the entry of a final, non-appealable decision by a court of competent jurisdiction, the United States Patent and Trademark Office, or its foreign counterparts, finding that all SGI Licensed Patents are invalid or unenforceable, provided that such proceedings were not initiated by NEB.

2. Settlement Payment. NEB shall pay to SGI the sum of \$[***] (the "Settlement Payment") within ten business days following execution of this Settlement Agreement. NEB shall make the Settlement Payment by wire transfer of immediately available funds pursuant to the wire transfer instructions attached hereto as Exhibit 5.

3. Royalty Payments. Until October 1, 2017, NEB shall continue to pay royalties to SGI on the Gibson Assembly® Master Mix kit (NEB Product #E2611) and the Gibson Assembly® Cloning Kit (NEB Product #E5510) pursuant to the terms of the ARLA and Amendment No. 1 to the ARLA. Effective October 1, 2017, NEB shall pay SGI a quarterly royalty of [***]% of the Net Sales of all Royalty-Bearing Products through the Royalty Term, unless the licenses granted hereunder are terminated earlier and NEB ceases selling the Royalty-Bearing Products pursuant to the terms of this Settlement Agreement. Notwithstanding the above, for any Royalty-Bearing Product not being offered for sale as of the Effective Date that is introduced by NEB after the Effective Date, NEB shall pay SGI a reduced quarterly royalty of [***]% of the Net Sales of such Royalty-Bearing Product beginning with sales made after October 1, 2020.

4. Sales of Royalty-Bearing Products and Other DNA Assembly Products. NEB agrees to continue to offer for sale all Royalty-Bearing Products through at least September 30, 2025. NEB may stop offering for sale any of the Royalty-Bearing Products at any time after September 30, 2025, by providing sixty (60) days written notice to SGI with respect to each Royalty-Bearing Product that NEB elects to stop offering for sale. Upon the expiration of the 60-day notice period, NEB's license with respect to each discontinued Royalty-Bearing Product shall terminate. NEB may continue offering for sale the Royalty Bearing Products after September 30, 2025, but nothing in this Settlement Agreement shall require it to do so. Both Parties agree not to sell, offer for sale, or license any DNA assembly products that would directly compete with the Royalty-Bearing Products before September 30, 2023, other than: (1) for NEB, the Royalty-Bearing Products and the Golden Gate and USER DNA assembly products, and any newer versions thereof; and (2) for SGI, the Gibson Assembly® HiFi 1-Step-Kit, the Gibson Assembly® Ultra Kit, the Gibson Assembly® Site-Directed Mutagenesis Kit, and the Gibson Assembly® Vectors products, and any newer versions thereof

5. Royalty Reports. Within thirty (30) days after each of February 28, May 31, August 31, and November 30, for so long as NEB is obligated to pay royalties hereunder, NEB shall furnish to SGI a written report of all Net Sales of Royalty-Bearing Products during the applicable calendar quarter. Such report shall include (i) the determination of Net Sales in each country in which the Royalty-Bearing Products are sold; and (ii) the royalty payment then due from such sales, in United States dollars. If no sales or use occurred, a report will be due so stating.

6. Record Retention. NEB shall keep—and shall require its Affiliates to keep—records of sales of all Royalty-Bearing Products in sufficient detail to permit SGI to confirm the accuracy of NEB's royalty calculations. Such records shall be retained for at least three (3) years following a given reporting period. At SGI's request, NEB shall permit an independent public accountant appointed by SGI and reasonably acceptable to NEB to examine, upon

reasonable notice and at reasonable times at NEB's offices, such records solely to the extent necessary to verify NEB's royalty calculations. If such accountant concludes that additional amounts were owed during the audited period, then NEB shall pay such additional amounts within thirty (30) days of the date SGI delivers to NEB such accountant's written report so concluding. The fees charged by such accountant shall be paid by SGI; provided, however, if the audit discloses that the royalties actually owing by NEB for such period are more than seven percent (7%) of the royalties actually paid for such period, then NEB shall pay the reasonable fees and expenses charged by such accountant.

7. License Under the SGI Licensed Patents. Subject to the fulfillment by NEB of all the terms and conditions of this Settlement Agreement, during the term of this Settlement Agreement (unless NEB terminates licenses for any Royalty-Bearing Products pursuant to Section 4 hereof, in which case NEB's license for each discontinued Royalty-Bearing Product shall likewise terminate), SGI hereby grants to NEB and NEB hereby accepts (a) a royalty-bearing, worldwide, nonexclusive, non-transferable, non-sublicensable license under the SGI Licensed Patents to make, use, sell and offer to sell the Royalty-Bearing Products; and (b) a royalty-bearing, non-exclusive, non-transferable license under the SGI Licensed Patents to grant to customers buying the Royalty-Bearing Products sold by NEB or its distributors the right to use such Royalty-Bearing Products, including to develop commercial products. If NEB sells the Royalty-Bearing Products to an Affiliate or distributor that sells the Royalty-Bearing Products to the final end-user, then such Affiliate or distributor shall have the right to grant the license under clause (b) to such final end-user. This Paragraph does not represent an admission by either Party that the Royalty-Bearing Products practice the SGI Licensed Patents or any other SGI intellectual property, or that any license is required to legally make, use, or sell the Royalty-Bearing Products.

8. Dismissal of the Arbitration with Prejudice. Each Party agrees that it shall, by and through its counsel of record, execute within five (5) days of the execution of this Settlement Agreement a Stipulated Agreement dismissing the Arbitration with prejudice. Each Party shall bear its own costs and attorneys' fees related to the Arbitration. The Parties further agree that, upon their execution of this Settlement Agreement, no Party shall serve any further discovery in the Arbitration, including by subpoena, nor shall any Party take any steps to seek further responses on any historical or pending discovery.

9. Termination of the Prior License Agreements. The Parties agree that the Prior License Agreements are terminated in favor of this Settlement Agreement as of the Effective Date of this Settlement Agreement.

10. Mutual Releases.

a. By SGI. Except for the obligations imposed by this Settlement Agreement, SGI, on behalf of itself and its past, present and future corporate parents, subsidiaries, affiliates, partners, predecessors, successors, licensees and assigns, and each of their past, present and future principals, partners, officers, directors, shareholders, representatives, employees, insurers, agents, attorneys, and each of their estates, heirs, executors, administrators, successors, licensees and assigns does hereby release, discharge, and

forever acquit NEB and its past, present and future parents, subsidiaries, affiliates, partners, successors, licensees and assigns, and each of their past, present and future principals, partners, officers, directors, shareholders, representatives, employees, insurers, agents, attorneys, and each of their estates, successors, licensees and assigns from any and all liability, actions, causes of action, suits, rights, debts, claims and demands whatsoever, in law or equity, including, without limitation, claims for sanctions, costs, expenses, or attorneys' fees, whether known or unknown, that SGI ever had or now has arising out of events, conduct, or actions occurring from the beginning of time to the date of this Settlement Agreement. SGI covenants not to sue NEB for making, using, selling, or offering for sale the Royalty-Bearing Products as long as NEB is complying with all terms and conditions of this Settlement Agreement.

b. By NEB. Except for the obligations imposed by this Settlement Agreement, NEB, on behalf of itself and its past, present and future representatives, agents, attorneys, estates, heirs, executors, administrators, successors, licensees and assigns, does hereby release, discharge, and forever acquit SGI and its past, present and future corporate parents, subsidiaries, affiliates, partners, predecessors, successors, licensees and assigns, and each of their past, present and future principals, partners, officers, directors, shareholders, representatives, employees, insurers, agents, attorneys, and each of their estates, heirs, executors, administrators, successors, licensees and assigns from any and all liability, actions, causes of action, suits, rights, debts, claims and demands whatsoever, in law or equity, including, without limitation, claims for sanctions, costs, expenses, or attorneys' fees, whether known or unknown, that NEB ever had or now has arising out of events, conduct, or actions occurring from the beginning of time to the date of this Settlement Agreement.

c. Waiver of Section 1542 of the California Civil Code. The Parties hereby waive any and all rights that they may have under the provisions of any rule of law that exists or that may be adopted by the State of California that provides that a release does not extend to claims that are unknown or unsuspected at the time of executing the Agreement, which if known would have materially affected the provisions of the Agreement, including, but not limited to California Civil Code section 1542. Section 1542 provides:

A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.

Each Party expressly waives and relinquishes any and all rights and benefits which they may have under, or which may be conferred upon it, by the provisions of section 1542 of the California Civil Code, as well as any other similar state or federal statute or common law principle, to the fullest extent they may lawfully waive such rights and benefits. The Parties acknowledge and agree that this waiver is an essential and material term of the Agreement, and that without such waiver the settlement payments and releases that constitute the consideration for the Agreement would not have been made.

d. This settlement is voluntary and does not constitute an admission of any liability by any of the Parties, or an admission of the existence of any facts upon which liability

could be based, and each Party agrees that it will not claim otherwise. Any such liability is expressly denied by the Parties.

e. Each of the Parties represents and warrants for itself that it has not sold, assigned, or transferred in any way any claims released in this Paragraph (the "Released Claims") and that the Released Claims are intended to be full and complete general releases of the Released Claims.

11. Confidentiality.

a. It is understood that in the course of complying with this Settlement Agreement, the Parties may wish to provide confidential information to each other. All such confidential information shall be disclosed in writing and designated "confidential" or, if disclosed orally, shall be confirmed in writing and designated confidential within thirty (30) days of such disclosure, however, if under the circumstances a Party would understand such information to be confidential, it shall be treated as such regardless of any such designation. It is also understood that the Parties disclosed to each other confidential business information to comply with the Prior License Agreements. The receiving Party agrees not to use the confidential information of the disclosing Party for any purpose other than those contemplated under this Settlement Agreement and not to disclose such confidential information to other than its employees who need to know it to carry out the receiving Party's obligations hereunder. The receiving Party shall use the same efforts to prevent unauthorized disclosure or use of such confidential information as it would to prevent unauthorized disclosure of its own confidential information. In the event that a Party receives a subpoena or other validly issued administrative or judicial process requesting confidential information of the other Party, the receiving Party shall promptly notify the disclosing Party and tender to it the defense of such demand. Upon request of the disclosing Party, the receiving Party shall cooperate (at the expense of the disclosing Party) in the defense of the demand. Unless the demand shall have been timely limited, suppressed or extended, the receiving Party shall thereafter be entitled to comply with such demand to the extent required by law.

b. Notwithstanding the foregoing, confidential information of a Party shall not include information that the other Party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the disclosing Party to the receiving Party; (b) to have become publicly known, without the fault of the receiving Party, subsequent to disclosure of such information by the disclosing Party to the receiving Party; (c) to have been received by the receiving Party at any time from a source, other than the disclosing Party, rightfully having possession of and the right to disclose such information; (d) to have been, otherwise known by the receiving Party prior to disclosure of such information by the disclosing Party to the receiving Party; or (e) to have been independently developed by employees or agents on behalf of the receiving Party without use of such information disclosed by the disclosing Party to the receiving Party.

c. No Party will directly or indirectly publish or comment on this settlement or disclose the contents of this Settlement Agreement without the prior written consent of the other Party, except that the Parties may state the following (or words to this effect) if asked

about the resolution of the Arbitration: "SGI and NEB have entered into a confidential settlement agreement on mutually agreeable terms. As a result, the Arbitration has been resolved and dismissed."

d. Notwithstanding the foregoing, nothing in this Paragraph shall prevent any Party from disclosing the terms of this Settlement Agreement confidentially:

(i) to the extent necessary to comply with any law, rule, regulation, security or other disclosure requirement, court or administrative order, or to enforce or defend against claims arising from this Settlement Agreement; provided, however, that in the event a Party seeks to file this Settlement Agreement or any documents reflecting the Settlement Amount, the Party must seek to file this Settlement Agreement or any documents reflecting the Settlement Amount under seal if such a procedure is available and attempt to take all other steps necessary to maintain confidentiality. A Party making any such a disclosure shall not issue a press release or otherwise publicize such disclosure. Further, if a Party receives a subpoena or similar demand seeking any or all terms of this Settlement Agreement, the Party receiving the subpoena or similar demand, or otherwise seeking to disclose any or all terms of this Settlement Agreement pursuant to this paragraph, will make reasonable efforts to give the other Party reasonable notice and opportunity to object, to the extent permissible under any applicable law, rule regulation, court or administrative order;

(ii) to the Party's shareholders, officers, directors, employees, accountants, financial advisors, tax advisors, insurers, and attorneys; provided, however, that each such shareholder, officer, director, employee, accountant, financial advisor, tax advisor, insurer, or attorney shall be informed of the confidentiality provision contained in this Settlement Agreement and must agree to similarly be bound thereby; or

(iii) to the extent as may be required to enforce this Settlement Agreement.

e. All written and oral discussions regarding this Settlement Agreement and its implementation will be deemed to fall within the protections afforded compromises and offers to compromise by Rule 408 of the Federal Rules of Evidence and analogous state law principles.

12. Non-Disparagement. Each Party covenants and agrees that its executive-level employees will not make, nor will they encourage or suggest that any other person make, any negative or disparaging remarks about the other Party or its members, parents, subsidiaries, affiliates, agents, officers, directors, attorneys, employees or assigns to anyone.

13. Notices. All notices and requests which are required or permitted to be given in connection with this Settlement Agreement shall be deemed given as of the day they are received either by messenger, delivery service, or in the United States of America mails, postage

prepaid, certified or registered, return receipt requested, and addressed as follows, or to such other address as the Party to receive the notice or request so designates by written notice to the other:

For SGI:

Synthetic Genomics, Inc.
11149 North Torrey Pines Road
La Jolla, California 92037 Attention: Legal Department

With copy to:
Jess Krannich
Manning Curtis Bradshaw and Bednar PLLC
136 East South Temple, Suite 1300
Salt Lake City, Utah 84111
jkrannich@mc2b.com

For NEB:

New England Biolabs, Inc.
240 Country Road
Ipswich, Massachusetts 01938
Attention: Legal Department

legal@neb.com

With copy to:
Tracey Davies
Gibson, Dunn & Crutcher LLP
2400 McKinney Ave
Dallas, Texas 75201-6912
tdavies@gibsondunn.com

14. Destruction of Documents. The Parties agree that, upon the entry of the final order dismissing the Arbitration, they shall follow the procedure set forth in the arbitration panel's Procedural Order No. 2 (protective order) with respect to the destruction of documents.

15. Termination. The following rights shall apply to the Parties with respect to termination or expiration of this Settlement Agreement and/or the licenses granted herein:

- a. Termination by SGI. SGI shall have the right to terminate all licenses under this Settlement Agreement if NEB has not paid Royalties pursuant to Paragraph 3 for more than sixty (60) days, and has failed to cure any such deficiency within thirty (30) days of receiving written notice from SGI thereof. SGI shall also have the right to terminate all licenses under this Settlement Agreement if NEB ceases to sell all Royalty-Bearing Products before September 30, 2025. If NEB shall become bankrupt or insolvent and/or if the business of NEB shall be placed in the

hands of a receiver, assignee or trustee for the benefit of creditors, whether by the voluntary act of NEB or otherwise, SGI shall thereupon have the right to terminate all licenses under this Settlement Agreement by giving written notice to NEB of such termination as specified in this Paragraph 15 above, and specifying the effective date thereof, which shall be at least thirty (30) days after the date the notice is mailed by SGI.

- b. Termination By NEB. NEB shall have the right to stop selling the Royalty-Bearing Products only in accordance with the provisions of Paragraph 4 or upon any material breach or default of any provision of this Settlement Agreement by SGI if SGI has not cured any such breach or default prior to the expiration of sixty (60) days from receipt of written notice of the breach or default. In addition, all rights and interests granted to NEB hereunder are, for purposes of Section 365(n) of the United States Bankruptcy Code, including any equivalent foreign statutes (the "Bankruptcy Code"), licenses of "intellectual property" within the meaning of Sections 101 (35A) and 365 of the Bankruptcy Code. SGI acknowledges that NEB, as a licensee of such rights and interests hereunder, will retain and may fully exercise all of its rights and interests under this Settlement Agreement and the Bankruptcy Code, and no subsequent sale or transfer of the intellectual property by SGI, or by any successor in interest to SGI, shall terminate or modify NEB's rights and interests under this Settlement Agreement, whether NEB, or any successor in interest, receives notice of any such sale or transfer or objects to any such sale or transfer. If SGI, or any successor-in-interest to SGI, including a debtor-in-possession or trustee, rejects this Settlement Agreement under Section 365 of the Bankruptcy Code, NEB shall elect, and hereby does so elect prospectively, to retain its rights and interests to the intellectual property under this Settlement Agreement to the full extent permitted by Section 365(n) of the Bankruptcy Code, and hereby prospectively requests that SGI, and any successor in interest, to SGI comply with the requirements of Sections 365(n) of the Bankruptcy Code.
- c. Expiration of Settlement Agreement and Survival. This Settlement Agreement will expire upon the earlier of (i) the expiration of the Royalty Term, or (ii) upon the termination of all licenses granted hereunder pursuant to the terms of this Settlement Agreement. Upon expiration of this Settlement Agreement, the Parties shall no longer have any rights, duties or obligations hereunder subsequent to the date of such expiration, except as may then have accrued under this Settlement Agreement (including royalty payments) prior to the date of expiration, or as specified in Paragraphs 10 (Mutual Release), 11 (Confidentiality), 13 (Notices), 15(c) (Expiration of Settlement Agreement and Survival), 16 (Indemnification), and 19 (Governing Law, Arbitration, and Enforceability), which shall survive the expiration of this Settlement Agreement. For clarity, in the event that this Settlement Agreement expires due to the expiration of the Royalty Term, NEB shall thereafter be entitled to sell Royalty Bearing Products without accrual or payment of additional royalties to SGI.

16. Indemnification.

- a. Indemnification by SGI. SGI shall defend, indemnify and hold NEB harmless against all claims by a third party alleging that the method to be practiced by the Gibson Assembly® Master Mix (NEB Product #E2611) or the Gibson Assembly® Cloning Kit (NEB Product #E5510), as expressly set forth in a claim of an issued patent included in the SGI Licensed Patents, infringes such third party's patent rights, but expressly excluding any claims for (i) infringement that arises from any of the individual components included within the Gibson Assembly® Master Mix (NEB Product #E2611) or the Gibson Assembly® Cloning Kit (NEB Product #E5510) or their manufacture or use, or (ii) any combination of the Gibson Assembly® Master Mix (NEB Product #E2611) or the Gibson Assembly® Cloning Kit (NEB Product #E5510) with any other components. Such defense, indemnity and hold harmless obligations shall include reasonable costs and expenses, including attorneys' fees, incurred in defending against such claims. NEB shall (a) notify SGI promptly in writing of any such asserted claim, (b) grant SGI sole control over the defense and settlement thereof, and (c) reasonably cooperate in response to a SGI request for assistance related to such a claim. THIS SECTION STATES NEB'S SOLE AND EXCLUSIVE REMEDY AND SGI'S ENTIRE LIABILITY FOR ANY CLAIM FOR WHICH AN INDEMNITY IS PROVIDED HEREUNDER.
- b. Indemnification By NEB. NEB shall defend, indemnify and hold SGI harmless against all claims by whomever asserted for personal injury or tangible property damage or otherwise arising out of NEB's gross negligence or willful misconduct (or the same by others at the direction of NEB), in connection with this Settlement Agreement or from the manufacture, distribution or use of the Gibson Assembly® Master Mix (NEB Product #E2611) or the Gibson Assembly® Cloning Kit (NEB Product #E5510). Such defense, indemnity and hold harmless obligations shall include reasonable costs and expenses, including attorneys' fees, incurred in defending against such claims. SGI shall (a) notify NEB promptly in writing of such claim, (b) grant NEB sole control over the defense and settlement thereof, and (c) reasonably cooperate in response to an NEB request for assistance related to such a claim. THIS SECTION STATES SGI' s SOLE AND EXCLUSIVE REMEDY AND NEB'S ENTIRE LIABILITY FOR ANY CLAIM FOR WHICH AN INDEMNITY IS PROVIDED HEREUNDER.

17. Relationship of the Parties. Nothing in this Settlement Agreement is intended or shall be deemed to constitute a partnership, agency, employer-employee, or joint venture relationship between the Parties.

18. Advice of Counsel. The Parties acknowledge and agree that this Settlement Agreement is the product of arm's-length negotiations between the Parties, each Party has read the terms of this Settlement Agreement, each Party has been assisted by counsel of its choosing with respect to this Settlement Agreement, each Party fully understands the terms of this

Settlement Agreement, and the Parties have entered into this Settlement Agreement voluntarily and with full knowledge of the effects hereof.

19. Governing Law, Arbitration, and Enforceability. This Settlement Agreement and the rights and obligations hereunder shall be enforced, interpreted and construed in accordance with the laws of the State of California, without regard to the principles of the conflicts of laws thereof. In the event of any controversy or claims arising out of or relating to any provision of this Settlement Agreement or the breach thereof; the Parties shall first try to settle such controversy or claim amicably between themselves. Should they fail to agree, the matter in dispute shall be settled through binding arbitration conducted in accordance with AAA's then-applicable Commercial Arbitration Rules. Notwithstanding anything to the contrary in such rules, the arbitration shall be held in Boston, Massachusetts, if brought by SGI, or in San Diego, California, if brought by NEB, or at a place otherwise mutually agreeable. The award through arbitration shall be final and binding. Any Party may enter any such award in a court having jurisdiction or may make application to such court for judicial acceptance of the award and an order of enforcement, as the case may be.

20. Costs, Expenses, and Attorneys Fees. Each Party shall bear its own costs, expenses, and attorneys' fees related to the drafting and negotiation of this Settlement Agreement. In any action to interpret or enforce the terms of this Settlement Agreement, the prevailing Party shall be entitled to recover from the non-prevailing Party its reasonable costs, expenses, and fees, including attorneys' fees, in addition to any other relief to which such Party may be entitled under this Settlement Agreement, at law or in equity. Should any dispute continue to a final hearing, the Arbitration Panel shall identify a "prevailing party" and a "losing party" as part of its final order.

21. Authority. Each of the signatories hereto represents and warrants that it is fully authorized to enter into this Settlement Agreement on behalf of the person or entity for which it executes the Agreement and that such signatory has not assigned, sold, transferred, pledged or encumbered, or purported to assign, sell transfer, pledge, or encumber, in writing or otherwise, any right, title, or interest in any of the claims that is released hereunder.

22. Severability. If any provision of this Settlement Agreement is held to be invalid, illegal, or unenforceable for any reason, the invalid or unenforceable portion shall be deemed severed from this Settlement Agreement and the balance of this Settlement Agreement shall remain in full force and effect and be enforceable in accordance with the non-severed provisions of this Settlement Agreement.

23. Limitation on Assignments. Neither this Settlement Agreement nor any interests hereunder shall be assignable by either Party, except that either Party may assign or transfer its interests under this Settlement Agreement to an entity that acquires all or substantially all of its business through merger, acquisition, reorganization, or otherwise.

24. Integration. This Settlement Agreement contains the entire agreement between the Parties with respect to the settlement of the Arbitration and supersedes all prior agreements, including all discussions between the Parties at and following the August 24, 2017 mediation

and all terms discussed, negotiated, and agreed to by the Parties at and following that mediation. For avoidance of doubt, the Parties intend this Settlement Agreement and not any verbal discussions or understandings or any prior negotiations or agreements, to constitute their complete and entire agreement with respect to the settlement of the Arbitration. This Settlement Agreement shall not be amended or otherwise modified in any manner except in a writing executed by the Parties hereto.

25. Non-Waiver. No failure to exercise or enforce or delay in exercising or enforcing any right, obligation, or commitment under this Settlement Agreement shall constitute a waiver thereof, nor shall it preclude any other or further exercise or enforcement of any right, obligation, or commitment under this Settlement Agreement.

26. Signature by Counterparts. This Settlement Agreement may be executed in two separate counterparts, and by facsimile or email, each of which, when executed, shall be an original, and all of which together shall constitute one and the same Agreement, notwithstanding that all Parties may not have executed the same counterpart, and each Party may execute a separate signature page which may be appended to form one or more duplicate originals of this Settlement Agreement.

[Signatures on Next Page]

IN WITNESS WHEREOF, intending to be legally bound hereby, the Parties have executed this Settlement Agreement effective as of the date first written above.

SYNTHETIC GENOMICS, INC.

By: /s/ Robert H. Cutler

Name: Robert H. Cutler

Title: General Counsel & Secretary

NEW ENGLAND BIOLABS, INC.

By: /s/ Joseph W. Secondine, Jr.

Name: Joseph W. Secondine, Jr.

Title: General Counsel

Subsidiaries of the Registrant

Subsidiary Name

Jurisdiction

SGI-DNA Limited

United Kingdom

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated March 16, 2021, relating to the consolidated financial statements of Codex DNA, Inc., which is contained in that Prospectus. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ OUM & CO. LLP

San Francisco, California
May 28, 2021