

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

**Amendment No. 1 to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

SEQLL 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)

46-5319744
(I.R.S. Employer
Identification No.)

317 New Boston Street, Suite 210
Woburn, Massachusetts 01801
(781) 460-6016
(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 this Registration Statement is declared effective.

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, as amended, 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, 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, a 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input checked="" type="checkbox"/>		

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 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 ⁽²⁾	Amount of Registration Fee
Common Stock, \$0.00001 par value per share ⁽¹⁾	\$ 9,936,000	\$1,205
Underwriters' Warrants ⁽³⁾⁽⁴⁾	—	—
Shares of Common Stock underlying Underwriters' Warrants	\$ 540,000	\$ 66
Total:	\$10,476,000	\$1,271

- (1) Includes 202,500 shares that the underwriters have the option to purchase to cover over-allotments, if any.
- (2) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(a) under the Securities Act of 1933, as amended, or the Securities Act.
- (3) Registers warrants to be granted to the underwriters, or designees, for an amount equal to 5% of the number of the shares of common stock sold to the public, and assuming a per share exercise price equal to 125% of the price per share in this offering. See "Underwriting" on page 98 for information on underwriting arrangements.
- (4) No registration fee required pursuant to Rule 457(g) under the Securities Act.

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 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 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 it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MAY 21, 2019

PRELIMINARY PROSPECTUS



1,350,000 Shares of Common Stock

This is the initial public offering of our common stock. Prior to this offering there has been no public market for our common stock. We are offering 1,350,000 shares of common stock. We currently expect the initial public offering price to be between \$5.40 and \$6.40 per share.

We have applied to list our shares on the Nasdaq Capital Market, or Nasdaq, under the symbol “SQL.”

We are an “emerging growth company” as that term is defined in the Jumpstart Our Business Startups Act of 2012, and as such, have elected to take advantage of certain reduced public company reporting requirements.

Investing in our common stock involves a high degree of risk. Please read “Risk Factors” beginning on page 9 of this prospectus.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts and commissions ⁽¹⁾	\$	\$
Proceeds to us, before expenses	\$	\$

- (1) Does not include warrants that are issuable by us to the underwriters for 5% of the shares of common stock sold in the offering at a price per share equal to 125% of the initial public offering price or certain out-of-pocket expenses of the underwriters that are reimbursable by us. See “Underwriting” beginning on page 98 of this prospectus for a description of the compensation payable to the underwriters.

We have granted to the underwriters an option to purchase up to 202,500 additional shares of common stock at the public offering price, less the underwriting discounts and commissions, for 45 days after the date of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Delivery of the shares of common stock is expected to be made on or about _____, 2019.

WallachBeth Capital, LLC

The date of this prospectus is _____, 2019

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We have not, and the underwriters have not, authorized anyone to provide any information or to make any representations other than those 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. This prospectus is an offer to sell only the shares offered hereby, but only under the circumstances and in the jurisdictions where it is lawful to do so. The information contained in this prospectus or in any applicable free writing prospectus is current only as of its date, regardless of its time of delivery or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

MARKET AND INDUSTRY DATA

Certain of the market data and other statistical information contained in this prospectus, such as the size, growth and share of the services industry, are based on information from independent industry organizations and other third-party sources, industry publications, surveys and forecasts. The global DNA next generation sequencing market information referenced in this prospectus is based on *DNA Next Generation Sequencing Market* published by The Insight Partners on January 2019. The global RNA next generation sequencing market information referenced in this prospectus is based on *NGS-Based RNA Seq. Market* published by The Insight Partners on December 2018. Some market data and statistical information contained in this prospectus are also based on our management's estimates and calculations, which we derived from our review and interpretation of the independent sources, our internal market and brand research and our knowledge of the industries in which we operate. While we believe that each of these studies and publications is reliable, neither we nor the underwriters have independently verified market or industry data from third-party sources. We also believe our internal company research is reliable and the definitions of our market and industry are appropriate, though neither this research nor these definitions have been verified by any independent source. Information that is based on estimates, forecasts, projections 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.

Although we are not aware of any misstatements regarding the industry data that we present in this prospectus, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under "Risk Factors," "Forward-Looking Statements," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this prospectus.

TRADEMARKS AND TRADE NAMES

We use our registered trademarks and trade names, such as "SeqLL," "tSMS," "DRS" and "Sequence the Lower Limit," in this prospectus. Solely for convenience, trademarks and trade names referred to in this prospectus appear without the ® and ™ symbols, but those references are not intended to indicate that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

GLOSSARY OF CERTAIN SCIENTIFIC TERMS

The medical and scientific terms used in this prospectus have the following meanings:

“cDNA” means complementary DNA created from RNA through the use of reverse transcriptase.

“DNA” means deoxyribonucleic acid, a self-replicating material present in nearly all living organisms as the carrier of genetic information.

“Double helix” is a structure formed by a pair of parallel helices intertwined around a common axis. DNA is a double helix.

“DRS” means Direct RNA Sequencing, a method for sequencing RNA molecules without conversion to complementary DNA (cDNA) or amplification via PCR.

“Epigenetic” is the changes in gene expression that do not involve changes in the DNA sequence.

“FDA” means the U.S. Food and Drug Administration.

“Flow cell” means an optical cell used for detection and measurement of biological samples.

“Gene” is a portion of a DNA that serves as the basic unit of heredity.

“Gene expression” is a process by which information from a gene is used for the synthesis of a functional product.

“Genome” is an organism’s complete set of DNA.

“Helix” is an extended spiral chain of molecules.

“Ligation” is a process of joining two DNA strands by chemical linkage.

“Microfluidics” is the science of manipulating and controlling fluids, usually in very small ranges.

“Next Generation Sequencing” means a high-throughput sequencing to sequence DNA and RNA molecules much more quickly and cheaply than the previously used techniques.

“NGS” means Next Generation Sequencing.

“Nucleic Acid” means a complex organic substance present in living cells such as DNA or RNA.

“Nucleotide bases” or “Nucleotides” are building blocks of nucleic acids and include adenine (“A”), cytosine (“C”), guanine (“G”), thymine (“T”) and uracil (“U”).

“PCR” means Polymerase Chain Reaction and is a technique used to generate multiple copies (thousands to millions) of DNA sequences.

“RNA” means ribonucleic acid, a material present in all living cells which acts as a messenger carrying instructions from the DNA for controlling the synthesis of proteins.

“Transcript” is a single stranded RNA synthesized by transcription of DNA.

“Transcriptome” is an organism’s complete set of RNA molecules at an active cellular state.

“tSMS” means True Single Molecule Sequencing.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus and does not contain all of the information that you should consider before investing in our common stock. This summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. You should read this entire prospectus carefully, including the information set forth in the sections titled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our financial statements and related notes thereto contained in this prospectus, before making an investment decision. Unless the context requires otherwise, references in this prospectus to “we,” “us,” “our,” “our company,” or similar terminology refer to SeqLL Inc.

Overview

We are a life sciences instrumentation and services company leveraging our team’s expertise with our unique True Single Molecule Sequencing (tSMS™) technology focused on contributing major advancements to scientific research by accelerating one’s understanding of the molecular mechanisms of disease and fundamental biological processes. We have developed and offer a proprietary sequencing technology platform in the multi-billion dollar Next Generation Sequencing marketplace (“NGS”) that has critical advantages over existing NGS technologies, particularly for emerging applications in the research and development of precision medicine and transcriptome analysis. Our single molecule technology is capable of analyzing billions of molecules in parallel, which positions us as both competitive and complementary with other NGS platforms. Our technology advantage is a simplified method of quantifying DNA and RNA molecules at single molecule resolution because our platform does not require the routine PCR amplification and library preparation and ligation steps required by most NGS systems, thereby avoiding systematic bias. Data produced by our tSMS platform generates highly accurate, reproducible molecular profiles, often providing researchers with new insights into the biology being researched like revealing previously unknown characteristics of molecular structures. Armed with our robust technology platform, we have already assisted medical researchers uncover potentially significant implications in DNA and RNA-based discovery of bio-markers for the early detection of diseases, specifically for cardiovascular artery disease and epithelial cancer.

The NGS market is comprised of DNA and RNA sequencing, of which the global DNA market is projected to grow from \$6.82 billion in 2019 to \$22.72 billion in 2025, representing a compound annual growth rate (“CAGR”) of 22.2%. The global RNA market is projected to grow from \$1.63 billion in 2019 to \$4.96 billion in 2025, representing CAGR of 20.4%. We believe the potential addressable NGS market for our products and services in the combined DNA and RNA global markets is approximately \$1.03 billion in 2019, and it is projected to grow to approximately \$5.26 billion by 2025, representing CAGR of 31.3%.

Our strategy is offering sequencing services to our addressable market by unlocking the inherent advantages of single molecule sequencing and applying our tSMS platform to develop a wide variety of DNA-based, RNA-based applications. Over the longer-term our overall strategy is to integrate our tSMS platform with the development of novel applications in the rapidly emerging precision medicine market, generating revenue through product sales, sequencing services and research grants. Our target customers are consumers of our NGS products and services, such as academic and government institutes, hospitals and medical centers, pharmaceutical and biotechnology companies, non-profit research organizations and agricultural genomics organizations. Integral to our strategy will be to work with many of our existing customers in developing new instruments built to their research specifications as well as to offer them continued sequencing services over a wider array of applications.

Our revenues, which were \$1.3 million and \$0.8 million for the year ended December 31, 2017 and December 31, 2018, respectively, have been constrained by our lack of marketing which the proceeds from this offering will address. Since inception we have generated revenues but incurred net losses, have used net cash in our operations and have funded our business and operations primarily through proceeds from convertible promissory notes from our majority stockholder and the private placement of equity securities.

Background on Genetic Sequencing

Genetic inheritance in living systems is conveyed through a naturally occurring information storage system known as deoxyribonucleic acid, or DNA. DNA stores information in linear chains of chemical

bases known as adenine (“A”), cytosine (“C”), guanine (“G”) and thymine (“T”). Inside living cells, these chains usually exist in pairs bound together in a double helix by complementary base pairs. A “genome” is an organism’s complete set of DNA, which for humans consists of approximately three billion DNA base pairs. Ribonucleic acid, or RNA, is a molecule used by organisms to convey genetic information. A “transcriptome” is an organism’s complete set of RNA molecules at an active cellular state and includes both protein coding and noncoding RNA transcripts.

Studying genomes and transcriptomes helps scientists understand the inheritance of biological characteristics, developmental biology and normal and disease states of cells and organisms. Genetic variation accounts for many of the differences between individuals, such as eye color and blood group, and also affects a person’s susceptibility to certain diseases such as cancer, heart disease or diabetes, among others. Genetic variation can also determine a person’s response to drug therapies.

There are different sequencing technologies available for sequencing genetic material, each producing the sequence data in a unique format. Some of the technologies produce millions of sequence reads with a very short read length, generally less than 300 nucleotide bases. These technologies are generally referred as short read NGS platforms. Other technologies produce few thousand sequence reads of a very long read length, generally more than 1,000 nucleotide bases. These technologies are generally referred as long read NGS platforms. Both, the short as well as long read NGS technologies have their advantages in various settings. For *de novo* assembly of genomes and long RNA transcripts, the long contiguous reads from the long read NGS technologies are preferred. The short reads can be used to further fill in the gaps from the data. For the molecular counting application, a large amount of independent reads from the short read NGS technologies are preferred. Different genes are present in varying amounts in biological samples, and the success of the technique is highly dependent on the dynamic range of the detection technology.

Over the past two decades, researchers and clinicians have used NGS technologies to gain a deeper understanding of nucleic acids and the biological mechanisms they control. These areas of scientific advancement encompass the identification of disease-associated biomarkers, discovery of molecules for drug development, novel applications for early screening and diagnosis, and, more recently, the creation of genome editing technologies. Taken together, these technologies are having a profound impact on the lives of patients and hold the promise for delivering cures for many life-threatening diseases. While progress is being made on multiple fronts through the combined utilization of these technologies, there remains a wide gap between the expanding needs of researchers and the available tools with capabilities specialized to meet this recurring demand. This results in a significant market opportunity. Based upon our technology development, scientific collaborations and activities, and our understanding of these markets, we believe that the tSMS platform is uniquely positioned to address key segments of the life sciences market by providing access to a broad range of single molecule applications.

Our Technology Solution

Because our tSMS platform offers a single molecule solution for DNA and RNA sequencing by performing detection of nucleic acids without the need for complex sample manipulation, researchers using our platform can analyze many billions of single molecules in a single experiment and still generate highly accurate and reproducible data. Our technology’s critical advantage over other technologies is because our platform does not require the routine PCR amplification and library prep and ligation steps needed by most NGS systems, thereby avoiding systematic amplification bias. RNA sequencing on the SeqLL platform detects transcripts regardless of abundance and with high accuracy in quantifying gene expression changes associated with certain disease as well as detecting subtle changes in RNA transcript levels that are undetectable with other methods.

Our system still requires isolation and preparation of DNA or RNA samples; however, our system is adaptable to most purification and preparation kits and techniques that are currently available in the market and no additional or special steps are required to prepare the samples for sequencing.

Our platform offering single molecule resolution is unique because it combines a patented fluorescence-based optical detection apparatus with a precision microfluidics and thermal control system to perform sequencing-by-synthesis reactions. Notably, a limitation of an optical-based detection system is longer sequencing times compared to non-optical sequencing platforms. Furthermore, as with any short

read-length platform, a common challenge is to generate reads that must be long enough to provide sufficient information to unambiguously place them on a known template sequence, or to generate unambiguous overlaps to reconstruct the sequence if no template is available. Moreover, our real time image processing software, supplemented with a powerful machine learning module, overlays the images to produce sequence information for individual molecules as an output.

In sum, we believe that our tSMS platform offers the following critical advantages over existing technologies:

- Minimal Sample Preparation — Preserves the sample integrity, and avoids the bias and errors in the sequence data output;
- Greater Sensitivity — our unique, amplification and library-free sequencing technology enables detection of subtle changes in molecular profiles that we believe are undetectable with other methods;
- High Accuracy — Each molecule is sequenced individually without the need for phasing, which provides an accurate dataset across a broad range of molecular inputs; and
- Seamless Flexibility — Provides the ability to control throughput and apply diverse applications. The tSMS platform has the ability to scale the throughput across a range of small to large sample projects.

Our Mission and Strategy

Our mission is to empower researchers with improved genetic tools that enable scientists and physicians to better understand the molecular mechanisms of disease and the underlying biological systems. This knowledge is essential to the continued development of new breakthroughs in genomic medicine that address the critical concerns involved with today's precision medicine.

Our strategy is offering sequencing services to our addressable market by unlocking the inherent advantages of single molecule sequencing and applying our tSMS platform to develop a wide variety of DNA-based, RNA-based. Over the longer-term our overall strategy is to integrate our tSMS platform with the development of novel applications in the rapidly emerging precision medicine market, generating revenue through product sales, sequencing services and research grants. Integral to our strategy will be to work with many of our existing customers in developing new instruments built to their research specifications as well as to offer them continued sequencing services over a wider array of applications.

Our customers are consumers of our NGS products and services, such as academic and government institutes, hospitals and medical centers, pharmaceutical and biotechnology companies, non-profit research organizations and agricultural genomics organizations. We plan to grow revenues from recurring and prospective clients by the following key strategies:

- Provide the scientific community with a combination of sequencing services and NGS instrumentation to serve markets that we believe are inadequately addressed by existing technologies.
 - Assist in the development of new classes of RNA-based diagnostics.
 - Collaborate with researchers to enhance pharmacogenomics and biomarker discovery.
 - Support drug developers seeking a better understanding of the side-effects of their new drugs.
- Continue to innovate and develop new aspects of our products and technology, applications and instrumentation through scientific collaborations, including grants.
- Leverage our expertise and the broad applicability of the tSMS platform to grow into new markets through strategic collaborations, partnerships, existing data sets, and customers.
- Maintain a strong culture and network of technical resources while continuously attracting new talent to build an industry leading single molecule solutions company.

We have assembled an experienced management team, board of directors, scientific founders and advisory board who bring extensive industry experience to our Company and business strategy. The members of our team have deep experience in discovering, developing and commercializing with a particular focus on sequencing products and applications, having built emerging growth companies from the ground up and led management teams of larger established companies in diverse sectors of the economy.

As we expand product lines to address the diagnosis of disease, regulation by governmental authorities in the United States will become an increasingly significant factor in development, testing, production and marketing. Products that we develop in the molecular diagnostic markets, depending on their intended use, may be regulated as medical devices or in vitro diagnostic products (“IVDs”) by the FDA. We have not sought FDA approval of our sequencers because to date we have marketed them for research purposes and not for clinical diagnostics. We will likely need to pursue regulatory approvals from the FDA when we attempt to enter the diagnostics market, which process is expensive, involves a high degree of risk and there is no assurance that we will be able to develop a commercially viable product.

Summary Risks Related to Our Business

Our business is subject to a number of risks, including risks that may prevent us from achieving our business objectives or may adversely affect our business, financial condition, results of operations, cash flows and prospects that you should consider before making a decision to invest in our common stock.

Since inception we have incurred net losses, have used net cash in our operations and have funded our business and operations primarily through proceeds from promissory notes from our majority stockholder, private placement of equity securities and convertible notes. We expect to continue to require significant future financing as we continue our research and development activities. Our future capital needs are uncertain and our ability to obtain additional financing will be subject to a number of factors, including market conditions, our operating performance and investor sentiment. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our products, restrict our operations or obtain funds by entering into agreements on unattractive terms, which would likely have a material adverse effect on our business, stock price and our relationships with third parties with whom we have business relationships, at least until additional funding is obtained. As a result, substantial doubt exists about our ability to continue as a going concern as of the date hereof. The accompanying financial statements do not include any adjustment for the possible future effects on the recoverability and classification of recorded assets, or the amount and classification of liabilities that might be different should we be unable to continue as a going concern based on the outcome of the uncertainties described above. Other risks include, but are not limited to, the following:

- Our products and services may fail to achieve and sustain sufficient market acceptance at levels sufficient to support our costs.
- We may be unable to develop new products in a cost-effective manner, or at all.
- We have limited experience as a commercial company and may not be able to manage our growth effectively.
- We operate in a highly competitive industry and we may not be able to compete effectively.
- Rapidly changing technology could render our products, services or technology obsolete.
- We may be unable to adequately protect our intellectual property worldwide.
- Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for certain litigation under Delaware statutory law or Delaware common law which limits our stockholders’ ability to obtain a different judicial forum for disputes with us or our directors, officers or employees.
- We have relied on our majority shareholder to fund our working capital needs, including portions of our overhead.

- We may be unable to raise additional funds in the future on favorable terms or at all.

For a more detailed discussion of some of the risks you should consider, you are urged to carefully review and consider the section titled “Risk Factors” beginning on page 9 of this prospectus.

Implications of Being an Emerging Growth Company

We qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we remain an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies. These provisions include, but are not limited to:

- being permitted to have only two years of audited financial statements and only two years of related selected financial data and management’s discussion and analysis of financial condition and results of operations disclosure;
- an exemption from compliance with the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act;
- reduced disclosure about executive compensation arrangements in our periodic reports, registration statements and proxy statements; and
- exemptions from the requirements to seek non-binding advisory votes on executive compensation or golden parachute arrangements.

In addition, the JOBS Act permits emerging growth companies to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are not choosing to “opt out” of this provision. We will remain an emerging growth company until the earliest of (i) the end of the fiscal year following the fifth anniversary of the completion of this offering, (ii) the first fiscal year after our annual gross revenues exceed \$1.07 billion, (iii) the date on which we have, during the immediately preceding three-year period, issued more than \$1.0 billion in non-convertible debt securities or (iv) the end of any fiscal year in which the market value of our common stock held by non-affiliates exceeds \$700 million as of the end of the second quarter of that fiscal year.

Corporate Information

We were incorporated in Delaware on April 3, 2014. Our principal executive offices are located at 317 New Boston Street, Suite 210, Woburn, Massachusetts 01801, and our telephone number is (781) 460-6016. Our corporate website address is www.seqll.com. The information contained on or accessible through our website is not a part of this prospectus.

Our tSMS technology has been in development since 2004 at Helicos Biosciences Corporation (“Helicos”), which pioneered the first generation tSMSTM technology resulting in its commercialization as the HeliScope Genetic Analysis System. In 2013, Daniel Jones, a former scientist at Helicos, formed SeqLL as a limited liability company to further the development of tSMS. SeqLL then purchased much of our physical assets from Helicos, including, among other things, sequencers, laboratory equipment, internal servers, protocols and data analysis procedures through Helicos’ bankruptcy proceedings that began in 2012. In addition, we entered into a non-exclusive license agreement for certain intellectual property of Helicos and the pioneering tSMS technology. In 2016 we established a revenue producing sequencing services business while in parallel we re-designed the original Helicos technology with customer-friendly user interface and a reliable system architecture.

Beginning in 2017, we introduced a benchtop sequencer that reduces the physical space demands that the previous version of sequencer requires. The benchtop sequencer uses a redesigned system architecture that improved the instrument reliability. We have placed two benchtop sequencers at the Medical Departments of Yale and Harvard/MGH.

THE OFFERING

Common stock offered by us	1,350,000 shares.
Underwriters' over-allotment option	We have granted the underwriters an option for a period of 45 days from the date of this prospectus to purchase an additional 202,500 shares of common stock.
Common stock to be outstanding after this offering	9,753,775 shares.
Use of proceeds	We currently intend to use the net proceeds from this offering as follows: (1) approximately \$1.0 million to expand our commercial operations to grow sequencing services; (2) approximately \$500,000 to build additional sequencing instruments to support sequencing services expansion; (3) approximately \$500,000 to build consumables and lab resources to support sequencing services expansion; (4) approximately \$1.0 million to improve and update our tSMS technology and instruments to develop additional applications; (5) approximately \$1.0 million to support and expand our marketing and business development efforts in the United States and internationally; (6) the repayment of two promissory notes totaling \$270,000 plus outstanding accrued interest; and (7) the balance for working capital and other general corporate purposes. See "Use of Proceeds" on page 32 .
Risk Factors	See "Risk Factors" on page 9 a discussion of certain of factors to consider carefully before deciding to purchase any shares of our common stock.
Nasdaq Capital Market Symbol	"SQL"

The number of shares of our common stock to be outstanding after this offering is based on 4,864,862 shares of common stock outstanding as of May 15, 2019, the conversion of all outstanding shares of our preferred stock consented to by a majority of holders of our Series A preferred stock, into an aggregate of 3,130,622 shares of our common stock, and the conversion of our outstanding convertible notes and promissory note consented to by the holder of such notes, into an aggregate of 408,291 shares of our common stock, which conversions will occur immediately prior to the closing of this offering and excludes as of such date:

- 596,396 shares of our common stock issuable upon the exercise of warrants, at a weighted average exercise price of \$2.32 per share;
- 67,500 shares of our common stock that may be issued upon exercise of the Underwriters' Warrants at an exercise price of \$7.38, which represents 5% of the shares of common stock being offered hereby and 125% of an assumed public offering price of \$5.90, which is the midpoint of the initial public offering price range reflected on the cover of this prospectus;
- 889,181 shares of our common stock issuable upon the exercise of outstanding stock options under our 2014 Equity Incentive Plan, or the 2014 Plan; and
- 191,900 shares of our common stock reserved for future issuance under the 2014 Plan.

Unless otherwise indicated, all information contained in this prospectus assumes:

- the conversion of all outstanding shares of our preferred stock into an aggregate of 3,130,622 shares of our common stock, consented by a majority of holders of our Series A preferred stock to occur immediately prior to the closing of this offering;

Summary Financial Data

	For The	For The Years ended	
	Three Months Ended March 31,	December 31,	
	2019	2018	2017
Revenue			
Sales	\$ 106,855	\$ 756,303	\$ 1,138,052
Other revenue	—	22,765	200,700
Total revenue	106,855	779,068	1,338,752
Cost of sales	16,449	674,281	1,084,518
Gross profit	90,406	104,787	254,234
Operating expenses			
Research and development	393,391	1,039,260	974,531
General and administrative	332,557	1,466,814	806,897
Total operating expenses	725,948	2,506,074	1,781,428
Operating loss	(635,542)	(2,401,287)	(1,527,194)
Other income and expenses			
Gain on settlement of liabilities	—	182,439	—
Debt Conversion Expense	—	(438,873)	—
Interest and other expenses	(28,441)	(230,296)	(179,740)
Total other expenses, net	(28,441)	(486,730)	(179,740)
Net Loss	\$ (663,983)	\$(2,888,017)	\$(1,706,934)
Net loss per share – basic and diluted	\$ (0.14)	\$ (0.59)	\$ (0.35)
Weighted average common shares – basic and diluted	4,864,862	4,864,862	4,864,862

As of March 31, 2019

	Actual	Pro Forma	Pro Forma as Adjusted
Balance Sheet Data:			
Cash	\$ 52,176	\$ 52,176	\$ 7,300,326
Working capital	\$ 254,782	\$ 254,782	\$ 6,628,730
Total assets	\$ 1,107,767	\$ 1,107,767	\$ 8,355,917
Total liabilities	\$ 2,152,346	\$ 986,636	\$ 1,860,838
Total stockholders' equity/(deficit)	\$(1,044,579)	\$ 121,097	\$ 6,495,045

As of December 31, 2018

	Actual	Pro Forma ⁽¹⁾	Pro Forma as Adjusted ⁽²⁾⁽³⁾
Balance Sheet Data:			
Cash	\$ 64,694	\$ 64,694	\$ 6,613,535
Working capital	\$ 448,237	\$ 448,237	\$ 6,997,078
Total assets	\$ 1,180,277	\$ 1,180,277	\$ 7,729,118
Total liabilities	\$ 1,566,690	\$ 845,980	\$ 845,980
Total stockholders' equity/(deficit)	\$ (386,413)	\$ 334,297	\$ 6,883,138

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- (1) Gives effect to the conversion of all outstanding shares of our preferred stock into an aggregate of 3,130,622 shares of our common stock, and the filing and effectiveness of our amended and restated certificate of incorporation, and the conversion of our outstanding convertible notes and promissory note into an aggregate of 408,291 shares of our common stock, which conversions will occur immediately prior to the closing of this offering.
 - (2) Reflects, in addition to the pro forma adjustment set forth in footnote (1), the sale of 1,350,000 shares of our common stock in this offering at an assumed initial public offering price of \$5.90 per share, 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.
 - (3) A \$1.00 increase or decrease in the assumed initial public offering price of \$5.90 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 cash, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$1.2 million, assuming the number of shares offered by us, as stated on the cover page of this prospectus, remains unchanged and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of one hundred thousand in the number of shares we are offering would increase or decrease, as applicable, each of cash, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by \$536,900, assuming the assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this prospectus, including our financial statements, the notes thereto and the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” before deciding to invest in our common stock. The occurrence of any of the following risks could have a material and adverse effect on our business, reputation, financial condition, results of operations and future growth prospects, as well as our ability to accomplish our strategic objectives. As a result, the trading price of our common stock could decline and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and stock price.

As we have incurred recurring losses and negative cash flows since our inception, there is no assurance that we will be able to continue as a going concern absent additional financing, which we may not be able to obtain on favorable terms or at all.

We have incurred net losses since our incorporation in 2014 and we cannot be certain if or when we will produce sufficient revenue from our operations to support our costs. Even if profitability is achieved in the future, we may not be able to sustain profitability on a consistent basis. We expect to continue to incur substantial losses and negative cash flow from operations for the foreseeable future. Our financial statements included with this Form S-1 have been prepared assuming that we will continue as a going concern. We have concluded that substantial doubt about our ability to continue as a going concern exists and our auditors have made reference to this in their audit report on our audited consolidated financial statements for the year ended December 31, 2018. As a result, it may be more difficult for the Company to attract investors. Our future is dependent upon our ability to obtain financing and upon future profitable operations from the sale of future sequencing products.

Our ability to obtain additional financing will be subject to a number of factors, including market conditions, our operating performance and investor sentiment. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue our operations or obtain funds by entering into agreements on unattractive terms, which would likely have a material adverse effect on our business, stock price and our relationships with third parties with whom we have business relationships, at least until additional funding is obtained. If we do not have sufficient funds to continue operations, we could be required to seek bankruptcy protection or other alternatives that would likely result in our stockholders losing some or all of their investment in us.

We do not have any credit facilities as a source of future funds, and there can be no assurance that we will be able to raise sufficient additional capital on acceptable terms, or at all. We may seek additional capital through a combination of private and public equity offerings, debt financings and strategic collaborations. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. Debt financing, if obtained, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, could increase our expenses and require that our assets secure such debt. Moreover, any debt we incur must be repaid regardless of our operating results.

We are an early, commercial-stage company with a limited operating history.

We were incorporated in 2014 and we have had limited sales to date. As such, we have limited historical financial data upon which to base our projected revenue, planned operating expenses or upon which to evaluate us and our commercial prospects. Based on our limited experience in developing and marketing our existing products and services as well as launching new products, we may not be able to effectively:

- drive adoption of our current and future products and services;
- attract and retain customers for our products and services;
- provide appropriate levels of customer training and support for our products and services;
- implement an effective marketing strategy to promote awareness of our products and services;

- develop, manufacture and commercialize new products or achieve an acceptable return on our manufacturing or research and development efforts and expenses;
- anticipate and adapt to changes in our market or predict future performance
- accommodate customer expectations and demands with respect to our products and services;
- grow our market share by marketing and selling our products and services to new and additional market segments;
- maintain and develop strategic relationships with vendors and manufacturers to acquire necessary materials for the production of our existing or future products;
- adapt or scale our manufacturing activities to meet potential demand at a reasonable cost;
- avoid infringement and misappropriation of third-party intellectual property;
- obtain any necessary licenses to third-party intellectual property on commercially reasonable terms;
- obtain valid and enforceable patents that give us a competitive advantage;
- protect our proprietary technology; and
- attract, retain and motivate qualified personnel.

If our tSMS sequencing instruments or sequencing services fail to achieve and sustain sufficient market acceptance, we will not generate expected revenue and our business may not succeed.

We cannot be sure that our current or future tSMS sequencers or services will gain acceptance in the marketplace at levels sufficient to support our costs. We must successfully develop and commercialize our technology for use in a variety of life science and other applications. Even if we are able to implement our technology and develop products successfully, we and/or our sales and distribution partners may fail to achieve or sustain market acceptance of our products across the full range of our intended life science and other applications. Our sequencing instruments require reagent kits and consumables in order to produce sequencing data at sufficient levels to generate expected revenue. We will need to increase our internal capabilities and collaborate with other partners in order to successfully expand sales of our reagent kits and consumables in the markets we seek to reach, which we may be unable to do at the scale required to support our business.

Our research and development efforts may not result in the benefits we anticipate, and our failure to successfully market, sell, and commercialize our current and future sequencing instruments and services products could have a material adverse effect on our business, financial condition and results of operations.

We have dedicated significant resources to developing sequencing instruments and services. We are also engaged in substantial and complex research and development efforts such as Direct RNA Sequencing (DRS™), single cell sequencing, biomarker discovery, and epigenetic modification detection, which, if successful, may result in the introduction of new products in the future. Our research and development efforts are complex and require us to incur substantial expenses. We may not be able to develop and commercialize new products, or achieve an acceptable return, if any, on our research and development efforts and expenses. There can also be no assurance that we will be able to develop and manufacture future sequencing instruments and applications as a result of our research and development efforts, or that we will be able to market, sell and commercialize the products that result from our research and development efforts. We will need to expand our internal capabilities and seek new partnerships or collaborations in order to successfully market, sell and commercialize the sequencing instruments and applications that we have developed in the markets we seek to reach.

If we are unable to successfully develop and timely manufacture our sequencing instruments and reagents, our business may be adversely affected.

In light of the highly complex technologies involved in our sequencing products, including instruments and reagents, there can be no assurance that we will be able to manufacture and commercialize our new sequencing instruments and reagents on a timely basis or provide adequate support for such products. The

commercial success of our sequencers and reagents depends on a number of factors, including performance and reliability, our anticipating and effectively addressing customer preferences and demands, the success of our sales and marketing efforts, effective forecasting and management of instrument and sequencing services demand, purchase commitments and inventory levels and effective management of manufacturing and supply costs. Our ability to manufacture benchtop sequencers and reagents could be negatively impacted by changes to personnel, hiring delays, resource availability, supply chain disruption, facilities disruption and may be insufficient to achieve customer acceptance and growth.

The development of our sequencing instruments and reagents is complex and costly, requiring successful systems integration and reagent quality to generate usable data for customers and collaborators. Problems in the design or quality of our products may have a material and adverse effect on our brand, business, financial condition, and operating results. Unanticipated problems with our products could divert substantial resources, which may impair our ability to support our new and existing products, and could substantially increase our costs. If we encounter development challenges or discover errors in our products late in our development cycle, we may be forced to delay product shipments or the scaling of manufacturing or supply. The expenses or losses associated with delayed or unsuccessful product development or lack of market acceptance of our new products could materially and adversely affect our business, financial condition and results of operations.

We must successfully manage new product introductions and transitions related to the tSMS technology, we may incur significant costs during these transitions, and they may not result in the benefits we anticipate.

The introduction of future products may lead to our limiting or ceasing development of further enhancements to our existing sequencing instruments and applications, as we focus our resources on new products, and could result in reduced marketplace acceptance and loss of sales of our existing sequencing instruments or sequencing services, materially adversely affecting our revenue and operating results. The introduction of new products may also have a negative impact on our revenue in the near-term as our current and future customers may delay or cancel orders of existing sequencing instruments or sequencing services in anticipation of new products and we may also be pressured to decrease prices for our existing products. Further, we could experience difficulty in managing or forecasting customer reactions, purchasing decisions or transition requirements with respect to newly-launched sequencing instruments or sequencing services. We could incur significant costs in completing the transitions, including costs of inventory write-downs of our products, as current or future customers transition to the new products. If we do not successfully manage these product transitions, our business, reputation and financial condition may be materially and adversely affected.

Our future capital needs are uncertain and we may need to raise additional funds to support those needs.

We believe that the net proceeds from this offering, together with our cash generated from commercial sales and research activity, will enable us to fund our operations for several years. However, we expect to seek significant future financing, namely to:

- expand our sales and marketing efforts to further commercialize our products and services;
- hire additional personnel;
- add operational, financial and management information systems;
- incur increased costs as a result of operating as a public company;
- lease additional laboratory space to accommodate expanded operations and increased human resources;
- expand our research and development efforts to improve our product offerings and to successfully launch new products;
- enter into collaboration agreements, if any, or in-license other products and technologies; and
- seek FDA approval to market our existing products or new products that would be utilized for diagnostic purposes.

Future funding requirements will depend on many factors, including:

- market acceptance of our products;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost of our research and development activities;
- the success of our existing distribution and marketing arrangements and our ability to enter into additional arrangements in the future; and
- the effect of competing technological and market developments.

We cannot assure you that we will be able to obtain additional funds on acceptable terms, or at all. Our ability to obtain additional financing will be subject to market conditions, our operating performance and investor sentiment, among other factors. If we raise additional funds by issuing equity or equity-linked securities, our stockholders may experience dilution. Future debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or equity financing may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could have a material adverse effect on our financial condition, operating results and business.

Comprehensive tax reform legislation could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act, or the TCJA, that significantly reforms the Internal Revenue Code of 1986, as amended. The TCJA, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal tax rate of 35% to a flat rate of 21%, limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of annual taxable income and elimination of net operating loss carrybacks and modifying or repealing many business deductions and credits (including reducing the business tax credit for certain clinical testing expenses incurred in the testing of certain drugs for rare diseases or conditions generally referred to as “orphan drugs”). We continue to examine the impact this tax reform legislation may have on our business. However, the effect of the TCJA on our business, whether adverse or favorable, is uncertain and may not become evident for some period of time. We urge investors to consult with their legal and tax advisers regarding the implications of the TCJA on an investment in our common stock.

We rely on other companies for certain components and materials and intend to outsource sub-assembly manufacturing in the future. We may not be able to successfully assemble or manufacture reagents and instruments or scale the manufacturing process necessary to build and test multiple products on a full commercial basis, which could materially harm our business.

Our products are complex and involve a large number of unique components, many of which require precision in manufacturing that is performed in-house using third party components. The nature of our products requires significant use of customized components that are currently available only from a limited number of sources, and in some cases, single sources. If we are required to purchase these components from alternative sources, it could take several months or longer to qualify the alternative sources. If we are unable to secure a sufficient supply of these product components on a timely basis, or if these components do not meet our expectations or specifications for quality and functionality, our operations and manufacturing will be materially and adversely affected, we could be unable to meet customer demand and our business and results of operations may be materially and adversely affected.

The operations of our suppliers could be disrupted by conditions unrelated to our business or operations or that are beyond our control, including but not limited to international trade restrictions or changes resulting from factors beyond our control. If our suppliers are unable or fail to fulfill their obligations to us for any reason, we may not be able to manufacture our instruments or reagents and satisfy

customer demand or our obligations under sales agreements in a timely manner, and our business could be harmed as a result. Our current manufacturing process is characterized by long lead times between the placement of orders for and delivery of our products. If we have received insufficient components to manufacture our products on a timely basis to meet customer demand, our sales and our gross margin may be adversely affected, and our business could be materially harmed. If we are unable to reduce our manufacturing costs and establish and maintain reliable, high-volume manufacturing suppliers as we scale our operations, our business could be materially harmed.

We may be unable to consistently manufacture our instruments and reagents to the necessary specifications or in quantities necessary to meet demand at an acceptable cost.

In order to successfully generate revenue from our products, we need to supply our customers with products that meet their expectations relating to read length, error rates and data yield in accordance with established specifications. There is no assurance that we will be able to manufacture our products so that they consistently achieve the product specifications and quality that our customers expect, including any products developed for clinical uses. Problems in the design or quality of our products may have a material adverse effect on our brand, business, financial condition, and operating results. There is also no assurance that we will be able to increase manufacturing output and decrease costs, or that we will be successful in forecasting customer demand or manufacturing and supply costs. Furthermore, we may not be able to increase manufacturing to meet anticipated demand or may experience downtime in our existing or new manufacturing facilities. An inability to manufacture sequencing instruments and reagents or provide sequencing services, that consistently meet specifications, in necessary quantities and at commercially acceptable costs, will have a negative impact, and may have a material adverse effect, on our business, financial condition and results of operations.

Rapidly changing technology in life sciences and diagnostics could make our technology obsolete unless we continue to develop and commercialize new and improved products and pursue new market opportunities.

The biotechnology industry is characterized by rapid and significant technological changes, frequent new product introductions and enhancements and evolving industry standards. Our future success will depend on our ability to continually improve our products, 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. These new market opportunities may be outside the scope of our proven expertise or in areas where the market demand is unproven, and new products and services developed by us may not gain market acceptance. Our inability to develop and introduce new products and to gain market acceptance of such products could harm our future operating results. Unanticipated difficulties or delays in replacing existing products with new products or other new or improved products in sufficient quantities to meet customer demand could diminish future demand for our products and harm our future operating results.

Increased market adoption of our products by customers may depend on the availability of sample preparation and informatics tools, some of which may be developed by third parties.

Our commercial success may depend in part upon the development of sample preparation and software third parties for use with our sequencing and data analysis workflow. We cannot guarantee that third parties will develop tools that our current and future customers will find useful with our sequencing instruments given that our sample preparation methods are uniquely tailored to single molecule sequencing. Similarly, as a direct result of sequencing methodology not requiring amplification and bridge PCR, the downstream data analysis tools required for informatics analysis are specialized. A lack of complementary sample preparation options and software to enable broader usability may impede the adoption of our technology and may materially and adversely impact our business.

We operate in a highly competitive industry and if we are not able to compete effectively, our business and operating results will likely be harmed.

Some of our current competitors, including Illumina, Inc., Pacific Bioscience of California, Inc., Thermo Fisher Scientific Inc., and Beijing Genomic Institute as well as other potential competitors, have greater name recognition, more substantial intellectual property portfolios, longer operating histories, significantly greater financial, technical, research and/or other resources, more experience in new product

development, larger and more established manufacturing capabilities and marketing, sales and support functions, and/or more established distribution channels to deliver products to customers than we do. These competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. In light of these advantages, even if our technology is more effective than the products or service offerings of our competitors, current and potential customers might purchase competitive products and services instead of our products. There are also several companies that are in the process of developing or have already developed new, potentially competing technologies, products and/or services. Increased competition may result in pricing pressures, which could harm our sales, profitability or market share. Our failure to further enhance our existing products and to introduce new products to compete effectively could materially and adversely affect our business, financial condition or results of operations.

Single molecule sequencers are highly complex, have recurring support requirements and could have unknown defects or errors, which may give rise to claims against us or divert application of our resources from other purposes.

Products using our technology are highly complex and may develop or contain undetected defects or errors. Despite testing, defects or errors may arise in our products, which could result in a failure to maintain or increase market acceptance of our products, diversion of development resources, injury to our reputation and increased warranty, service and maintenance costs. New products or enhancements to our existing products in particular may contain undetected errors or performance problems that are discovered only after delivery to customers. If our products have reliability or other quality issues or require unexpected levels of support in the future, the market acceptance and utilization of our products may not grow to levels sufficient to support our costs and our reputation and business could be harmed. We generally ship our sequencing instruments with one year of service included in the purchase price with an option to purchase one or more additional years of service. We also provide a warranty for our consumables, which is generally limited to replacing, or at our option, giving credit for any consumable with defects in material or workmanship. Defects or errors in our products may also discourage customers from purchasing our products. The costs incurred in correcting any defects or errors may be substantial and could materially and adversely affect our operating margins. If our service and support costs increase, our business and operations may be materially and adversely affected.

In addition, such defects or errors could lead to the filing of product liability claims against us or against third parties who we may have an obligation to indemnify against such claims, which could be costly and time-consuming to defend and result in substantial damages. Although we have product liability insurance, any product liability insurance that we have or procure in the future may not protect our business from the financial impact of a product liability claim. Moreover, we may not be able to obtain adequate insurance coverage on acceptable terms. Any insurance that we have or obtain will be subject to deductibles and coverage limits. A product liability claim could have a serious adverse effect on our business, financial condition and results of operations.

We depend on the continuing efforts of our senior management team and other key personnel. If we lose members of our senior management team or other key personnel or are unable to successfully retain, recruit and train qualified scientists, engineers and other personnel, our ability to maintain and develop our products could be harmed and we may be unable to achieve our goals.

Our future success depends upon the continuing services of members of our senior management team and scientific and engineering personnel. We compete for qualified management and scientific personnel with other life science companies, academic institutions and research institutions, particularly those focusing on genomics. If one or more of our senior executives or other key personnel were unable or unwilling to continue in their present positions, we may not be able to replace them easily or at all, and other senior management may be required to divert attention from other aspects of the business. In addition, we do not have “key person” life insurance policies covering any member of our management team or other key personnel. The loss of any of these individuals or any inability to attract or retain qualified personnel, including scientists, engineers and others, could prevent us from pursuing collaborations and materially and adversely affect our support of existing products, product development and introductions, business growth prospects, results of operations and financial condition.

A significant portion of our potential sales depends on customers' spending budgets that may be subject to significant and unexpected variation which could have a negative effect on the demand for our products.

Our instruments represent significant capital expenditures for our customers. Potential customers for our current or future products include academic and government institutions, genome centers, medical research institutions, clinical laboratories, pharmaceutical, agricultural, biotechnology, diagnostic and chemical companies. Their spending budgets can have a significant effect on the demand for our products. Spending budgets are based on a wide variety of factors, including the allocation of available resources to make purchases, funding from government sources which is highly uncertain and subject to change, the spending priorities among various types of research equipment and policies regarding capital expenditures during economically uncertain periods. Any decrease in capital spending or change in spending priorities of our current and potential customers could significantly reduce the demand for our products. Any delay or reduction in purchases by potential customers or our inability to forecast fluctuations in demand could harm our future operating results.

Delivery of our reagents could be delayed or disrupted by factors beyond our control, and we could lose customers as a result.

We rely on third-party carriers for the timely delivery of our products both domestically and internationally. As a result, we are subject to carrier disruptions and increased costs that are beyond our control. Any failure to deliver products to our customers in a safe and timely manner may damage our reputation and brand and could cause us to lose customers. If our relationship with any of these third-party carriers is terminated or impaired or if any of these carriers are unable to deliver our products, the delivery and acceptance of our products by our customers may be delayed, which could harm our business and financial results. Specific reagents utilized in our sequencing reactions are temperature-sensitive and require to be kept and stored in a temperature-controlled method in order to properly ship. In addition, many of the raw materials used during the manufacturing process of our reagents require temperature control during shipment. The failure to deliver our products in a safe, temperature-controlled, and timely manner may harm our relationship with our customers, increase our costs and otherwise disrupt our operations.

We are, and may become, subject to governmental regulations that may impose burdens on our operations, and the markets for our products may be narrowed.

We are subject, both directly and indirectly, to the adverse impact of government regulation of our operations and markets. Moreover, the life sciences industry, which is expected to be one of the primary markets for our technology, has historically been heavily regulated. There are, for example, laws in several jurisdictions restricting research in genetic engineering, which may narrow our markets. At a minimum, biosafety regulations enforced by local government must be followed and updated should new regulations pass the approval process. Given the evolving nature of this industry, legislative bodies or regulatory authorities may adopt additional regulations that may adversely affect our market opportunities. Additionally, if ethical and other concerns surrounding the use of genetic information, diagnostics or therapies become widespread, there may be less demand for our products.

Our business is also directly affected by a wide variety of government regulations applicable to business enterprises generally and to companies operating in the life science industry in particular. Failure to comply with government regulations or obtain or maintain necessary permits and licenses could result in a variety of fines or other censures or an interruption in our business operations which may have a negative impact on our ability to generate revenue and the cost of operating our business. In addition, changes to laws and government regulations could cause a material adverse effect on our business as we will need to adapt our business to comply with such changes.

Our products could become subject to regulation by the U.S. Food and Drug Administration or other domestic and international regulatory agencies, which could increase our costs and impede or delay our commercialization efforts, thereby materially and adversely affecting our business and results of operations.

Our products are not currently subject to the FDA clearance or approval since they are not intended for use in the diagnosis or treatment of disease. However, in the future, certain of our products or related applications, such as those that may be developed for clinical uses, could be subject to FDA regulation, or

the FDA's regulatory jurisdiction could be expanded to include our products. Even where a product is exempted from FDA clearance or approval, the FDA may impose restrictions as to the types of customers to which we or our partners can market and sell our products. Such regulation and restrictions may materially and adversely affect our business, financial condition and results of operations. In the event that we fail to obtain and maintain necessary regulatory clearances or approvals for products that we develop for clinical uses, or if clearances or approvals for future products and indications are delayed or not issued, our commercial operations may be materially harmed. Furthermore, even if we are granted regulatory clearances or approvals, they may include significant limitations on the indicated uses for the product, which may limit the market for the product. We do not have experience in obtaining FDA approvals and no assurance can be given that we will be able to obtain or to maintain such approvals. Furthermore, any approvals that we may obtain can be revoked if safety or efficacy problems develop.

Due to material weakness in our internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our business and our stock price.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be evaluated frequently. We may in the future discover areas of our internal financial and accounting controls and procedures that need improvement. Operating as a public company requires sufficient resources within the accounting and finance functions in order to produce timely financial information, ensure the level of segregation of duties, and maintain adequate internal control over financial reporting customary for a U.S. public company.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States (U.S. GAAP). Our management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected.

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

Under Section 382 of the Internal Revenue Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses ("NOLs") to offset future taxable income. Significant changes in our stock ownership could result in us being unable to utilize a material portion of our NOLs even if we attain profitability.

Our sales cycle is unpredictable and lengthy, which makes it difficult to forecast revenue and may increase the magnitude of quarterly or annual fluctuations in our operating results.

The sales cycle for our sequencing instruments is lengthy because they represent a major capital expenditure and generally require the approval of our customers' senior management. This may contribute to substantial fluctuations in our quarterly or annual operating results, particularly during the periods in which our sales volume is low. Factors that may cause fluctuations in our quarterly or operating results include, without limitation, market acceptance for our products; our ability to attract new customers; publications of studies by us, competitors or third parties; the timing and success of new product introductions by us or our competitors or other changes in the competitive dynamics of our industry, such as consolidation; the amount and timing of our costs and expenses; changes in our pricing policies or those of our competitors; general economic, industry and market conditions; the regulatory environment; expenses associated with warranty costs or unforeseen product quality issues; the hiring, training and retention of key employees, including our ability to grow our sales organization; litigation or other claims against us for intellectual property infringement or otherwise; our ability to obtain additional financing as necessary; and changes or trends in new technologies and industry standards. Because of these fluctuations, it is likely that in some future quarters our operating results will fall below the expectations of securities analysts or investors.

Our operations involve the use of hazardous materials, and we must comply with environmental, health and safety laws, which can be expensive and may adversely affect our business, operating results and financial condition.

Our research and development and manufacturing activities involve the use of hazardous materials, including chemicals and biological materials. Our sequencing reagents such as tris (2-carboxyethyl) phosphine and acetonitrile include hazardous materials. Accordingly, we are subject to federal, state, local and foreign laws, regulations and permits relating to environmental, health and safety matters, including, among others, those governing the use, storage, handling, exposure to and disposal of hazardous materials and wastes, the health and safety of our employees, and the shipment, labeling, collection, recycling, treatment and disposal of products containing hazardous materials. Liability under environmental laws and regulations can be joint and several and without regard to fault or negligence. For example, under certain circumstances and under certain environmental laws, we could be held liable for costs relating to contamination at our or our predecessors' past or present facilities and at third-party waste disposal sites. We could also be held liable for damages arising out of human exposure to hazardous materials. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes. The failure to comply with past, present or future laws could result in the imposition of substantial fines and penalties, remediation costs, property damage and personal injury claims, investigations, the suspension of production or product sales, loss of permits or a cessation of operations. Any of these events could harm our business, operating results and financial condition. We also expect that our operations will be affected by new environmental, health and safety laws and regulations on an ongoing basis, or more stringent enforcement of existing laws and regulations. New laws or changes to existing laws may result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how we manufacture them, which could have a material adverse effect on our business, operating results and financial condition.

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

Our products may be used to provide genetic information about humans and other living organisms. The information obtained from our products could be used in a variety of applications which may have underlying ethical, legal, privacy and social concerns, including the genetic engineering or modification of agricultural products or testing for genetic predisposition for certain medical conditions. Governmental authorities could, for safety, social or other purposes, call for limits on or regulation of the use of genetic testing. Such concerns or governmental restrictions could limit the use of our products, which could have a material adverse effect on our business, financial condition and results of operations.

Disruption of critical information technology systems or material breaches in the security of our systems could harm our business, customer relations and financial condition.

Information technology ("IT") helps us to operate efficiently, interface with customers, maintain financial accuracy and efficiently and accurately produce our financial statements. IT systems are used extensively in virtually all aspects of our business, including sales forecast, order fulfillment and billing, customer service, logistics, and management of data from running samples on our products. Our success depends, in part, on the continued and uninterrupted performance of our IT systems. IT systems may be vulnerable to damage from a variety of sources, including telecommunications or network failures, power loss, natural disasters, human acts, computer viruses, computer denial-of-service attacks, unauthorized access to customer or employee data or company trade secrets, and other attempts to harm our systems. Certain of our systems are not redundant, and our disaster recovery planning is not sufficient for every eventuality. Despite any precautions we may take, such problems could result in, among other consequences, disruption of our operations, which could harm our reputation and financial results.

If we do not allocate and effectively manage the resources necessary to build and sustain the proper IT infrastructure, we could be subject to transaction errors, processing inefficiencies, loss of customers, business disruptions or loss of or damage to intellectual property through security breach. If our data management systems do not effectively collect, store, process and report relevant data for the operation of our business, whether due to equipment malfunction or constraints, software deficiencies or human error,

our ability to effectively plan, forecast and execute our business plan and comply with applicable laws and regulations will be impaired, perhaps materially. Any such impairment could materially and adversely affect our reputation, financial condition, results of operations, cash flows and the timeliness with which we report our internal and external operating results.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of our customers, suppliers and business partners, and personally identifiable information of our employees, on our networks. The secure processing, maintenance and transmission of this information is critical to our operations. Despite our security measures, our IT infrastructure may be vulnerable to attacks by hackers, computer viruses, malicious codes, unauthorized access attempts, and cyber- or phishing-attacks, or breached due to employee error, malfeasance, faulty password management or other disruptions. Third parties may attempt to fraudulently induce employees or other persons into disclosing user names, passwords or other sensitive information, which may in turn be used to access our IT systems, commit identity theft or carry out other unauthorized or illegal activities. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disruption of our operations and damage to our reputation, which could divert our management's attention from the operation of our business and materially and adversely affect our business, revenues and competitive position. Moreover, we may need to increase our efforts to train our personnel to detect and defend against cyber- or phishing-attacks, which are becoming more sophisticated and frequent, and we may need to implement additional protective measures to reduce the risk of potential security breaches, which could cause us to incur significant additional expenses.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations. We can face serious consequences for violations.

Among other matters, U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations, which are collectively referred to as Trade Laws, prohibit companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We also expect our non-U.S. activities to increase in time. We plan to engage third parties for collaborations, sales and distribution of sequencing products and we can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

Risks Related to Our Intellectual Property

Failure to secure patent or other intellectual property protection for our products and improvements to our products may reduce our ability to maintain any technological or competitive advantage over our current and potential competitors.

Our ability to protect and enforce our intellectual property rights is uncertain and depends on complex legal and factual questions. Our ability to establish or maintain a technological or competitive advantage over our competitors may be diminished because of these uncertainties. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications or issued patents;
- we or our licensors might not have been the first to file patent applications for these inventions;

- the scope of the patent protection we or our licensors obtain may not be sufficiently broad to prevent others from practicing our technologies, developing competing products, designing around our patented technologies or independently developing similar or alternative technologies;
- our and our licensors' patent applications or patents have been, are and may in the future be, subject to interference, opposition or similar administrative proceedings, which could result in those patent applications failing to issue as patents, those patents being held invalid or the scope of those patents being substantially reduced;
- the current assignee of our intellectual property may elect to forego paying maintenance fees, placing us at risk to lose the licensed IP, or the assignee may neglect to enforce the intellectual property we license from them;
- we or our partners may not adequately protect our trade secrets;
- we may not develop additional proprietary technologies that are patentable; or
- the patents of others may limit our freedom to operate and prevent us from commercializing our technology in accordance with our plans.

The occurrence of any of these events could impair our ability to operate without infringing upon the proprietary rights of others or prevent us from establishing or maintaining a competitive advantage over our competitors.

The intellectual property that is important to our business is owned by other companies or institutions and licensed to us, and changes to the rights we have licensed may adversely impact our business.

We license the intellectual property that is important to our business from Fluidigm Corporation ("Fluidigm") (which obtained this intellectual property portfolio from Helicos) pursuant to a non-exclusive licensing agreement. In addition, we sub-license intellectual property that is important to our business from Arizona Science and Technology Enterprises LLC pursuant to a non-exclusive sublicense. If we fail to comply with the terms of the licenses, the licensors could terminate these licenses. If these third parties who license intellectual property to us fail to maintain the intellectual property that we have licensed, or lose rights to that intellectual property, the rights we have licensed may be reduced or eliminated, which could subject us to claims of intellectual property infringement. Termination of these licenses or reduction or elimination of our licensed rights may result in our having to negotiate new or reinstated licenses with less favorable terms, or could subject us to claims of intellectual property infringement in litigation or other administrative proceedings that could result in damage awards against us and injunctions that could prohibit us from selling our products. In addition, these two license agreements are non-exclusive and the licensors may license the technology to our competitors, which may result in significant competition for us.

In addition, we have limited rights to participate in the prosecution and enforcement of the patents and patent applications that we have licensed. As a result, we cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of our business. Further, because of the rapid pace of technological change in our industry, we may need to rely on key technologies developed or licensed by third parties, and we may not be able to obtain licenses and technologies from these third parties at all or on reasonable terms. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

A license agreement for intellectual property that is important to our business may be terminated in the event that Daniel Jones, our Chief Executive Officer, fails to continue to work full time for us.

As discussed above, we license certain intellectual property that is important to our business from Fluidigm (which obtained this intellectual property portfolio from Helicos) pursuant to a non-exclusive licensing agreement. The license agreement provides that Fluidigm has a right to terminate the license in the event Daniel Jones, our Chief Executive Officer, fails to continue to work full time for us for any reason, including his resignation, termination, death or otherwise. If we lose our rights to such intellectual property, the rights we have licensed may be reduced or eliminated, which could subject us to claims of intellectual

property infringement, require us to cease selling certain or all of our products, negotiate less favorable agreements or otherwise result in a loss of business. In addition, such language could prevent us from terminating Mr. Jones from his position when it would otherwise be favorable for stockholders or our business in general.

Our licensed intellectual property and future intellectual property will have limited window of enforcement.

In addition, our licensed intellectual property and future intellectual property will have limited window of enforcement. Substantially all of our licensed IP are expected to expire from 2021 – 2028, excluding any extension or adjustment of patent term that may be available. This gives us a limited window of opportunity to market and expand our proprietary technology and services. We may face development of similar technology from our competitors after the expiration of our IP portfolio which will impede our revenue and growth.

We may not be able to protect intellectual property and proprietary rights worldwide.

The majority of our intellectual property is licensed from third parties through non-exclusive license agreements. Although our company has accumulated trade secrets and know-hows to make the technology work effectively and reliably over the last decade, the other entities may attempt to commercialize this technology by gaining access to the intellectual property. As a result, we may encounter additional competition from third parties, and may require significant amount of time and resources to protect intellectual property and proprietary rights.

Filing, prosecuting, and defending patents on our product and other technologies in all countries throughout the world would be cost prohibitive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. Proceedings to enforce our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put 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, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property and proprietary rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Intellectual property laws, and patent laws and regulations in particular, have been subject to significant variability either through administrative or legislative changes to such laws or regulations or changes or differences in judicial interpretation, and it is expected that such variability will continue to occur. Additionally, intellectual property laws and regulations differ by country. Variations in the patent laws and regulations or in interpretations of patent laws and regulations in the United States and other countries may diminish the value of our intellectual property and may change the impact of third-party intellectual property on us. Accordingly, we cannot predict the scope of the patents that may be granted to us with certainty, the extent to which we will be able to enforce our patents against third parties or the extent to which third parties may be able to enforce their patents against us.

If the scope of any patent protection we obtain is not sufficiently broad, or if we lose any of our patent protection, our ability to prevent our competitors from commercializing similar or identical sequencing technology and applications would be adversely affected.

The patent position of biotechnology companies generally is highly uncertain, involves complex legal and factual questions, and has been the subject of much litigation in recent years. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our owned or in-licensed pending and future patent applications may not result in patents being issued which protect our tSMS platform, or other technologies or which effectively prevent others from commercializing competitive technologies and applications.

Our ability to stop third parties from making, using, selling, offering to sell, or importing products that infringe our intellectual property will depend in part on our success in obtaining and enforcing patent claims that cover our technology, inventions and improvements. With respect to both licensed and company-owned intellectual property, we cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our products and the methods used to manufacture those products. Moreover, even our issued patents do not guarantee us the right to practice our technology in relation to the commercialization of our products. The area of patent and other intellectual property rights in biotechnology is an evolving one with many risks and uncertainties, and third parties may have blocking patents that could be used to prevent us from commercializing our sequencing instruments and practicing our proprietary technology. Our issued patent and those that may be issued in the future may be challenged, invalidated, or circumvented, which could limit our ability to stop competitors from marketing related products or limit the length of the term of patent protection that we may have for our technology. In addition, the rights granted under any issued patents may not provide us with protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies. For these reasons, we may have competition for our products. Moreover, because of the extensive time required for development and testing of new sequencing instruments, it is possible that, before any particular product can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent.

Moreover, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications we own or license issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, or otherwise provide us with any competitive advantage. Any patents that we own or in-license may be challenged, narrowed, circumvented, or invalidated by third parties. Consequently, we do not know whether our tSMS platform or other technologies will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner which could materially adversely affect our business, financial condition, results of operations and prospects.

The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and patents that we own or license may be challenged in the courts or patent offices in the United States and abroad. We or our licensors may be subject to a third-party reissuance submission of prior art to the USPTO or to foreign patent authorities or become involved in opposition, derivation, revocation, reexamination, post-grant and *inter partes* review, or interference proceedings or other similar proceedings challenging our owned or licensed patent rights. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate or render unenforceable, our owned or in-licensed patent rights, allow third parties to commercialize our tSMS platform technologies or other technologies and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. Moreover, we, or one of our licensors, may have to participate in interference proceedings declared by the USPTO to determine priority of invention or in post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge our or our licensor's priority of invention or other features of patentability with respect to our owned or in-licensed patents and patent applications. Such challenges may result in loss of patent rights,

loss of exclusivity, or in patent claims being narrowed, invalidated, or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our tSMS Platform and other technologies. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us.

We may in the future co-own patent rights relating to future sequencing instruments, reagents, applications, or our tSMS platform with third parties. Some of our in-licensed patent rights are, and may in the future be, co-owned with third parties. In addition, our licensors may co-own the patent rights we in-license with other third parties with whom we do not have a direct relationship.

We could in the future be subject to legal proceedings with third parties who may claim that our products infringe or misappropriate their intellectual property rights.

Our products are based on complex, rapidly developing technologies. We may not be aware of issued or previously filed patent applications that belong to third parties that mature into issued patents that cover some aspect of our products or their use. In addition, because patent litigation is complex and the outcome inherently uncertain, our belief that our products do not infringe third-party patents of which we are aware or that such third-party patents are invalid and unenforceable may be determined to be incorrect. As a result, third parties have claimed, and may in the future claim, that we infringe their patent rights and have filed, and may in the future file, lawsuits or engage in other proceedings against us to enforce their patent rights. In addition, as we enter new markets, our competitors and other third parties may claim that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which effectively could block our ability to develop further, commercialize, or sell products or services, and could result in the award of substantial damages against us. Patent litigation between competitors in our industry is common. In defending ourselves against any of these claims, we could in the future incur, substantial costs, and the attention of our management and technical personnel could be diverted. We may be unable to modify our products so that they do not infringe the intellectual property rights of third parties. In some situations, the results of litigation or settlement of claims may require us to cease allegedly infringing activities which could prevent us from selling some or all of our products. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

In addition, in the course of our business, we may from time to time have access or be alleged to have access to confidential or proprietary information of others, which, though not patented, may be protected as trade secrets. Others could bring claims against us asserting that we improperly used their confidential or proprietary information, or that we misappropriated their technologies and incorporated those technologies into our products. A determination that we illegally used the confidential or proprietary information or misappropriated technologies of others in our products could result in us paying substantial damage awards or being prevented from selling some or all of our products, which could materially and adversely affect our business.

We have not yet registered some of our trademarks in all of our potential markets, and failure to secure those registrations could adversely affect our business.

Some of our trademark applications may not be allowed for registration, and our registered trademarks may not be maintained or enforced. In addition, in the U.S. Patent and Trademark Office and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings.

Risks Related to our Collaborations with Third Parties

Our future collaborations may be important to our business. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected

We have limited capabilities for technology development, sales, marketing or distribution. Accordingly, we may enter into collaborations with academic and commercial entities to provide us with important

technologies and funding for our programs and technology, and we may receive additional technologies and funding under these and other collaborations in the future. Any future collaborations we enter into, may pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any platform or may elect not to continue or renew development or commercialization programs or license arrangements based on changes in the collaborators' strategic focus or available funding, or external factors, such as a strategic transaction that may divert resources or create competing priorities;
- collaborators may provide insufficient funding for the research program;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our sequencing instruments and applications if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- biomarkers discovered in collaboration with us may be viewed by our collaborators as competitive with their own products, which may cause collaborators to cease to devote resources to the commercialization of our product;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or terminations of the research, development or commercialization of new platforms, might lead to additional responsibilities for us with respect to technology development, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators 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 intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- if a collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization of any product licensed to it by us; and
- collaborations may be terminated by the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable sequencing technology. If our potential future collaborations do not result in the successful discovery, development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone potential payments under the collaboration. If we do not receive the funding we expect under these agreements, our development of our technology and applications could be delayed and we may need additional resources to develop products and our technology. All of the risks relating to product development, regulatory approval and commercialization described in this prospectus also apply to the activities of our therapeutic collaborators.

Additionally, if one of our potential future collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be adversely affected.

Risks Related to this Offering and Ownership of Our Common Stock

The market price of our common stock may be highly volatile, and you could lose all or part of your investment.

Prior to this offering, there was no public market for shares of our common stock. The offering price for the shares of our common stock sold in this offering will be determined by negotiation between the underwriters and us. This price may not reflect the market price of our common stock following this offering. As a result, the trading price of our common stock is likely to be volatile, which may prevent you from being able to sell your shares at or above the public offering price. Our stock price could be subject to wide fluctuations in response to a variety of factors, which include:

- actual or anticipated fluctuations in our financial condition and operating results;
- announcements of technological innovations by us or our competitors;
- announcements by our customers, partners or suppliers relating directly or indirectly to our products, services or technologies;
- overall conditions in our industry and market;
- addition or loss of significant customers;
- changes in laws or regulations applicable to our products;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, capital commitments or achievement of significant milestones;
- additions or departures of key personnel;
- competition from existing products or new products that may emerge;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- disputes or other developments related to proprietary rights, including patents, litigation matters or our ability to obtain intellectual property protection for our technologies;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us or our stockholders;
- stock price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- reports, guidance and ratings issued by securities or industry analysts; and
- general economic and market conditions.

If any of the forgoing occurs, it would cause our stock price or trading volume to decline. Stock markets in general and the market for companies in our industry in particular have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. You may not realize any return on your investment in us and may lose some or all of your investment.

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

The market price of our securities may be volatile, and in the past companies that have experienced volatility in the market price of their securities 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.

We have broad discretion in the use of the net proceeds from this offering and may invest or spend the proceeds in ways with which you disagree or that may not yield a return.

While we set forth our anticipated use for the net proceeds from this offering in the section titled “Use of Proceeds,” our management will have broad discretion on how to use and spend any proceeds that we receive from this offering and may use the proceeds in ways that differ from the anticipated uses set forth in this prospectus. Investors in this offering will need to rely upon the judgment of our management with respect to the use of proceeds with only limited information concerning management’s specific intentions. It is possible that we may decide in the future not to use the proceeds of this offering in the manner described in this offering. Our management may spend a portion or all of the net proceeds from this offering in ways that holders of our common stock may not desire or that may not yield a significant return or any return at all. Investors will receive no notice or vote regarding any such change and may not agree with our decision on how to use such proceeds. If we fail to utilize the proceeds we receive from this offering effectively, our business and financial condition could be harmed and we may need to seek additional financing sooner than expected. Pending their use, we may also invest the net proceeds from this offering in a manner that does not produce income or that loses value.

There is no existing market for our common stock and we do not know if one will develop to provide you with adequate liquidity.

Prior to this offering, there has not been a public market for our common stock. Although we have applied to have our common stock listed on the Nasdaq, an active trading market for our common stock may never develop or be sustained following this offering. You may not be able to sell your shares quickly or at the market price if trading in our common stock is not active. The initial public offering price for the shares will be determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the trading market. You may not be able to sell your shares of our common stock at or above the price you paid in the offering. As a result, you could lose all or part of your investment. Further, an inactive market may also impair our ability to raise capital by selling shares of our common stock and may impair our ability to enter into strategic partnerships or acquire companies or products by using our shares of common stock as consideration.

Concentration of ownership by our principal stockholders may result in control by such stockholders of the composition of our board of directors.

Our existing significant stockholders, executive officers, directors and their affiliates beneficially own a significant number of our outstanding shares of common stock. As a result, these stockholders will be able to exercise a significant level of control over all matters requiring stockholder approval, including the election of directors. This control could have the effect of delaying or preventing a change of control of our company or changes in management and will make the approval of certain transactions difficult or impossible without the support of these stockholders.

Our failure to meet the continued listing requirements of Nasdaq could result in de-listing of our common stock.

If, after listing, we fail to satisfy the continued listing requirements of Nasdaq, such as the corporate governance requirements or the minimum closing bid price requirement, Nasdaq may take steps to de-list our common stock. Such a de-listing would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a de-listing, we would take actions to restore our compliance with Nasdaq Marketplace Rules, but our common stock may not be listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with the Nasdaq Marketplace Rules.

If our shares become subject to the penny stock rules, it would become more difficult to trade our shares.

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00, other than securities registered on certain national securities exchanges or authorized for quotation on certain

automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. If we do not obtain or retain a listing on Nasdaq and if the price of our common stock is less than \$5.00, our common stock will be deemed a penny stock. The penny stock rules require a broker-dealer, before a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that before effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore stockholders may have difficulty selling their shares.

Future sales of shares by existing stockholders could cause our stock price to decline.

If our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock in the public market after the 180-day contractual lock-up and other legal restrictions on resale discussed in this prospectus lapse, the trading price of our common stock could decline significantly and could decline below the initial public offering price. After giving effect to this offering and based on 8,403,775 shares outstanding immediately prior to the offering, we will have outstanding 9,753,775 shares of common stock, assuming no exercise of outstanding options and warrants. Of these shares, 1,350,000 shares of common stock, plus any shares sold pursuant to the underwriters' option to purchase additional shares, will be immediately freely tradable, without restriction, in the public market. If our existing stockholders sell substantial amounts of our common stock in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our common stock, even if there is no relationship between such sales and the performance of our business. We also intend to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus.

After the lock-up agreements pertaining to this offering expire and based on shares outstanding after this offering, additional shares will be eligible for sale in the public market. In addition, upon issuance, the 916,208 shares subject to outstanding options under our 2014 Plan and the shares reserved for future issuance under our 2014 Plan will become eligible for sale in the public market in the future, subject to certain legal and contractual limitations. If our existing stockholders sell substantial amounts of our common stock in the public market, or if the public perceives that such sales could occur, this could have an adverse impact on the market price of our common stock, even if there is no relationship between such sales and the performance of our business.

If you purchase shares of common stock in this offering, you will suffer immediate dilution of your investment.

The public offering price of our common stock will be substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Based on an assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$5.19 per share, representing the difference between our pro forma net tangible book value per share, after giving effect to this offering, and the assumed initial public offering price. In addition, purchasers of common stock in this offering will have contributed approximately 51.4% of the aggregate price paid by all purchasers of our stock but will own only approximately 14% of our common stock outstanding after this offering.

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

We are an "emerging growth company," as defined in the JOBS Act. We may remain an emerging growth company until as late as December 2023 (the fiscal year-end following the fifth anniversary of the completion of our initial public offering), though we may cease to be an emerging growth company earlier.

under certain circumstances, including (1) if the market value of our common stock that is held by nonaffiliates exceeds \$700 million as of any June 30, in which case we would cease to be an emerging growth company as of the following December 31, or (2) if our gross revenue exceeds \$1.07 billion in any fiscal year. Emerging growth companies may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements 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. Investors could find our common stock less attractive because we may 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, Section 102 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably 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.

We will incur significant costs as a result of operating as a public company and our management expects to devote substantial time to public company compliance programs.

As a public company, we will incur significant legal, accounting and other expenses due to our compliance with regulations and disclosure obligations applicable to us, including compliance with the Sarbanes-Oxley Act, as well as rules implemented by the SEC and Nasdaq. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact, in ways we cannot currently anticipate, the manner in which we operate our business. Our management and other personnel will devote a substantial amount of time to these compliance programs and monitoring of public company reporting obligations and as a result of the new corporate governance and executive compensation related rules, regulations and guidelines prompted by the Dodd-Frank Act and further regulations and disclosure obligations expected in the future, we will likely need to devote additional time and costs to comply with such compliance programs and rules. These rules and regulations will cause us to incur significant legal and financial compliance costs and will make some activities more time-consuming and costlier.

To comply with the requirements of being a public company, we may need to undertake various actions, including implementing new internal controls and procedures and hiring new accounting or internal audit staff. The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that information required to be disclosed in reports under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is accumulated and communicated to our principal executive and financial officers. Our current controls and any new controls that we develop may become inadequate and weaknesses in our internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls when we become subject to this requirement could negatively impact the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we may be required to include in our periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act, harm our operating results, cause us to fail to meet our reporting obligations or result in a restatement of our prior period financial statements. In the event that we are not able to demonstrate compliance with the Sarbanes-Oxley Act, that our internal

control over financial reporting is perceived as inadequate or that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and the price of our common stock could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on Nasdaq.

Our management team has limited experience managing a public company.

Most members of our management team have limited experience managing a publicly-traded company, interacting with public company investors and complying with the increasingly complex laws pertaining to public companies. Our management team may not successfully or efficiently manage our transition to being a public company subject to significant regulatory oversight and reporting obligations under the federal securities laws and the continuous scrutiny of securities analysts and investors. These new obligations and constituents will require significant attention from our senior management and could divert their attention away from the day-to-day management of our business, which could adversely affect our business, financial condition and operating results.

Because we have elected to use the extended transition period for complying with new or revised accounting standards for an emerging growth company our financial statements may not be comparable to companies that comply with public company effective dates.

We have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(1) of the JOBS Act. This election allows us to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates, and thus investors may have difficulty evaluating or comparing our business, performance or prospects in comparison to other public companies, which may have a negative impact on the value and liquidity of our common stock.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on us. If no securities or industry analysts commence coverage of us, the price for our common stock could be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, our stock price could decline. In addition, if our operating results fail to meet the forecast of analysts, our stock price could decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our stock price and trading volume to decline.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws, as amended and restated, may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and bylaws include provisions that:

- provide for a staggered board of directors;
- authorize our board of directors to issue, without further action by the stockholders, up to 20,000,000 shares of undesignated preferred stock and up to approximately 80,000,000 shares of authorized but unissued shares of common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the Board, the Chief Executive Officer or the President;

- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that our directors may be removed only for cause; and
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

Our Amended and Restated Certificate of Incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for certain litigation that may be initiated by our stockholders.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory law or Delaware common law: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us arising pursuant to provisions of the Delaware General Corporation Law or our amended and restated certificate of incorporation or amended and restated bylaws; or (4) any action asserting a claim governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents. Stockholders who do bring a claim in the Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near the State of Delaware. The Court of Chancery may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition. By agreeing to the exclusive forum provisions, investors will not be deemed to have waived our compliance obligations with any federal securities laws or the rules and regulations thereunder.

We do not anticipate paying any cash dividends on our common stock in the foreseeable future and, as such, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

We have never declared or paid cash dividends on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. In addition, and any future loan arrangements we enter into may contain, terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections titled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words “may,” “might,” “will,” “could,” “would,” “should,” “expect,” “intend,” “plan,” “objective,” “anticipate,” “believe,” “estimate,” “predict,” “project,” “potential,” “continue” and “ongoing,” or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these words. These statements relate to future events or our future financial performance or condition and involve known and unknown risks, uncertainties and other factors that could cause our actual results, levels of activity, performance or achievement to differ materially from those expressed or implied by these forward-looking statements. These forward-looking statements include, but are not limited to, statements about:

- the success, cost and timing of our product development activities, including statements regarding the timing of initiation and completion of our research and development programs;
- developments regarding next generation sequencing technologies;
- our expectations regarding the market size and growth potential for our business;
- the implementation of our strategic plans, including strategy for our business and related financing;
- our ability to maintain and establish future collaborations and strategic relationships;
- the rate and degree of market acceptance of our products;
- our ability to generate sustained revenue or achieve profitability;
- the potential for our identified research priorities to advance our technology;
- the pricing and expected gross margin for our products;
- our commercialization, marketing and manufacturing capability and strategy;
- our expectations related to the use of proceeds from this offering;
- our research and development plans including, among other things, statements relating to future uses, quality or performance of, or benefits of using, products or technologies;
- updates or improvements of our products;
- intentions regarding seeking regulatory approval for our products;
- our competitive position;
- our estimates of our expenses, ongoing losses, future revenue, capital requirements and our needs for, or ability to obtain, additional financing as necessary; and
- our ability to maintain our intellectual property position for our technology.

You should read this prospectus, including the section titled “Risk Factors,” and the documents that we reference elsewhere in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual results may differ materially from what we expect as expressed or implied by our forward-looking statements. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all.

These forward-looking statements represent our estimates and assumptions only as of the date of this prospectus regardless of the time of delivery of this prospectus or any sale of our common stock. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this prospectus. All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$6.4 million from the sale of the shares of common stock offered in this offering, or approximately \$7.5 million if the underwriters exercise their option to purchase additional shares in full, based on an assumed initial public offering price of \$5.90 per share, the midpoint of the estimated 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 (decrease) in the assumed initial public offering price of \$5.90 per share, the midpoint of the estimated price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by approximately \$1.2 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 100,000 in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, by approximately \$536,900, assuming the initial public offering price stays the same.

We currently expect to use the net proceeds from this offering as follows: (1) approximately \$1.0 million to expand our commercial operations to grow sequencing services; (2) approximately \$500,000 to build additional sequencing instruments to support sequencing services expansion; (3) approximately \$500,000 to build consumables and lab resources to support sequencing services expansion; (4) approximately \$1.0 million to improve and update our tSMS technology and instruments to develop additional applications; (5) approximately \$1.0 million to support and expand our marketing and business development efforts in the United States and internationally; (6) the repayment of the promissory notes totaling \$270,000 plus outstanding accrued interest; and (7) the balance for working capital and other general corporate purposes.

Although we currently anticipate that we will use the net proceeds from this offering as described above, there may be circumstances where a reallocation of funds is necessary. If we are required to borrow funds for operations prior to closing this offering, then a portion of net proceeds will be used to repay such borrowed funds. Due to the uncertainties inherent in the technology development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. The amounts and timing of our actual expenditures will depend upon numerous factors, including our sales and marketing and commercialization efforts, demand for our technology, our operating costs and the other factors described under "Risk factors" in this prospectus. Accordingly, our management will have flexibility in applying the net proceeds from this offering. An investor will not have the opportunity to evaluate the economic, financial or other information on which we base our decisions on how to use the proceeds.

DIVIDEND POLICY

We do not anticipate paying cash dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects, the requirements of current or then-existing debt instruments and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2019:

- on an actual basis;
- on a pro forma basis to reflect (1) the conversion of all outstanding shares of our preferred stock into 3,130,622 shares of our common stock, and the conversion of our outstanding notes and promissory note into an aggregate of 408,291 shares of our common stock immediately prior to the closing of this offering, (2) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the closing of this offering, as if such conversion had occurred on March 31, 2019; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of 1,350,000 shares of common stock in this offering at an assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only and our capitalization following the completion of this offering is subject to adjustment based on the initial public offering price of our common stock and other terms of this offering determined at pricing. You should read the following table in conjunction with “Use of Proceeds,” “Selected Financial Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Description of Capital Stock” and other financial information contained in this prospectus, including the financial statements and related notes appearing elsewhere in this prospectus.

	As of March 31, 2019		
	Actual	Pro Forma	Pro Forma As Adjusted ⁽¹⁾
Cash and cash equivalents	\$ 52,176	\$ 52,176	\$ 7,300,326
Total liabilities	\$ 2,152,346	\$ 986,636	\$ 1,860,838
Preferred stock, \$0.00001 par value; 8,779,762 shares authorized at March 31, 2019 and December 31, 2018; 5,791,665 shares issued and outstanding at March 31, 2019 and December 31, 2018	\$ 58	—	—
Common stock, \$0.00001 par value; 20,299,261 shares authorized at March 31, 2019 and December 31, 2018; 4,864,862 shares issued and outstanding at March 31, 2019 and December 31, 2018	\$ 49	\$ 84	\$ 98
Additional paid-in capital	\$ 6,810,688	\$ 7,855,374	\$15,224,523
Accumulated deficit	\$(7,855,374)	\$(7,855,374)	\$(8,729,576)
Total stockholders’ equity (deficit)	\$(1,044,579)	\$ 121,097	\$ 6,495,045

- (1) A \$1.00 increase or decrease in the assumed initial public offering price of \$5.90 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 cash, additional paid-in capital, total stockholders’ (deficit) equity and total capitalization by approximately \$1.2 million, assuming the number of shares offered by us, as stated on the cover page of this prospectus, remains unchanged and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase or decrease of one hundred thousand in the number of shares we are offering would increase or decrease, as applicable, each of cash, additional paid-in capital, total stockholders’ (deficit) equity and total capitalization by \$1.2 million, assuming the assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our common stock to be outstanding after this offering is based on 4,864,862 shares of common stock outstanding as of May 15, 2019, the conversion of all outstanding shares of our preferred stock consented to by a majority of holders of our Series A preferred stock, into an aggregate of 3,130,622 shares of our common stock, and the conversion of our outstanding convertible notes and promissory note consented to by the holder of such notes, into an aggregate of 408,291 shares of our common stock, which conversions will occur immediately prior to the closing of this offering and excludes as of such date:

- 596,396 shares of our common stock issuable upon the exercise of warrants, at a weighted average exercise price of \$2.32 per share;
- 67,500 shares of our common stock that may be issued upon exercise of the Underwriters' Warrants at an exercise price of \$7.38, which represents 5% of the shares of common stock being offered hereby and 125% of an assumed public offering price of \$5.90, which is the midpoint of the initial public offering price range reflected on the cover of this prospectus;
- 889,181 shares of our common stock issuable upon the exercise of outstanding stock options under our 2014 Equity Incentive Plan, or the 2014 Plan; and
- 191,900 shares of our common stock reserved for future issuance under the 2014 Plan.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value (deficit) is the amount of our total assets less our liabilities. Our historical net tangible book value (deficit) per share is our historical net tangible book value (deficit) divided by the number of shares of common stock outstanding as of March 31, 2019. Our historical net tangible book value (deficit) as of March 31, 2019, was approximately \$(1,044,579), or \$(0.21) per share of common stock. Our pro forma net tangible book value (deficit) as of March 31, 2019 was \$121,131 or \$0.01 per share of common stock, after giving effect to the conversion of all outstanding shares of our preferred stock into an aggregate of 3,130,622 shares of our common stock, and the conversion of our outstanding convertible notes and promissory notes (excluding the promissory notes totaling \$270,000) into an aggregate of 408,291 shares of our common stock immediately prior to the closing of this offering.

Pro forma as adjusted net tangible book value (deficit) is our pro forma net tangible book value, after giving further effect to the sale of 1,350,000 shares of our common stock in this offering at an assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The following table illustrates this dilution on a per share basis to new investors:

Assumed initial public offering price per share	\$5.90
Historical net tangible book value (deficit) per share as of March 31, 2019	\$(0.21)
Increase in pro forma net tangible book value (deficit) attributable to conversion of our preferred stock and notes	<u>0.14</u>
Pro forma net tangible book value (deficit) per share as of March 31, 2019, before giving effect to this offering	(0.07)
Increase in pro forma net tangible book value (deficit) per share attributable to new investors participating in this offering	<u>0.75</u>
Pro forma as adjusted net tangible book value (deficit) per share after this offering	<u>0.68</u>
Dilution in pro forma net tangible book value (deficit) per share to new investors participating in this offering	5.22

A \$1.00 increase or decrease in the assumed initial public offering price of \$5.90 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 (deficit) per share after this offering by approximately \$0.12 per share and decrease or increase, as appropriate, the dilution in pro forma net tangible book value (deficit) per share to investors participating in this offering by approximately \$0.88 per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Similarly, a one hundred thousand share increase or decrease in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase or decrease, as appropriate, the pro forma as adjusted net tangible book value (deficit) after this offering by approximately \$531,000 and decrease or increase, as appropriate, the dilution in pro forma net tangible book value (deficit) per share to investors participating in this offering by approximately \$0.10, assuming the assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma information discussed above is illustrative only and will change based on the actual initial public offering price, number of shares and other terms of this offering determined at pricing.

If the underwriters exercise in full their option to purchase 202,500 additional shares of our common stock in this offering, the pro forma as adjusted net tangible book value will increase to \$0.99 per share, representing an immediate increase in pro forma net tangible book value to existing stockholders of \$0.77 per share and a decrease in immediate dilution of \$5.13 per share to new investors participating in this offering.

The following table sets forth, as of the date of this prospectus, on the pro forma as adjusted basis described above, the differences between our existing stockholders and the purchasers of shares of common stock in this offering with respect to the number of shares of common stock purchased from us, the total consideration paid to us and the weighted average price paid per share paid to us, based on an assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Weighted Average Price per Share
	Number	Percent	Amount	Percent	
Existing stockholders	8,403,775	86.16%	\$ 7,525,688	48.6%	\$0.90
New investors	1,350,000	13.84%	\$ 7,965,000	51.4%	\$5.90
Total	9,753,775	100%	\$15,490,688	100%	\$1.59

If the underwriters exercise in full their option to purchase additional shares of our common stock in this offering, the number of shares held by existing stockholders will be reduced to 84.40% of the total number of shares of common stock that will be outstanding upon completion of this offering, and the number of shares of common stock held by new investors participating in this offering will be further increased to 15.60% of the total number of shares of common stock that will be outstanding upon completion of the offering, before any sales by any Selling Stockholders of any of the shares of common stock registered concurrently with this offering.

To the extent that any outstanding options or warrants are exercised, new options are issued under our 2014 Plan or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. If all outstanding options and warrants as of May 15, 2019, other than the option held by the underwriters, were exercised, then our existing stockholders, including holders of such options and warrants, would own 88.02% and our new investors would own 11.98% of the total number of shares of our common stock outstanding upon the completion of this offering. In such event, the total consideration paid by our existing stockholders, including the holders of such options and warrants, would be approximately \$9,166,729, or 53.5%, the total consideration paid by our new investors would be \$7,965,000, or 46.5% of the total consideration for our common stock outstanding upon the completion of this offering, and, the average price per share paid by our existing stockholders would be \$0.92 and the average price per share paid by our new investors would be \$5.90.

A \$1.00 increase or decrease in the assumed initial public offering price of \$5.90 per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase or decrease, as appropriate, the total consideration paid by new investors by \$1.2 million, assuming the number of shares we are offering, as set forth on the cover page of this prospectus, remains the same, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Similarly, each increase or decrease of one hundred thousand shares in the number of shares offered by us would increase or decrease, as appropriate, the total consideration paid by new investors by \$536,900, assuming that the assumed initial price to the public remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We may choose to raise additional capital through the sale of equity or equity-linked securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that any options are issued under our equity incentive plan or we issue additional shares of common stock or equity-linked securities in the future, there will be further dilution to investors purchasing in this offering.

The number of shares of our common stock to be outstanding after this offering is based on 4,864,862 shares of common stock outstanding as of May 15, 2019 and 3,130,622 shares of our common stock issuable upon the conversion of our preferred stock and the conversion of our outstanding convertible notes and promissory note into an aggregate of 408,291 shares of our common stock and excludes as of such date:

- 596,396 shares of our common stock issuable upon the exercise of warrants, at a weighted average exercise price of \$2.32 per share;
- 67,500 shares of our common stock that may be issued upon exercise of the Underwriters' Warrants at an exercise price of \$7.38, which represents 5% of the shares of common stock being offered hereby and 125% of an assumed public offering price of \$5.90, which is the midpoint of the initial public offering price range reflected on the cover of this prospectus;
- 889,181 shares of our common stock issuable upon the exercise of outstanding stock options under our 2014 Plan; and
- 191,900 shares of our common stock reserved for future issuance under the 2014 Plan.

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

You should read the following discussion of our financial condition and results of operations in conjunction with “Selected Financial Data” and our financial statements and related notes included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under “Risk Factors” and elsewhere in this prospectus. You should carefully read the “Risk Factors” section of this prospectus to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled “Cautionary Note Regarding Forward-Looking Statements and Industry and Market Data” in this prospectus.

Overview

We are a life sciences instrumentation and services company leveraging our team’s expertise with our unique True Single Molecule Sequencing (tSMS™) technology focused on contributing major advancements to scientific research by accelerating one’s understanding of the molecular mechanisms of disease and fundamental biological processes. We have developed and offer a proprietary sequencing technology platform in the multi-billion dollar NGS that has critical advantages over existing NGS technologies, particularly for emerging applications in the research and development of precision medicine and transcriptome analysis. Our single molecule technology is capable of analyzing billions of molecules in parallel, which positions us as both competitive and complementary with other NGS platforms. Our technology advantage is a simplified method of quantifying DNA and RNA molecules at single molecule resolution because our platform does not require the routine PCR amplification and library prep and ligation steps required by most NGS systems, thereby avoiding systematic amplification bias. Data produced by our tSMS platform generates highly accurate, reproducible molecular profiles, often providing researchers with new insights into the biology being researched like revealing previously unknown characteristics of molecular structures. . Armed with our robust technology platform, we have already assisted medical researchers uncover potentially significant implications in DNA and RNA-based discovery of bio-markers for the early detection of diseases, specifically for cardio vascular artery disease and epithelial cancer.

Since our incorporation in 2014, we have devoted substantially most of our efforts to business planning, research and development. The Company incurred net losses of \$663,983 and \$182,757 and had negative cash flow from operating activities of \$465,018 and \$245,014 for the three months ended March 31, 2019 and 2018, respectively, and had an accumulated deficit of \$7,855,374 as of March 31, 2019. These condition among others raise substantial doubts about the Company’s ability to continue as a going concern. The Company’s ability to continue to operate is dependent upon the success of this offering.

Recent Developments

During 2019, the Company has entered into a series of convertible promissory notes with St. Laurent Investments, amounting to \$545,000 and additional non-convertible notes amounting to \$225,000. These convertible and non-convertible promissory notes accrue interest at 10% per annum. The convertible promissory notes are convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing. In connection with these convertible promissory notes, the Company is obligated to issue warrants to purchase the number of common shares equal to 6% of the total amount of shares related to the conversion of these convertible promissory notes at the exercise price equal to the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing.

Going Concern and Management’s Plan

Our consolidated financial statements are prepared based on the assumption that we will continue as a going concern, which contemplates the realization of assets and liquidation of liabilities in the normal course of business. We face certain risks and uncertainties that are present in many emerging growth

companies regarding product development and commercialization, limited working capital, recurring losses and negative cash flow from operations, future profitability, ability to obtain future capital, protection of patents, technologies and property rights, competition, rapid technological change, navigating the domestic and major foreign markets' regulatory environment, recruiting and retaining key personnel, dependence on licensing agreements and lack of sales and marketing activities. These risks and other factors raises substantial doubt about our ability to continue as a going concern as of the date of the filing of this Registration Statement.

We have relied exclusively on private placements with a small group of accredited investors, primarily by William St. Laurent, our founder, to finance our business and operations. We do not have any credit facilities as a source of future funds. If we are not successful in securing additional outside financing, there are no assurances that Mr. St. Laurent will continue to fund us to an adequate level of financing needed for the long-term development and commercialization of our products.

We are looking at ways to add an additional revenue stream to offset some of our expenses. We are planning on raising additional funds in 2020 following the completion of this initial public offering. In addition, we are seeking alternative options to add additional cash. However, no assurance can be given that we will be successful in securing adequate funds that may be required. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our products, restrict our operations or obtain funds by entering into agreements on unattractive terms, which would likely have a material adverse effect on our business, stock price, and our relationships with third parties with whom we have business relationships, at least until additional funding is obtained.

Doubts exist about our ability to continue as a going concern as of the date of the filing of this Registration Statement. The accompanying consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of recorded assets, or the amounts and classification of liabilities that might be different should we be unable to continue as a going concern based on the outcome of these uncertainties described above. Our management and Board of Directors believe that the net proceeds from this offering, together with our cash generated from commercial sales and research activity, will enable us to fund our operations for several years.

Results of Operations

Overview

Since our incorporation in 2014, we have devoted substantially most of our efforts to business planning, research and development. The Company incurred net losses of \$663,983 and \$182,757 and had negative cash flow from operating activities of \$465,018 and \$245,014 for the three months ended March 31, 2019 and 2018, respectively, and had an accumulated deficit of \$7,855,374 as of March 31, 2019. These condition among others raise substantial doubts about the Company's ability to continue as a going concern. The Company's ability to continue to operate is dependent upon raising additional funds to finance its activities.

Results of Operations

Comparison of Three Months Ended March 31, 2019 and 2018

The following table represents selected items in our consolidated statements of operations for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,		Change
	2019	2018	
Revenue			
Sales	\$ 106,855	\$ 291,200	\$(184,345)
Other revenue	—	22,765	(22,765)
Total revenue	106,855	313,965	(207,110)
Cost of sales	16,449	20,781	(4,332)
Gross profit	90,406	293,184	(202,778)
Operating expenses			
Research and development	393,391	275,867	117,524
General and administrative	332,557	327,664	4,893
Total operating expenses	725,948	603,531	122,417
Operating loss	(635,542)	(310,347)	(325,195)
Other income and expenses			
Gain on settlement of liabilities	—	182,439	(182,439)
Interest and other expenses	(28,441)	(54,849)	26,408
Total other expenses, net	(28,441)	127,590	(156,031)
Net Loss	<u>\$(663,983)</u>	<u>\$(182,757)</u>	<u>\$(481,226)</u>

Comparison of Three Months Ended March 31, 2018 and 2017.

Revenues

Revenues earned during the three months ended March 31, 2019 were \$106,855 as compared to revenues of \$313,965 during the three months ended March 31, 2018. The decrease was primarily a result of three factors: a one-time revenue recognition for an equipment sale in the three months ended March 31, 2018; multiple long-term projects being completed and paid for in the three months ended March 31, 2018; and an upfront payment for a 2018 contract for services that extended into the three months ended March 31, 2019.

Gross Profit

Gross profits earned during the three months ended March 31, 2019 were \$90,406 as compared to gross profits of \$293,184 during the three months ended March 31, 2018. The decrease was primarily a result of the significant revenues coming in the three months ended March 31, 2018 that incurred a corresponding significant cost of sales.

Research and Development Expenses

Research and Development expenses increased by \$117,524, or 43%, from \$275,867 for the three months ended March 31, 2018 to \$393,391 for the three months ended March 31, 2019. The increase is primarily due to new NIH grant opportunities which incurred certain allocated direct and indirect expenses.

General and Administrative Expenses

General and administrative expenses increased slightly by \$4,893, or 1%, from \$327,664 for the three months ended March 31, 2018 to \$332,557 for the three months ended March 31, 2019.

Other Income Expenses

We recognized interest and other expenses of \$28,441 and \$54,849 during the three months ended March 31, 2019 and 2018, respectively, representing a decrease of 48%, or \$26,408. The decrease in interest expense was due to a decrease in our outstanding convertible notes because the Company exchanged approximately \$3 million of its outstanding convertible notes for preferred stock on September 30, 2018.

Net Loss

Our net loss for the three months ended March 31, 2019 increased by \$481,226, or 263%, to \$663,983 as compared to \$182,757 for the three months ended March 31, 2018. The increase was primarily attributable to a decrease in revenues combined with an increase in payroll and professional services to prepare for our public offering and future operations as a public entity.

Comparison of the Years Ended December 31, 2018 and 2017

The following table represents selected items in our consolidated statements of operations for the years ended December 31, 2018 and 2017:

	Years Ended December 31,		Change
	2018	2017	
Revenue			
Sales	\$ 756,303	\$ 1,138,052	\$ (381,749)
Other revenue	22,765	200,700	(177,935)
Total revenue	779,068	1,338,752	(559,684)
Cost of sales	674,281	1,084,518	(410,237)
Gross profit	104,787	254,234	(149,447)
Operating expenses			
Research and development	1,039,260	974,531	64,729
General and administrative	1,466,814	806,897	659,917
Total operating expenses	2,506,074	1,781,428	724,646
Operating loss	(2,401,287)	(1,527,194)	874,093
Other income and expenses			
Gain on settlement of liabilities	182,439	—	182,439
Debt conversion expense	(438,873)	—	438,878
Interest and other expenses	(230,296)	(179,740)	50,556
Total other expenses, net	(486,730)	(179,740)	306,990
Net Loss	<u>\$(2,888,017)</u>	<u>\$(1,706,934)</u>	1,181,083

Comparison of Years Ended December 31, 2018 and 2017.**Revenues**

Revenues earned during the year ended December 31, 2018 were \$779,068 as compared to revenues of \$1,338,752 during the year ended December 31, 2017. During 2018, revenues were generated through product sales of \$186,643, sequencing services of \$549,725, and consumables of \$19,935 and grant income of \$22,765 as compared to product sales of \$639,790, sequencing services of \$398,011, and consumables of \$100,251 and grant income of \$200,700 during the year ended December 31, 2017. The decrease was primarily a result of the company focusing on continued growth of sequencing services revenue, which increased 38% over the prior year's twelve months, and not manufacturing additional tSMS instruments that generated approximately one half of the 2017 revenue.

Gross Profit

Gross profits earned during the year ended December 31, 2018 were \$104,787 as compared to gross profits of \$254,234 during the year ended December 31, 2017. During 2018, gross profits were generated primarily through services revenues, which increased 54%, as compared to primarily greater product sales and grants for the year ended December 31, 2017. The decrease was primarily a result of lower cost of sales for increased services volume and a decrease in product revenues with higher gross margins.

Research and Development Expenses

Research and Development expenses increased by \$64,729, or 7%, from \$974,531 for the year ended December 31, 2017 to \$1,039,260 for the year ended December 31, 2018. The Company continued its commitment to R&D with investments at the same level as the previous year.

General and Administrative Expenses

General and administrative expenses increased by \$659,917, or 82%, from \$806,897 for the year ended December 31, 2017 to \$1,466,814 for the year ended December 31, 2018. The increase is primarily due to outside professional services to prepare for our public offering and future operations as a public entity.

Interest and Other Expense

We recognized interest and other expenses of \$230,296 and \$179,740 during the year ended December 31, 2018 and 2017 respectively, representing an increase of \$50,556, or 28%. The increase was in interest expense due to an increase in our outstanding convertible notes that grew \$1,795,000 during the year to a net total of \$990,710 after the exchange to preferred stock on September 30. We recognized a one-time extraordinary debt conversion expense of \$438,873 during the year ended December 31, 2018, versus no similar expense in the year ended December 31, 2017.

Net Loss

Our net loss for the year ended December 31, 2018 increased by \$1,181,137, or 69%, to \$2,888,071 as compared to \$1,706,934 for the year ended December 31, 2017. The increase was primarily attributable to increased expenses for outside professional services necessary to prepare for our public offering and future operations as a public entity as well as a one time debt conversion expense of \$438,873 associated with a significant warrant issuance.

Liquidity and Capital Resources

We have incurred losses since our incorporation in 2014 and negative cash flows from operating activities for the year ended December 31, 2018, 2017 and 2016. As of December 31, 2018, we had an accumulated deficit of \$7.2 million. Since inception, we have funded our operations primarily through private placements of equity and convertible debt securities as well as from modest sales coming from operations. As of December 31, 2018, we had \$64,694 of cash.

Through December 31, 2018, we issued 2,666,665 shares of Series A-2 preferred stock, at a purchase price of \$1.68 per share, to certain accredited investors, of which 729,165 shares were issued in 2016. The gross proceeds from the Series A-2 preferred stock was \$4,479,998 and we incurred offering expenses of \$18,674.

From January 9, 2018 to December 27, 2018 we received proceeds aggregating \$1,795,000 pursuant to the issuance of convertible promissory notes (the "Notes"), and five-year warrants for the purchase of 34,633 shares of our common stock (the "Warrants"). The Notes bear interest at 10% per annum. On September 30, 2018, the Notes along with all outstanding prior senior convertible notes from the same lender totaling \$3,135,000 were exchanged for (i) 1,866,071 shares of Series A-2 Preferred Stock; (ii) a warrant for 486,486 shares of common stock exercisable at \$2.16 per share; (iii) a warrant for 60,506 shares of common stock exercisable at \$2.16 per share and (iv) a 1-year promissory note for \$360,710 bearing 10% interest per annum and convertible at the lower of \$3.10 per share of a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing.

On March 15, 2018, the Company negotiated a final settlement payment for the promissory notes issued to Helicos Biosciences Company (the “Helicos Notes”) in the amount of \$105,000. The amount of the final settlement for the Helicos Notes was a result of a negotiation following a disagreement among the parties that resulted in the Company withholding payment and the holder of the note purporting to demand payment and accelerate amounts due thereunder. The parties settled all disputes with respect to the Helicos Notes and entered into a settlement agreement fixing the settlement amount at \$105,000 with each party releasing the other party for all liability in connection with such actions preceding the settlement. The principal and interest outstanding at December 31, 2017 on the Helicos Notes was \$287,439. The Helicos Note was cancelled and forgiven upon acceptance of payment of \$105,000.

We do not have any credit facilities as a source of future funds, and there can be no assurance that we will be able to raise sufficient additional capital on acceptable terms, or at all. As a result, substantial doubt existed about our ability to continue as a going concern as of the date of the filing of this registration statement. The accompanying consolidated financial statements do not include any adjustment to reflect the possible future effects on the recoverability and classification of recorded assets, or the amounts and classification of liabilities that might be different should we be unable to continue as a going concern.

Based upon our working capital as of March 31, 2019, and without regard to this offering, we will require additional equity and or debt financing in order to meet our obligations as they become due after September 30, 2019. We currently have limited resources to access to fund our negative cash flows from operations. After this offering, we will continue seeking additional financing sources to meet our working capital requirements, make continued investment in research and development and make capital expenditures needed for us to maintain and expand our business. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, or if we expend capital on projects that are not successful, our ability to continue to support our business growth and to respond to business challenges could be significantly limited, or we may have to cease our operations. These factors, among others, raise substantial doubt about our ability to continue as a going concern. If we raise additional funds through further issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our common stock, including shares of common stock sold in this offering.

Cash Flows

Three Months ended March 31, 2019 and 2018

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented.

	For the Three Months Ended March 31,	
	2019	2018
Cash proceeds provided by (used in):		
Operating activities	\$ (465,018)	\$ (245,014)
Investing activities	—	—
Financing activities	452,500	267,561
Net increase (decrease) in cash and cash equivalents	<u>\$ (12,518)</u>	<u>22,547</u>

Net cash used in operating activities

Net cash used in operating activities was approximately \$0.47 million and \$0.25 million for the three months ended March 31, 2019 and 2018, respectively. The increase in cash used in operating activities is primarily related to increased professional services and payroll to prepare for our public offering and future operations as a public entity.

We anticipate our research and development efforts and on-going general and administrative costs will generate negative cash flows from operating activities for the foreseeable future.

Net cash used in investing activities

Net cash used in investing activities was \$0 for the three months ended March 31, 2019 and 2018.

Net cash provided by (used in) financing activities

Net cash provided from financing activities was approximately \$0.45 million and \$0.27 for the three months ended March 31, 2019 and 2018, respectively. This increase is due to increased funding to pay for professional services and payroll in preparation for our public offering and future operations as a public entity.

Years ended December 31, 2018 and 2017

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented.

	For the Year Ended December 31,	
	2018	2017
Cash proceeds provided by (used in):		
Operating activities	\$(1,781,864)	\$(1,125,597)
Investing activities	—	(11,081)
Financing activities	1,816,500	959,483
Net increase (decrease) in cash and cash equivalents	<u>\$ 34,636</u>	<u>\$ (177,195)</u>

Net cash used in operating activities

Net cash used in operating activities was approximately \$1.8 million and \$1.1 million for the year ended December 31, 2018 and 2017, respectively. The increase in cash used in operating activities in 2018 compared to 2017 is primarily related to increased professional services and payroll to prepare for our public offering and future operations as a public entity.

We anticipate increasing significantly our research and development efforts and combined with our elevated general and administrative costs in preparation for our future operations as a public entity will generate negative cash flows from operating activities for the foreseeable future.

Net cash used in investing activities

Net cash used in investing activities was \$0 and \$11,081 for the year ended December 31, 2018 and 2017. The costs incurred related to leasehold improvements to the laboratory space.

Net cash provided by (used in) financing activities

Net cash provided from financing activities was approximately \$1.8 million and \$1.0 million for the year ended December 31, 2018 and 2017, respectively. This increase is due to increased funding to pay for professional services and payroll in preparation for our public offering and future operations as a public entity.

Recent Accounting Pronouncements

In June 2018, Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2018-07, Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. ASU 2018-07 expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. An entity should apply the requirements of Topic 718 to nonemployees awards except for specific guidance on inputs to an option pricing model and the attribution of cost. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor’s own operations by issuing share-based payment awards, and that Topic 718 does not apply to share-based

payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606 Revenue from Contracts with Customers. The Company is currently evaluating the impact of adopting this guidance.

In January 2017, FASB issued ASU No. 2017-01, Clarifying the Definition of a Business (“ASU 2017-01”). The standard clarifies the definition of a business by adding guidance to assist entities in evaluating whether transactions should be accounted for as acquisitions of assets or businesses. ASU 2017-01 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Under ASU 2017-01, to be considered a business, the assets in the transaction need to include an input and a substantive process that together significantly contribute to the ability to create outputs. Prior to the adoption of the new guidance, an acquisition or disposition would be considered a business if there were inputs, as well as processes that when applied to those inputs had the ability to create outputs. Early adoption is permitted for certain transactions. Adoption of ASU 2017-01 may have a material impact on the Company’s consolidated financial statements if it enters into future business combinations.

In August 2016, FASB issued ASU No. 2016-15, Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force) (“ASU 2016-15”). The amendments in ASU 2016-15 address eight specific cash flow issues and apply to all entities that are required to present a statement of cash flows under ASC Topic 230, Statement of Cash Flows. The amendments in ASU 2016-15 are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption during an interim period. Adoption of ASU 2016-15 will not have a material impact on the Company’s consolidated financial statements.

In March 2016, FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting (“ASU 2016-09”). ASU 2016-09 simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. Early adoption of ASU 2016-09 did not have a material impact on the Company’s consolidated financial statements.

In February 2016, FASB issued ASU No. 2016-02, Leases (Topic 842) (“ASU 2016-02”). ASU 2016-02 addresses the financial reporting of leasing transactions. Under current guidance for lessees, leases are only included on the balance sheet if certain criteria, classifying the agreement as a capital lease, are met. This update will require the recognition of a right-of-use asset and a corresponding lease liability, discounted to the present value, for all leases that extend beyond 12 months. For operating leases, the asset and liability will be expensed over the lease term on a straight-line basis, with all cash flows included in the operating section of the statement of cash flows. For finance leases, interest on the lease liability will be recognized separately from the amortization of the right-of-use asset in the statement of operations and the repayment of the principal portion of the lease liability will be classified as a financing activity while the interest component will be included in the operating section of the statement of cash flows. This guidance is effective for annual and interim reporting periods beginning after December 15, 2019 as the Company is an emerging growth company. Early adoption is permitted. The Company has not yet completed the analysis of how adopting this guidance will affect its consolidated financial statements.

In January 2016, FASB issued ASU 2016-01 (“ASU 2016-01”), which amends the guidance in U.S. GAAP on the classification and measurement of financial instruments. Changes to the current guidance primarily affect the accounting for equity investments, financial liabilities under the fair value option, and the presentation and disclosure requirements for financial instruments. In addition, the ASU clarifies guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The new standard is effective for fiscal years and interim periods beginning after December 15, 2017, and upon adoption, an entity should apply the amendments by means of a cumulative-effect adjustment to the balance sheet at the beginning of the first reporting period in which the guidance is effective.

In May 2014, FASB issued Accounting Standards Update (“ASU”) 2014-09, Revenue from Contracts with Customers (Topic 606) (“ASU 2014-09”), which supersedes existing revenue recognition guidance. The standard’s core principle is that a company will recognize revenue when it transfers promised goods or

services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. The standard defines a five-step process to achieve this principle and requires companies to use more judgment and make more estimates than under the previous guidance. These judgments and estimates include identifying performance obligations in the customer contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. The new standard is effective for fiscal years and interim periods beginning after December 15, 2018, as the Company is an emerging growth company. The Company is currently evaluating the impact of adopting this guidance.

Critical Accounting Policies and Estimates

Long-Lived Assets

The Company assesses, on an annual basis, the recoverability of the carrying amount of long-lived assets used in continuing operations. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flow expected to be generated by the asset. A loss is recognized when expected future cash flow (undiscounted and without interest) are less than the carrying amount of the asset. The impairment loss is determined as the difference by which the carrying amount of the asset exceeds its fair value. No impairment was recognized during the periods ending December 31, 2018 and 2017.

Stock-based Compensation

The Company's stock-based compensation program grants awards which may include stock options and restricted stock awards. The fair values of stock option grants are estimated as of the date of the grant using the Black-Scholes option valuation model. The fair values of restricted stock awards are based on fair value of Company's common stock on the date of the grant. The fair values of the stock-based awards, including the actual forfeitures, are then expensed over the requisite service period, generally the vesting period, for each award.

For awards granted to consultants and non-employees, compensation expense is recognized over the vesting period of the awards, which is generally the period during which services are rendered by such consultants and non-employees.

Derivative Liabilities

During 2017, we issued warrants for a variable number of shares of common stock at an adjustable price. We determined that these warrants are derivative instruments pursuant to FASB ASC 815 "Derivatives and Hedging."

The accounting treatment of derivative financial instruments requires that we record the warrants as a liability at fair value and mark-to-market the instruments at fair values as of each subsequent balance sheet date. Any change in fair value is recorded as a change in the fair value of derivative liabilities for each reporting period at each balance sheet date.

Financial Accounting Standards Board ("FASB") Accounting Standards Codification "ASC 820," Fair Value Measurements and Disclosures, (FASB ASC 820), defines fair value, and establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

- Level 1:** Quoted prices for identical assets and liabilities traded in active exchange markets, such as the New York Stock Exchange.
- Level 2:** Observable inputs other than Level 1 including quoted prices for similar assets or liabilities, quoted prices in less active markets, or other observable inputs that can be corroborated by observable market data. Level 2 also includes derivative contracts whose value is determined

using a pricing model with observable market inputs or can be derived principally from or corroborated by observable market data.

Level 3: Unobservable inputs supported by little or no market activity for financial instruments whose value is determined using pricing models, discounted cash flows methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgement or estimation; also includes observable inputs for non-binding single dealer quotes not corroborated by observable market data.

Fair value is a market-based measure considered from the perspective of the market participant rather than an entity-specific measure. Therefore, even when market assumptions are not readily available, the Company's own assumptions are set to reflect those that market participants would use in pricing the asset or liability at the measurement date.

The only liabilities measured at fair value on a recurring basis are the derivative warrants which represent Level 3 liabilities. In 2018, management made the determination that the warrants to purchase common stock were no longer required to be recorded as derivative liabilities. Therefore, \$8,474 of warrant liability was reclassified to additional paid-in capital.

Revenue Recognition

Revenue from genetic sequencing services and equipment sales are recognized when there is persuasive evidence of an arrangement, service has been rendered or product has been delivered, the sales price is determinable, and collectability is reasonably assured. Service is deemed to be rendered when the results have been reported to the customer who ordered the sequencing. To the extent that sequencing services have been prepaid, but results have not yet been reported, recognition of all related revenue is deferred until results are reported.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined in the rules and regulations of the SEC. We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for any other contractually narrow or limited purpose.

JOBS Act

Section 107 of the JOBS Act provides that an "emerging growth company" 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. In other words, an emerging growth company can delay the adoption of new or revised accounting standards until those standards would otherwise apply to private companies. We have irrevocably 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.

For as long as we remain an emerging growth company under the recently enacted JOBS Act, we will, among other things:

- be permitted to have only two years of audited financial statements and only two years of related selected financial data and management's discussion and analysis of financial condition and results of operations disclosure;
- be entitled to rely on an exemption from compliance with the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act;
- be entitled to reduced disclosure obligations about executive compensation arrangements in our periodic reports, registration statements and proxy statements; and

- be exempt from the requirements to seek non-binding advisory votes on executive compensation or golden parachute arrangements.

Although we are still evaluating the JOBS Act, we currently intend to take advantage of some or all of the reduced regulatory and reporting requirements that will be available to us so long as we qualify as an “emerging growth company.” Among other things, this means that our independent registered public accounting firm will not be required to provide an attestation report on the effectiveness of our internal control over financial reporting so long as we qualify as an emerging growth company, which may increase the risk that weaknesses or deficiencies in our internal control over financial reporting go undetected. Likewise, so long as we qualify as an emerging growth company, we may elect not to provide you with certain information, including certain financial information and certain information regarding compensation of our executive officers, that we would otherwise have been required to provide in filings we make with the SEC, which may make it more difficult for investors and securities analysts to evaluate our company. As a result, investor confidence in our company and the market price of our common stock may be materially and adversely affected.

BUSINESS

Overview

We are a life sciences instrumentation and services company leveraging our team's expertise with our unique True Single Molecule Sequencing (tSMS™) technology focused on contributing major advancements to scientific research by accelerating one's understanding of the molecular mechanisms of disease and fundamental biological processes. We have developed and offer a proprietary sequencing technology platform in the multi-billion dollar Next Generation Sequencing marketplace ("NGS") that has critical advantages over existing NGS technologies, particularly for emerging applications in the research and development of precision medicine and transcriptome analysis. Our single molecule technology is capable of analyzing billions of molecules in parallel, which positions us as both competitive and complementary with other NGS platforms. Our technology advantage is a simplified method of quantifying DNA and RNA molecules at single molecule resolution because our platform does not require the routine PCR amplification and library prep and ligation steps required by most NGS systems, thereby avoiding systematic bias. Data produced by our tSMS platform generates highly accurate, reproducible molecular profiles, often providing researchers with new insights into the biology being researched like revealing previously unknown characteristics of molecular structures. Armed with our robust technology platform, we have already assisted medical researchers uncover potentially significant implications in DNA and RNA-based discovery of bio-markers for the early detection of diseases, specifically for cardio vascular artery disease and epithelial cancer.

Our strategy is offering sequencing services to our addressable market by unlocking the inherent advantages of single molecule sequencing and applying our tSMS platform to develop a wide variety of DNA-based, RNA-based applications. Over the longer-term our overall strategy is to integrate our tSMS platform with the development of novel applications in the rapidly emerging precision medicine market, generating revenue through product sales, sequencing services and research grants. Our target customers are consumers of our NGS products and services, such as academic and government institutes, hospitals and medical centers, pharmaceutical and biotechnology companies, non-profit research organizations and agricultural genomics organizations. Integral to our strategy will be to work with many of our existing customers in developing new instruments built to their research specifications as well as to offer them continued sequencing services over a wider array of applications.

Background on Genetic Sequencing

Genetic inheritance in living systems is conveyed through a naturally occurring information storage system known as deoxyribonucleic acid, or DNA. DNA stores information in linear chains of chemical bases known as adenine ("A"), cytosine ("C"), guanine ("G") and thymine ("T"). Inside living cells, these chains usually exist in pairs bound together in a double helix by complementary base pairs. A "genome" is an organism's complete set of DNA, which for humans consists of approximately three billion DNA base pairs. Ribonucleic acid, or RNA, is a molecule used by organisms to convey genetic information. A "transcriptome" is an organism's complete set of RNA molecules at an active cellular state and includes both protein coding and noncoding RNA transcripts.

Genetic sequencing is the process of determining the order of nucleotide bases (A, C, G, or T) in a sample. This consists of three phases: sample preparation, physical sequencing, and analysis. Generally, the first step of sample preparation is either to shear the target genome into multiple small fragments or, depending on the amount of sample DNA or RNA available, amplify the target region using a variety of molecular methods. In the physical sequencing phase, the individual bases in each fragment are identified in order, creating individual sequence reads. The number of individual bases identified contiguously is defined as "*read length*." The sequencing throughput is generally defined as the product of the number of individual sequence reads and the average read length of the sequence reads. In the analysis phase, bioinformatics software is used to align overlapping reads, which allows the original genome to be assembled into contiguous sequence.

Studying genomes and transcriptomes helps scientists understand the inheritance of biological characteristics, developmental biology and normal and disease states of cells and organisms. Genetic variation accounts for many of the differences between individuals, such as eye color and blood group, and also affects a person's susceptibility to certain diseases such as cancer, heart disease or diabetes. Genetic variation can also determine a person's response to drug therapies.

A trend in healthcare is towards 'personalized medicine' to enable more accurate diagnosis and treatment through better understanding of each individual patient's disease. We believe that a greater understanding of the genome will lead to this new healthcare paradigm where diseases are understood at the molecular level, allowing patients to be diagnosed according to genetic information, in many instances earlier and more accurately, and be treated with drugs designed to work on specific molecular targets. The goal is to offer precision personalized medicine that will identify disease earlier, reduce healthcare costs, and enable more appropriate and effective treatment for better outcomes and quality of life. To date, this has largely been done through genomic testing, which provides information about a patient's predisposition to disease or likely response to medication, due to each individual's unique constellation of genes. However, DNA testing is, in most cases, a static readout that does not change through a patient's lifetime or disease course. It does not provide information about the patient's current health status. It is increasingly understood that the transcriptome provides dynamic information about the current state of the body that can be used to assess health, to detect early signs of disease and to enable physicians to select the appropriate treatment, monitor response to treatment and detect unwanted side effects.

Cell-free Nucleic Acids as Disease Biomarkers: Most of the DNA and RNA in the body are inside the cells, but a small amount of nucleic acids is also found in biological fluids such as blood, saliva, and urine. This material is generally referred to as cell-free DNA ("cfDNA") and cell-free RNA ("cfRNA"). Analysis of these free-floating molecules can lead to multiple applications such as early disease detection, drug selection, and treatment monitoring. For example, large amount of cell-free DNA material might indicate a bacterial infection or sepsis in very early stages. Another such example is cfRNA analysis for detection, diagnosis, and monitoring of malignant diseases such as cancer. The cfRNA transcripts are differentially expressed between normal and cancerous tissues. These transcripts can be used as a reliable biomarker for cancer screening and diagnostic applications. Analysis of cfRNA can be used to measure dynamic changes in the gene expression, allow oncologists to evaluate disease status, predict outcomes from anti-tumoral therapies and monitor the disease after treatment.

Sequencing Technologies: There are different sequencing technologies available for sequencing genetic material, each producing the sequence data in a unique format. Some of the technologies produce millions of sequence reads with a very short read length, generally less than 300 nucleotide bases. These technologies are generally referred as short read NGS platforms. Other technologies produce several thousand sequence reads of a very long read length, generally more than nucleotide 1000 bases. These technologies are generally referred as long read NGS platforms. Both, the short as well as long read NGS technologies have their advantages in various settings. For *de novo* assembly of genomes and long RNA transcripts, the long contiguous reads from the long read NGS technologies are preferred. The short reads can be used to further fill in the gaps from the data. For the molecular counting application, a large amount of independent reads from the short read NGS technologies are preferred. Different genes are present in varying amounts in biological samples, and the success of the technique is highly dependent on the dynamic range of the detection technology.

Most single molecule sequencing technologies do not require amplification, though many of the long read technologies still require complex sample manipulation prior to sequencing. This is especially true for sequencing of RNA molecules.

Our single molecule solution eliminates the need for PCR, adapter ligation, and other bias inducing steps. The ability to directly observe billions of single molecules in rapid succession allows our system to observe sequence contexts and cell type variation that present challenges for existing technologies. Unlike many other sequencing platforms, minimal amounts of sample preparation are required. In addition, our system does not require the routine PCR amplification needed by most NGS systems, thereby avoiding

systematic amplification bias. Our system still requires isolation and preparation of DNA or RNA samples; however, our system is adaptable to most purification and preparation kits and techniques that are currently available in the market and no additional or specialized steps are required to prepare the samples for sequencing.

Market Opportunity

The market for our products and services is segmented into two major categories, DNA NGS and RNA NGS, offering a combined addressable market opportunity of approximately \$1.03 billion in 2019 that is projected to grow to \$5.26 billion by 2025 at a CAGR of 31.3%.

DNA NGS market opportunity: The global DNA NGS market is projected to grow from \$6.82 billion in 2019 to \$22.72 billion in 2025 at a CAGR of 22.2% from 2019-2025. Our customers in the DNA NGS market largely consist of academic and research institutes and forensic labs. Collectively, academic and research institutes and forensic labs, pathology labs and diagnostic centers represent a projected 58.4% of the end user market share in 2019. The versatility of the tSMS platform can be applied across our near-term target segments of drug discovery, precision medicine and other novel applications. We intend to focus our commercialization efforts on academic and research institutes and forensic labs in North America and Europe, and will eventually expand it to the Asia Pacific region. North America and Europe represent 69.9% of the global market in 2019. Our targeted end users, applications and regions for DNA NGS offers an addressable market opportunity of \$0.74 billion in 2019 that is projected to grow to \$4.10 billion in 2025 at a CAGR of 33.0%.

RNA NGS market opportunity: The global RNA NGS market is projected to grow from \$1.63 billion in 2019 to \$4.96 billion in 2025 at a CAGR of 20.4%. We intend to leverage our simplified workflow, which reduces bias and misrepresentation caused by various enzymatic steps that other technologies utilize, to accelerate market penetration. The RNA NGS market can be segmented by products and services, end users, applications, and sequencing technologies. Research and academic centers, pharmaceutical and biotech companies, and pathology labs forensic labs and diagnostic centers represent a projected 76.7% share of the end users in 2019. Our simplified and mature RNA sequencing approach will facilitate a broad application pool across diagnostics, drug discovery, precision medicine and biomarker discovery field. We will offer RNA sequencing platform and consumables, sequencing services and data analysis products featuring our tSMS technology to such potential customers. Furthermore, we intend to focus on commercialization of our products in North America, Europe and Asia Pacific regions which collectively account for 81.2% of the global market geographically in 2019. Our targeted end users, applications and regions for RNA NGS offers an addressable market opportunity of \$0.29 billion in 2019 that is projected to grow to \$1.16 billion in 2025 at a CAGR of 26.2%.

Our tSMS technology platform produces data with potential diagnostic implications, detecting biomarkers for cardiovascular diseases and various types of cancer, and offers an optimal solution for use in RNA sequencing applications. We anticipate using these strengths to capture a portion of the growing multi-billion dollar NGS market. We strive to build and control intellectual property around the instruments, consumables, and methods that enable these applications to strengthen our market position. The major consumers of the NGS include academic and government institutes, hospitals and medical centers, pharmaceutical and biotechnology companies, non-profit research organizations and agri-genomics organizations. We will market our sequencing technology, optimized for accurate analysis of genetic information, for development of potentially high growth applications in rapidly emerging sectors such as RNA-based diagnostics, precision medicine and epigenetic analysis. Many of our target customers are engaged in drug discovery, biomarker discovery, and companion diagnostics for supporting clinical trials.

There are multiple short read and long read NGS technologies available in the market that partially address the need for accurate and sensitive analysis of genetic information. These technologies can further be classified based on the resolution of the technology as single molecule-sequencing technology and amplification-based technologies. Over the past two decades, the researchers and clinicians have used these technologies to gain a deeper understanding of nucleic acids, to study the biomarkers associated with diseases, to identify molecules for new drug discovery, to create novel applications for early screening and diagnosis, and more recently to create genome-editing. While researchers are making progress on various

fronts by utilizing a combination of these technologies, there remains a wide gap between the needs of the research community and the capabilities of existing sequencing tools. The gap is affecting the speed and potential of the research, and is a result of the inherent limitations of current technologies. These limitations are summarized below:

- **Biased results:** The short-read polymerase chain reaction (PCR) sequencing technology requires a large number of DNA molecules during the sequencing process. To generate enough DNA molecules, an amplification step is required during sample preparation. This amplification process can introduce errors known as amplification bias. The effect of this bias is that resulting copies are not uniformly representative of the original template DNA, causing skewed data representation in the final results.
- **Inefficient library preparation:** Many of our competitors use systems requiring multi-step sample preparation protocols to prepare sample libraries before sequencing. This library preparation technique is inefficient, capturing only a fraction of the informative input material. The process selectively captures the molecules which are present in large quantities while losing lower frequency molecules, thus not producing a true representation of the input material. The library preparation protocol limits the minimal amount of input sample. The library preparation steps also add significant burden on the sample preparation.
- **Inadequate throughput:** Applications such as transcriptome, gene expression and biomarker discovery require accurate quantification of data. The long read single molecule technologies fall short due to smaller number of strand throughput required to substantiate the presence or absence of a biomarker. The short-read amplification technology fall short due to a skewed data representation caused by the non-linear amplification bias present in the system.
- **Lower sensitivity:** In cases where the original template DNA contains regions of relatively high G-C content or relatively high A-T content, the amplification process tends to under-represent these regions. As a result, these regions, which may contain entire genes, can be completely missed. The non-linear nature of the amplification thus limits its ability to detect subtle changes in the genetic signature.

Our Technology Solution

Because our tSMS platform offers a single molecule solution for DNA and RNA sequencing by performing detection of nucleic acids without the need for complex sample manipulation, researchers using our platform can analyze many billions of single molecules in a single experiment and still generate highly accurate and reproducible data. Our technology's critical advantage over other technologies is because our platform does not require the routine PCR amplification and library prep and ligation steps needed by most NGS systems, thereby avoiding systematic amplification bias. RNA sequencing on the SeqLL platform detects transcripts regardless of abundance and with high accuracy in quantifying gene expression changes associated with certain disease as well as detecting subtle changes in RNA transcript levels that are undetectable with other methods.

Our system still requires isolation and preparation of DNA or RNA samples; however, our system is adaptable to most purification and preparation kits and techniques that are currently available in the market and no additional or special steps are required to prepare the samples for sequencing.

Our single molecule resolution technology is unique because it combines a patented fluorescence-based optical detection apparatus with a precision microfluidics and thermal control system to perform sequencing-by-synthesis reactions. Notably, a limitation of an optical-based detection system is longer sequencing times compared to non-optical sequencing platforms.

Our platform derives the sequencing information directly from the sample itself, not a copy of the sample. It does not require amplification at any stage of the process and offers simple, straight-forward sample preparation protocols. The technology uses a single stranded DNA and RNA material with length that range from less than 20 bases to more than 1000 bases as an input. The platform then captures the material on a glass surface and uses a patented fluorescence based optical detection apparatus combined with a precision microfluidics system to perform a sequencing-by-synthesis reaction on the input sample.

The single molecule fluorescence signal from millions of individual strands is captured by images using a high sensitivity camera during multiple cycles of nucleotide incorporation. Our powerful image analysis system processes these images to produce the sequence data as an output. The output data contains millions of individual unique sequences with the average read length between 35 – 60 nucleotide bases, with a range of 20 – 100 nucleotide bases. This length is sufficient to allow unambiguous identification of the origin of each sequence.

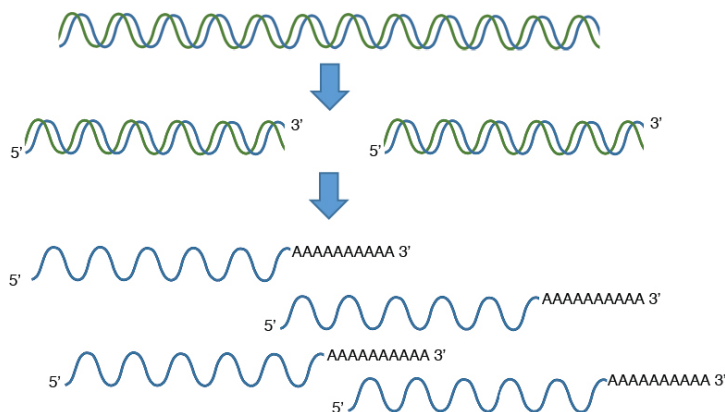
The single molecule resolution of the sequence data in association with a sub 100 nucleotide base read length positions the SeqLL platform as the only commercially available short read single molecule sequencer available in the market. The amplification based short read technologies are already helping the scientists in the field of research, diagnostics and therapeutics. By giving the short-read technology the power of single molecule resolution, we believe that our tSMS technology offers critical advantages over existing technologies, including:

- **Minimal Sample Preparation** — The tSMS platform offers a simple sample preparation process. The DNA strands are cut in shorter sizes, converted into single strands, and then tagged with a universal surface capture primer. By avoiding the complex multi-step library preparation method, the sample integrity is preserved, and the bias and errors in the sequence data output exhibited by other methods are avoided.
- **Greater Sensitivity** — The tSMS platform offers a high level of sensitivity as each strand is identified and synthesized irrespective of its abundance in the sample. In the existing amplification-based technologies, low expressing transcripts are typically masked due to preferences and may be missed or have their numbers minimized in the final data analysis. The simplified sample preparation along with single molecule resolution facilitates the unbiased, proportionate representation of input sample, even of the low expressing transcripts and constructs. This allows for obtaining more accurate information earlier, and for clinical treatments or decisions to be made sooner.
- **High Accuracy** — The tSMS platform provides an accurate set of data and results as well as a broader range of molecules to be evaluated. The ability to count each individual molecule, combined with simplified sample preparation and greater sample sensitivity, yields an accurate quantitative representation of sample in the final data. Our technology has been demonstrated to produce robust accurate short reads for a variety of applications.
- **Seamless Flexibility** — Our tSMS platform provides flexibility in two main aspects — throughput and applications. The tSMS platform has the ability to scale the throughput across a range of small to large projects. The programmable instrument workflow and modular design of consumables provide flexibility to choose the sample coverage and read length required for the final data. The simplified sample preparation allows for analysis of any genetic material that can be attached to a glass surface.

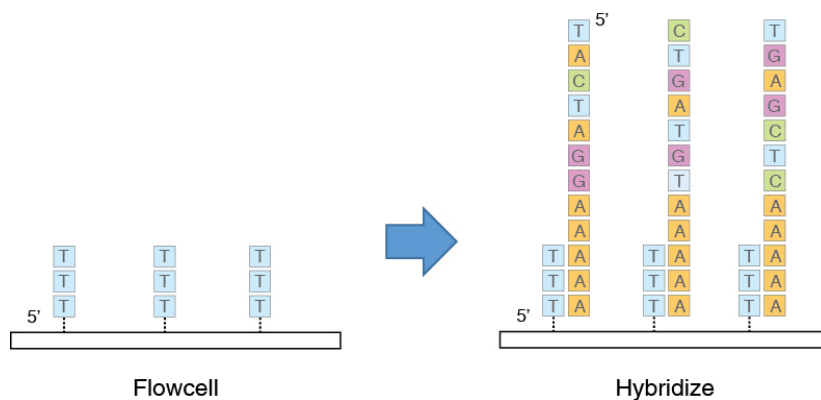
Our Gene Sequencing Methodology

The patented tSMS technology is the essence of the tSMS platform. The gene sequencing methodology takes genetic material as input and produces sequence data as an output through sequentially processing the following five major steps.

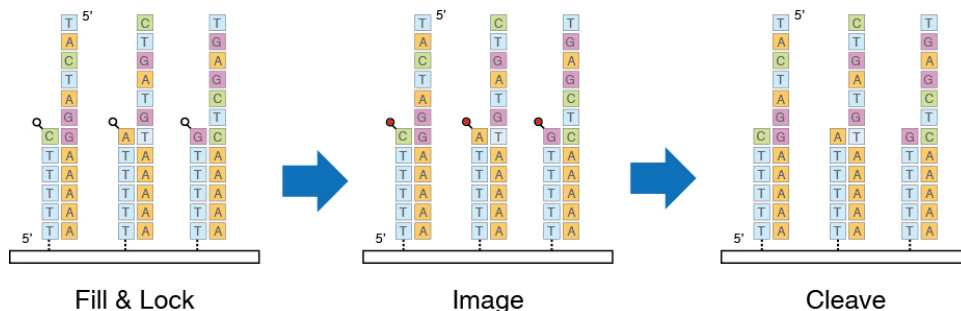
1. **Sample preparation:** A double helix strand is cut in to fragments of 100 – 200 nucleotides in length. In the case of the cfDNA and cfRNA material, this step is not necessary as cell-free strands are generally short and fit the profile of the input material. The strand fragments are then denatured to a single strand, and a polyA universal priming sequence is added to one end of each strand as shown in the following figure.



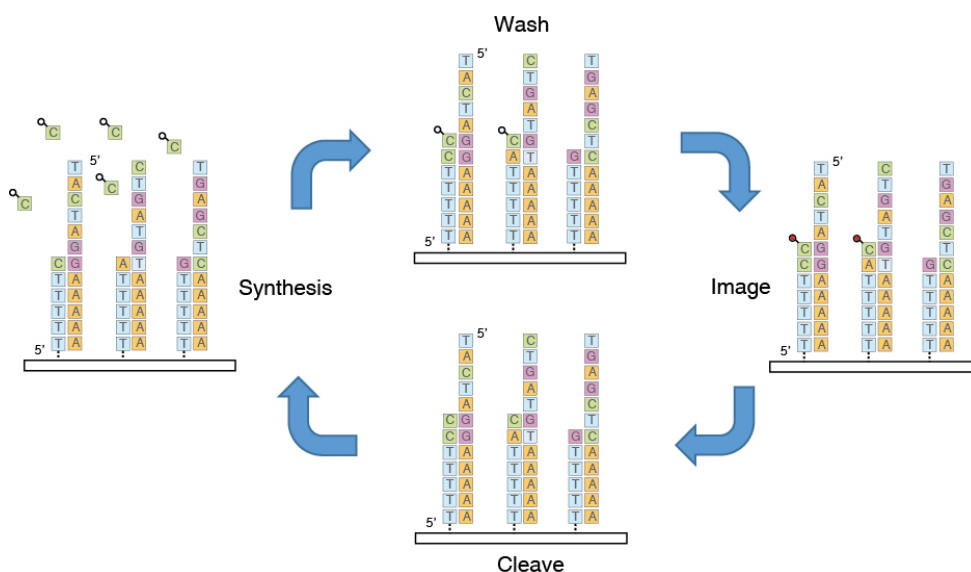
2. **Sample loading:** The strands are hybridized in a flowcell with billions of universal oligo T capture sites mobilized on the flowcell surface. The tSMS method typically utilizes a dT50 primer to initiate sequencing from a 3' poly-A tail, although other capture primers may be used to increase the specificity of sample hybridization.



3. **Template registration:** Once hybridized, a “Fill & Lock” step fills up the rest of the open bases from the Poly-A tail followed by the addition of fluorescently labeled nucleotides to the start of the strand. A laser illuminates the flow cell and the camera records the location of each captured sample strand. The flow cell is moved in sequential steps to allow the camera to cover its entire active area. The dye molecules are then cleaved and washed away.



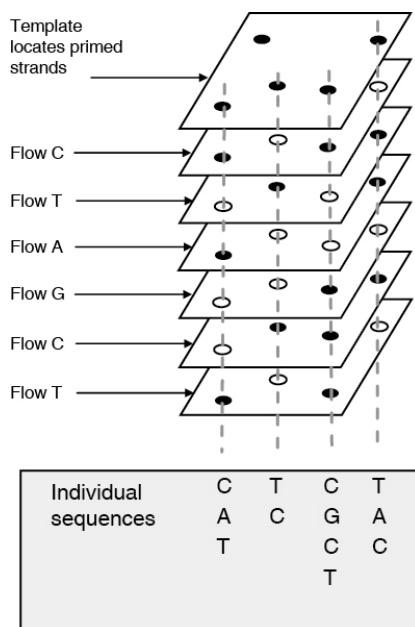
4. **tSMS sequencing-by-synthesis:**



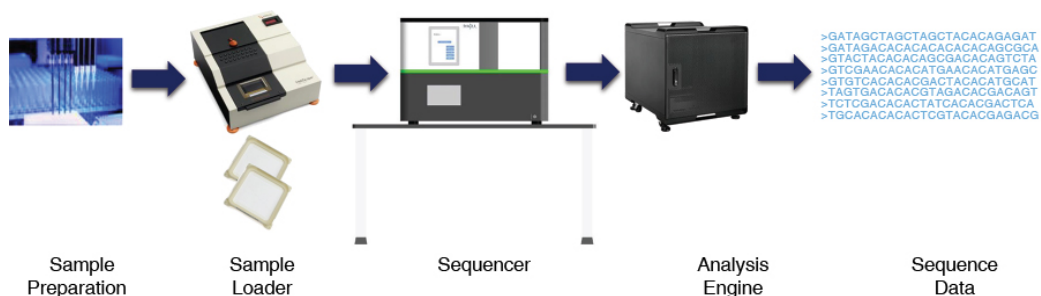
- a. **Synthesis:** DNA polymerase enzyme and the first of the four types of novel fluorescently labeled nucleotides are added. If the nucleotide is complementary to the next base in the template strand, the polymerase will add it to the primer strand. The nucleotides are designed to inhibit the polymerase from incorporating more than one base at a time on the same strand.
- b. **Wash:** Excess polymerase and unincorporated nucleotides are then washed away. This step ensures that only the incorporated nucleotides are available for fluorescence imaging.
- c. **Image:** The narrow bandwidth laser illuminates the flowcell surface to excite the fluorescently labeled nucleotides. The camera records the locations where fluorescently labeled nucleotides were added.
- d. **Cleave:** The fluorescent dye molecules are then cleaved from the labeled nucleotides and washed away. This step ensures that these molecules are fluoresced only for that particular nucleotide addition cycle.

The process is repeated with each of the four types of labeled nucleotides until a desired sequence length is reached. As an example, repeating this cycle 120 times adds an average of more than 33 nucleotides to the primer strand. In sequencing, this is known as the “read length.”

5. Data processing: The image analysis computer analyzes the series of images from each cycle and determines the sequence of bases in the template strand. The sequence is “read” by correlating the position of a fluorescent molecule in its vertical track with the knowledge of which base was added at that cycle. The sequence data is packaged in standard sequencing data formats for further bioinformatics analysis.



Our True Single Molecule Sequencer (tSMS)



As described under our gene sequencing methodology above, the tSMS single molecule sequencing system combines a simplified operation with powerful capabilities to directly sequence original samples of RNA and DNA. The tSMS system consists of four major components:

1. Consumables: The flowcells and reagent kit are the major components of the consumables that the instrument needs at the start of every new run. The custom flowcell features 25 discrete flow channels, and each channel of the flowcell has millions of capture probes deposited on the cover glass. The sequencing samples are loaded in to the flowcell channels using the sample loader. The sequencing run can sequence up to two flowcells in a single run. The reagent kit for the sequencing

run consists of custom prepackaged bottles that store proprietary tSMS chemistry reagents and wash buffers for the system. All of the flowcells and reagent kits are barcoded, so the sequencer can scan and store the barcodes as a part of the experiment setup procedure.

2. **Sample Loader:** The sample loader facilitates loading the billions of tailed single strands on to the glass surface of the standard 25 channel flowcell. A temperature-controlled chamber improves the hybridization efficiency and houses a mechanism to hold a standard flowcell used in the system. The proprietary sample loading block design helps to keep the transfer volume to near zero microliter, while the system offers precision control of loading the sample in 25 discrete channels without any cross-contamination. The input material volume for the sample loader can be as little as 20 microliters.
3. **tSMS Sequencer:** The sequencer accepts up to two flowcells for a sequencing run, allowing sequencing of up to 50 individual samples in a single run. The benchtop sequencer is a fully automated device that combines a Total Internal Reflection Fluorescence (TIRF) microscopy technique with a high precision, temperature-controlled microfluidics system. The microfluidics system houses the reagent kit required to perform tSMS chemistry, and uses high precision pumps and valves to formulate the chemistry just-in-time for delivery to the flowcell chamber during each chemistry cycle. The two flowcell design maximizes the machine utilization by performing the chemistry cycle on one flowcell while the other flowcell is going through the imaging cycle, and vice-a versa. The flowcells are mounted on a high speed, high accuracy multi-axis stage that moves the flowcell along the channel with nanometer grade precision. The high-power optics system consists of a narrow bandwidth laser to provide the excitation signal, while the high-fidelity imaging system uses a highly sensitive camera for capturing the single molecule signal emitted by the fluorophores. All of these subsystem operations are integrated and controlled by an on-board computer in a completely automated fashion over the course of the run. A simple touch screen based graphical user interface walks the user through an intuitive run setup. A typical run on the sequencer captures 3 to 6 million images containing information about billions of individual single molecules in the strands.
4. **Image Analysis Engine:** The image analysis engine processes the images captured by the sequencer camera, aligns them with the template image at individual position, and creates the sequence data file to be used for further bioinformatics analysis. It features a high-power CPU array with large storage capacity hard drives specifically designed for intensive image analysis and storage purposes. The image analysis engine runs parallel to the camera, processing the images as soon as camera starts imaging the flowcell. The image analysis engine software monitors the instrument status and automatically uploads the sequence data at the end of the run at a user-configurable network location.

The instrument has a web-based interface for remote monitoring that updates the key sequencing metrics and the instrument status in real time. The database system of the instrument stores the detailed logs of the instrument for both the record keeping and troubleshooting purposes.

Future Products

In the future, we expect to enter the clinical diagnostics market by partnering with biotech and pharma companies to develop RNA-based diagnostics. We plan to develop a clinical grade tSMS sequencer and to secure FDA clearance for use of the instrument for one or more clinical diagnostic tests. We intend to commercialize diagnostic tests where the tSMS platform offers accurate diagnostic capability, such as non-invasive prenatal testing (NIPT) for early pregnancy and high BMI mothers (below current detection levels), liquid biopsy for oncology, microbiome analysis, and transcriptome-based diagnostics for cardiovascular disease, infection and others. We will look to increase industry visibility and expand our reach globally for both sequencing services and instrument sales through strategic customer relationships and partnerships with larger organizations that can increase global support, supply and distribution. Through those partnerships, we plan to identify new, high value, cutting edge applications that are uniquely enabled by its amplification-free, short-read, direct DNA and RNA sequencing technology.

The accuracy, sensitivity, and simplicity of the tSMS platform allows the technology to be applied for developing assays and instruments used for quality control of manufactured therapeutic products, including gene therapy technologies. We plan to explore commercial stage partnerships with therapeutics companies.

As we expand product lines to address the diagnosis of disease, regulation by governmental authorities in the United States will become an increasingly significant factor in development, testing, production and marketing. Products that we develop in the diagnostic markets, depending on their intended use, may be regulated as IVDs by the FDA. Each medical device that we wish to distribute commercially in the U.S. will likely require us to seek either 510(k) clearance or approval of a pre-market approval application (PMA) from the FDA prior to marketing the device for in-vitro diagnostic use. Clinical trials related to our regulatory submissions may take years to complete and represent a significant expense. The 510(k) clearance pathway usually takes from three to 12 months, but can take longer. The PMA pathway is more costly, lengthy and uncertain, and can take from one to three years, or longer.

We have not sought FDA approval of our sequencers because to date we have marketed them for research purposes and not for clinical diagnostics. We will likely need to pursue regulatory approvals from the FDA when we attempt to enter the diagnostics market, which process is expensive, involves a high degree of risk and there is no assurance that we will be able to develop a commercially viable product. Even if our products are authorized and approved by FDA, we must still meet the challenges of successful marketing, distribution and customer acceptance. We do not intend to use proceeds from this offering to pursue FDA approval. We will raise additional funds prior to pursuing FDA approval.

Markets for Our Technology

The initial target market for our instruments and sequencing services has been the life sciences research and development market where we provide solutions for a variety of applications including drug discovery, biomarker discovery and companion diagnostics. This market includes laboratories associated with universities, scientific research centers, and government institutions, and biotechnology and pharmaceutical companies. In the future, we plan to enter the clinical diagnostics sector by partnering with biotech and pharmaceutical companies to develop diagnostic testing products using our technology in order to provide personalized genetic data and analysis to individual consumers.

There are a number of emerging markets for sequencing-based tests, including molecular diagnostics, which represent significant potential opportunities for us. The development of these markets is subject to variability driven by ongoing changes in the competitive landscape, evolving regulatory requirements, government funding of research and development activities, and macroeconomic conditions. Introductions of new technologies and products, while positive to the overall development of these markets, may result in greater competition for the limited financial resources available. As we expand into these emerging markets, the development of our business will be impacted by the variability of the factors affecting the growth of these markets.

The SeqLL technology is tailored for the following applications:

- Life sciences research and development: NGS technologies are accelerating the discovery and development of more effective new drugs. The complex nature of biological pathways, disease mechanisms and multiple drug targets requires an accurate, unbiased, and sensitive molecular counting platform. Single molecule sequencing, with its unparalleled linear quantitative accuracy in a large scale expression analysis could enable high-throughput screening of promising drug leads. During clinical trials, our technology could potentially be used for companion diagnostics to generate individual gene profiles that can provide valuable information on likely response to therapy, toxicology or risk of adverse events. The tSMS platform may also enable more precise selection of patient pools and individualization of therapy.
- Liquid biopsy: Liquid biopsy is emerging as a simple and non-invasive alternative to the traditional tissue biopsy approach for disease screening and monitoring. A simple draw of blood vial contains millions of tiny fragments of cell-free DNA/RNA material with lengths of order of 100 – 200bp, which carry informative signature of cancer and other life-threatening diseases even in a very early stage of the disease progression. With its quantitative accuracy, simple sample preparation methodology, and its ability to accurately sequence fragmented short reads, SeqLL's single molecule sequencing offers the best suited solution for liquid biopsy.

- **Infectious disease:** Infectious diseases are disorders caused by bacteria, viruses, and fungi. All of these organisms contain DNA and RNA. The detection and sequencing of the DNA and RNA from pathogens provides medically actionable information for diagnosis, treatment and monitoring of the infections. Accurate sequence information could also help to predict drug resistance.
- **Clinical diagnostics:** The amplification and ligation free sequencing method allows SeqLL to identify subtle changes in the RNA transcript levels that are undetectable with other methods because of amplification bias and loss of low-level transcripts inherent to the other technologies. The power of tSMS technology can help to address the large unmet need for biomarker discovery to diagnose diseases such as cardiovascular diseases and cancer at very early stages.
- **Microbiome analysis:** Microbial communities in and on the body show uniform bacterial diversity in healthy individuals. Drugs and diet can disrupt the microbial diversity, and thereby can affect disease progression and treatment efficacy. SeqLL's technology can accurately quantify the gene signature for all bacteria present and capture a real time snapshot of the microbiome. This data can be used by physicians for disease treatment by applying methods to encourage growth of beneficial microbes and eliminate harmful microbes.

Competition

Given the market opportunity, there are a significant number of competing companies offering DNA sequencing equipment or consumables. These include Illumina, Inc., Pacific Biosciences of California, Inc., Thermo Fisher Scientific, Inc., Qiagen N.V., and Oxford Nanopore Technologies, Ltd. Based on published revenue data, Illumina, Inc. leads the NGS technology with approximately 75% of the market share, followed by Pacific Biosciences of California, Inc. and Oxford Nanopore Technologies, Ltd. We believe that we are uniquely positioned among the competition to be the only company offering the high strand throughput with a power of single molecule resolution.

Our competitors have greater financial, technical, research and/or other resources than we do. These companies also have larger and more established manufacturing capabilities and marketing, sales and support functions. We expect the competition to intensify within this market. The increased competition may result in pricing pressures, which could harm our sales, profitability or market share. In order for us to successfully compete against these companies, we will need to demonstrate that our products deliver superior performance and value. We will also need to continually improve the breadth and depth of current and future products and applications.

Our Business Strategy

Our mission is to empower researchers with improved genetic tools that enable scientists and physicians to better understand the molecular mechanisms of disease and the underlying biological systems. This knowledge is essential to the continued development of new breakthroughs in genomic medicine that address the critical concerns involved with today's personalized medicine.

We generate our revenues through a combination of product sales, fee-for-sequencing services, and research grants. We plan to expand these revenues from recurring and prospective clients by the following key strategies:

- Provide the scientific community with a combination of sequencing services and NGS instrumentation to serve markets that we believe are inadequately addressed by existing technologies.
 - Assist in the development of new classes of RNA-based diagnostics.
 - Collaborate with researchers to enhance pharmacogenomics and biomarker discovery
 - Support drug developers seeking a better understanding of the side-effects of their new drugs.
- Continue to innovate and develop new aspects of our products and technology, applications and instrumentation through scientific collaborations, including grants.

- Leverage our expertise and the broad applicability of our tSMS platform to grow into new markets through strategic collaborations, partnerships, existing data sets, and customers.
- Maintain a strong culture and network of technical resources while continuously attracting new talent to build an industry leading single molecule solutions company.

We have assembled an experienced management team, board of directors, scientific founders and advisory board who bring industry experience to our Company and business strategy. The members of our team have deep experience in discovering, developing and commercializing with a particular focus on sequencing products and applications.

Marketing, Sales, Service and Support

SeqLL's business model is focused on offering a comprehensive and reliable solution that drives adoption, acceptance, customer loyalty, customer confidence, revenue growth and shareholder value. We plan to focus on addressing specific markets for which there are not currently adequate solutions. This will require education and demonstration of added value by helping customers to meet program timelines, providing data that supports their programs, and implementing custom solutions to meet each customer's specific objectives. We currently generate revenue by selling to existing customers and through collaborative, research-focused efforts that create the additional sales opportunities. In the future, we plan on developing a dedicated sales force comprised of full-time employees complemented by regional sales consultants focused on the NGS market. To accelerate instrument and sequencing services sales, we will seek to build relationships with established sales and marketing organizations around the globe. We will benefit from quick access to large customer bases associated with these organizations while also controlling internal sales costs.

To achieve recurring growth for our service revenues and earn new customers, we are implementing the following initiatives to increase market awareness of the tSMS platform:

1. Defining our value proposition in terms of commercial value and solution to customer needs, as related to platform flexibility, speed to solution, and comprehensive quality of the genetic information provided.
2. Updating customer portal to focus on the variety of applications and the solutions model SeqLL provides through sequencing products. The solutions model includes a multi-tiered scope from straight sample sequencing project to a comprehensive application development program. This approach will attract small companies without adequate resources as well as large companies looking for research support.
3. Creating new literature that highlights our technology, instruments and capabilities. This includes brochures, white papers, application notes, case studies, and solution's value proposition marketing material.
4. Implementing new customer facing programs including trade show participation, posters and presentations to showcase the solutions for commercial needs, and attending scientific conferences that publish the research data from the SeqLL platform.
5. Expanding visibility in segment verticals with email campaigns, segment organization participation, and by creating integrated training and education programs as a part of services and instrument sales process.
6. Research collaborations with key opinion leaders (KOLs) to address critical, high potential needs and publish the findings in the peer-reviewed scientific journals.

SeqLL believes this approach maximizes value to customers and shareholders by supporting the largest possible number of customers in each vertical segment:

- Those choosing to outsource important aspects of drug research and development
- Those choosing to outsource until it is financially beneficial to internalize the capability

- Those requiring access to proven and experienced infrastructure to meet surge or unexpected demand from market influences — direction changes, mergers or acquisition of pipeline candidates.

Customers

Our customer base is focused on academic research, biomarker discovery, and diagnostic product development. These customers over the years have produced scientific achievements through collaborative research efforts.

The versatility of the technology is demonstrated by our broad base of users that currently span research institutions, commercial laboratories, genome centers, clinical laboratories, government and academic institutions, sequencing service providers, and pharmaceutical companies. The majority of our current customers are early adopters of genomics technology including tSMS. A significant portion of the funding for these developing technologies has historically come from research grants provided by government agencies and non-profit research centers. We often collaborate with customers to drive innovation in the field of genomic sciences through grant funded research activities.

Manufacturing

We have the capability to manufacture all sequencing consumables and instrumentation at the SeqLL facility. We believe that by manufacturing all system components internally results in greater trade secret protection for our proprietary formulations and mechanics, a higher degree of customer satisfaction in our services business, and lower production costs. In the future, we may outsource some of the non-proprietary reagents and basic instrumentation sub-assemblies for parallel inventory production ramp-ups. Relationships to various contract manufacturing organizations have already been established and we believe several are prepared to provide these services once production demand exceeds internal capacities.

Our current manufacturing staff at SeqLL is comprised of 1 engineer and 2 technicians who each have more than 10 years of experience in the tSMS product line. Although currently small in size, the manufacturing team has tremendous experience in the tSMS platform and has the ability to adapt to future needs on both the hardware and consumable sides. In addition, the group has a wealth of knowledge in FDA product clearance and working in an FDA regulated environment. The team can take credit for having built each commercially available tSMS instrument since its origin in 2006, totaling 27 instruments.

We are planning on establishing a controlled manufacturing process and environment. We plan to implement ISO standards, Five Sigma, and lean techniques. We plan on creating work cells for efficiency and material control for both consumables and instrumentation. Implementation of quality assurance in manufacturing documentation and processes is our top priority as we continue the path towards releasing a clinical grade tSMS sequencer and securing FDA clearance.

The current facilities are adequate and have additional room to expand to meet our manufacturing needs for at least the next two years. Beyond that, we may need to lease additional space in the future to incorporate additional manufacturing lab, test, and assembly capabilities.

Research and Development

Our research and development efforts focus on maintaining our advantage in single molecule sequencing. These efforts leverage our team's involvement and continuing development of the tSMS technology for over a decade. The tSMS technology blends a number of scientific disciplines, namely optics, micro-fluidics, biochemistry and molecular biology, systems engineering, and bioinformatics. Over the years we have continuously established strong relationships with technology leaders and leading academic centers which augments and complements our internal research and development efforts.

Some of our research and development accomplishments include:

- Production of a second generation tSMS sequencer in benchtop form-factor;
- Optimized sample preparation, flowcell, and reagent tSMS processes;
- Innovated machine learning based on image analysis algorithms;

- Co-authored multiple publications in scientific journals; and
- Received multiple NIH grant awards for technology development

We plan to continue our investment in research and development to enhance the performance and expand the application base of our current products, and introduce additional products based on our technology. In addition, our engineering team will continue their focus on increasing instrument component and system reliability, reducing costs, and implementing additional system flexibility and versatility through the enhancement of existing products and development of new products.

Intellectual Property

Developing and maintaining a strong intellectual property position is an important element of our business. We maintain the intellectual property through a combination of licenses, patent protection and trade secrets.

We have sought, and will continue to seek, patent protection for our technology, for improvements to our technology, as well as for any of our other technologies where we believe such protection will be advantageous. In 2013, as part of the Helicos bankruptcy proceedings, we entered into two non-exclusive license agreements:

License Agreement by and between us and Helicos Biosciences Corporation dated March 15, 2013 (“Helicos License”).

We have entered and fully paid for a non-exclusive, royalty free license agreement to license, for the life of such patents, over 60 patents covering all areas of our technology, including design, methods and chemistry from Helicos. As part of the Helicos bankruptcy proceedings, Fluidigm obtained the rights to this patent portfolio. The license may be terminated by Fluidigm in the event we sub-license or assign any of the intellectual to a third party. In addition, Fluidigm has a right to terminate the license in the event Daniel Jones, our Chief Executive Officer, fails to continue to work full time for us or if we fail to use reasonable care in the investigation, testing or solicitation of government approvals with respect to the intellectual property. In addition, the license will automatically terminate in the event we dissolve, cease to conduct business, file a petition for bankruptcy, assign all of our assets to a receiver or trustee or in the event we have an involuntary bankruptcy petition initiated against us that is not dismissed within sixty days. This license is provided to us on an “as is” basis only and without any representations or warranty, express or implied, regarding the intellectual property and the use thereof. This patent portfolio is expected to expire 2021 through 2028.

Sub-License Agreement between us and Helicos Biosciences Corporation dated March 15, 2013

As part of the Helicos bankruptcy proceeding, Arizona Science and Technology Enterprises LLC (“AZCT”) agreed that Helicos could sub-license the license agreement between Helicos and AZCT to us with respect to 10 patents owned by AZCT for the life of such patents. The sub-license is non-exclusive and fully-paid. The sub-license may be terminated by AZCT in the event we sub-license or assign any of the patents to a third party or if we fail to use reasonable care in the investigation, testing or solicitation of government approvals with respect to the patents. In addition, the sub-license will automatically terminate in the event we dissolve, cease to conduct business, file a petition for bankruptcy, assign all of our assets to a receiver or trustee or in the event we have an involuntary bankruptcy petition initiated against us that is not dismissed within sixty days.

As of February 20, 2019, we own 1 pending U.S. patent application. Our issued and pending patents cover various aspects of our sequencing technology, and we expect to continue to file new patent applications to protect the improvements to our technologies.

We have trademarked the Company name (SeqLL) and design logo, as well as the phrases “tSMS,” and “Sequence the Lower Limit.” We protect trade secrets, know-how, copyrights, and trademarks, as well as continuing technological innovation and licensing opportunities to develop and maintain our competitive position. Our success depends in part on obtaining patent protection for our products and processes, preserving trade secrets, patents, copyrights and trademarks, operating without infringing the proprietary rights of third parties, and acquiring licenses for technology or products.

Employees

As of May 15, 2019, we had 12 employees. None of our employees are represented by a collective bargaining agreement, and we have never experienced any work stoppage. We believe we have good relations with our employees.

Properties and Facilities

We lease approximately 11,000 square feet of combined office, laboratory and manufacturing space in Woburn, Massachusetts for our headquarters and operations. We also lease bench space and key equipment at a chemistry incubator facility located in Woburn, MA. We anticipate leasing additional space in the Boston, MA biotech corridor as our needs grow.

Legal Proceedings

From time to time we may be involved in various disputes and litigation matters that arise in the ordinary course of business. We are currently not a party to any material legal proceedings.

Corporation Information

We were incorporated in Delaware on April 3, 2014. Our principal executive offices are located at 317 New Boston Street, Suite 210, Woburn, Massachusetts 01801, and our telephone number is (781) 460-6016. Our corporate website address is www.seql.com. The information contained on or that can be accessed through our website is not incorporated by reference into this prospectus.

MANAGEMENT

Executive Officers and Directors

The following table provides information regarding our key employees and directors as of May 15, 2019:

Name	Age	Position(s)
Executive Officers		
Daniel Jones	39	President, Chief Executive Officer and Director
John W. Kennedy	62	Chief Financial Officer and Secretary
Key Employees		
Erik Volke	39	Director of Operations
Abhijeet Shinde	38	Director of Engineering
Non-Employee Directors		
William C. St. Laurent	54	Chairman and Director
Douglas Miscoll	58	Director
David Pfeffer	60	Director

Executive Officers

Daniel Jones has been our co-founder, President, and a member of our Board of Directors since our inception. He has served as Chief Executive Officer since May 2018. Prior to becoming our CEO, he was President from inception to May 2018. Mr. Jones has over 15 years of biotechnology industry experience, including 12 plus years in single molecule research. Prior to founding SeqLL, Mr. Jones held various positions at Helicos Biosciences, a publicly traded biotechnology tools company. During his career at Helicos Biosciences, his responsibilities included applications development, instrument prototyping and validation, customer support, and bioinformatics analysis, as well as sales and operations. In 2008, Mr. Jones ran the first ever direct RNA sequencing experiments while at Helicos. From December 2003 to March 2007, Mr. Jones worked at U.S. Genomics in the Methods Development group and on development of their Trilogy 2020 Single Molecule Analyzer and Direct miRNA assays. From December 2002 to December 2003, Mr. Jones worked at EXACT Sciences on their ColoGuard assay, a non-invasive, now FDA-approved molecular diagnostic for colorectal cancer. Mr. Jones has authored or co-authored 4 publications and is named on multiple patents or patent applications. He holds a Bachelor of Science degree from Trinity College and has studied Biotechnology and Bioinformatics at Brandeis University and the University of Massachusetts.

We believe Mr. Jones' experience in the pharmaceutical industry as well as his extensive understanding of our business, operations, and strategy qualifies him to serve on our board of directors.

John W. Kennedy has served as our Chief Financial Officer and Secretary since August 2018. Previously, Mr. Kennedy served as a business consultant to us from February 2017 to August 2018. Mr. Kennedy has 34 years of experience in management, consulting, and investment banking. From January 1994 to July 2018 Mr. Kennedy ran Kennedy Partners Corp., a boutique merchant banking company where he has assisted numerous companies as their investment banker and CFO raising hundreds of millions of growth capital and completing over a dozen mergers & acquisitions, including several years as the FINRA Managing Principal for two US Broker-Dealers of Brazilian banks operating in the US, Banco FonteCindam SA and Banco Fibra SA. In prior years Mr. Kennedy worked at The Board of Governors of the Federal Reserve System, Peat, Marwick, Mitchell & Co., The Coca-Cola Company, Morgan Stanley & Co., and D.H. Blair Investment Banking & Co., where he served as Managing Director of Investment Banking conducting private equity investments, private equity placements and IPOs for a wide variety of emerging growth companies. He currently has a FINRA Series 82 license. He graduated from Union College with a B.A. in Economics and has an M.B.A. in Finance and International Business Management from New York University.

Key Employees

Erik Volke has served as our Director of Operations since August 2018 and comes with over 16 years of experience in Manufacturing Engineering, Operations management, Quality Assurance, as well as R&D in the fields of biotechnology, medical device instrumentation and FDA ISO 13485 environments. Prior to joining SeqLL, Erik worked in manufacturing engineering, quality, and production management roles during his time at Affymetrix, Helicos Biosciences, Life Technologies, and T2BioSystems. Starting with the company in 2015 as a Senior Manufacturing Engineer, Mr. Volke has managed hardware and consumable manufacturing, service operations, and facilities at SeqLL. He was also instrumental in the design of the second generation tSMS sequencer. He served as the product quality manager while at T2 BioSystems where Mr. Volke managed product quality and documentation to the FDA clearance of that company product from 2011 to 2015. Prior to T2, he managed a team of instrument and consumable manufacturing technicians at Life Technologies to release an Open Array platform to market from 2010 to 2011 and transitioned the facility to a high-volume site. Mr. Volke worked at Helicos BioSciences from 2007 to 2010 where he managed instrument production and continuous hardware improvement. He has a combined 7 years of experience with SeqLL tSMS working at SeqLL as well as Helicos. Prior to Helicos, his experience includes design transfer from engineering to production and product lifecycle management at Affymetrix from 2002 to 2007. Mr. Volke holds a Bachelor of Science degree in Manufacturing Engineering Technology from Wentworth Institute of Technology, Boston MA, 2002.

Abhijeet Shinde, M.S. has served as our Director of Engineering since June 2014. Mr. Shinde's expertise includes system integration, prototyping, motion control, troubleshooting and diagnosis, FDA design control management, and project management. Prior to joining SeqLL, Mr. Shinde worked as Senior Control Systems Engineer at Ivenix, a medical device company developing smart infusion pump, from 2012 to 2014 where he managed control system algorithm design and development for accurate flow control, fault identification and alarm system. From 2010 to 2012, Mr. Shinde worked as Systems Engineering Manager at Cambridge Endo to develop FDA approved surgical instruments for laparoscopic surgery to provide low cost alternative to expensive surgical robots. Mr. Shinde worked at Helicos Biosciences as a Staff Mechanical Engineer and Senior Engineer from 2006 to 2010 where he led system engineering efforts from concept to commercialization phase of the world's first single molecule sequencer 'Heliscope'. He gained in-depth knowledge of single molecule sequencing instrumentation by developing and servicing a variety of sequencers at Helicos Biosciences. Prior to joining Helicos, from 2004 to 2006 Mr. Shinde designed and prototyped a 6-axis robot for automated repair of thin walled aerospace structures using laser deposition technology at H&R Technologies. Mr. Shinde has authored and co-authored multiple peer-reviewed journal publications in the field of control systems and structural health monitoring. Mr. Shinde holds a Master of Science in Mechanical Engineering from Worcester Polytechnic Institute, MA and a Bachelor of Science in Mechanical Engineering from the University of Pune, India.

Non-Employee Directors

William C. St. Laurent has served as a member of our Board of Directors since our incorporation in 2014 and its Chairman since September 2015. Mr. St. Laurent has over thirty years of experience in leading companies, developing and executing strategy, including building businesses from the ground up. Mr. St. Laurent is currently chief executive officer of St. Laurent Properties, LLC in Orlando, Florida, and Vancouver, Washington; president of Consolidated Forest Products, Inc., in Perry, Florida, American Mulch & Groundcover, LLC in Central Florida and The St. Laurent Institute in Vancouver, Washington, where he is also a co-founder and Board member since 2005. Mr. St. Laurent is also co-founder and the chairman of the board of True Bearing Diagnostics in Washington, D.C., a biotech research company. He is also the founder of St. Laurent Land & Cattle Co., Inc., based in Eagle Point, Oregon, which raises beef with no hormones or antibiotics and has 125 acres of vineyards in development. Mr. St. Laurent serves on the board of People's Bank of Commerce of Oregon. Mr. St. Laurent served as vice chairman of Western Bank from 1989 until the bank sold in 1996. Mr. St. Laurent is heavily involved in community and charitable work and is currently Treasurer for the Florida Lacrosse Association and Braveheart Lacrosse Club, where he occasionally coaches youth lacrosse, as well as a board member for the St. Laurent Family Foundation and the City of Vancouver Aviation Advisory Committee. Mr. St. Laurent earned his Bachelor of Science degree from Cornell University.

We believe Mr. St. Laurent's experience in the industry and executive management experience qualifies him to serve on our board of directors.

Douglas Miscoll has served as a member of our Board of Directors since October 2015. Mr. Miscoll is the Managing Member of Ravello Precision Partners, which was founded in 2015, and manages a hedge fund focused on genomic biology companies. Mr. Miscoll founded Ravello Partners LLC, an affiliate of the Ravello Precision Partners, and a registered investment adviser, in 2010. Ravello Partners currently manages discretionary portfolios for families and small institutions focused on biotechnology and genomic medicine companies. From 1999 until 2009, Mr. Miscoll was a Managing Director at Newlight Management, where he was responsible for managing all aspects of two private equity funds and a hedge fund with total assets over \$135 million focused on technology, media and communications companies. He originated and directed the firm's public market investment activities. Previously, from 1994 to 1995, he was a Managing Director of Northgate Ventures, a venture capital fund focused on early stage technology companies. Mr. Miscoll was a founding member of the management team that created K-III Communications, a leveraged build-up in the publishing and information services industries sponsored by Kohlberg Kravis Roberts & Co. Mr. Miscoll received an MBA from Georgetown University, a Graduate Certificate from Templeton College, Oxford University, and a BA from Santa Clara University.

We believe Mr. Miscoll's executive management experience qualifies him to serve on our board of directors.

David Pfeffer has served as a member of our Board of Directors since September 2018. Mr. Pfeffer has over 30 years of experience in diverse roles in financial services; leading companies, developing and executing strategy, building businesses up from the ground floor and driving innovation to grow in today's ultra-competitive and dynamic global economy. Mr. Pfeffer is currently the EVP and CFO of Oppenheimer Funds, a \$250 billion asset manager, since 2004. From 2000 to 2004, Mr. Pfeffer worked as Institutional CFO at Citigroup Asset Management. During 1984 to 2000, Mr. Pfeffer served as CFO and Controller at JP Morgan where he gained significant international experience serving as CFO of JPM Brazil for 5 years in São Paulo and supporting JPM's global business during his 16-year tenure. Since 2009 Mr. Pfeffer has been an Independent Director and the Audit Committee Chairman at ICI Mutual Insurance Co. Mr. Pfeffer is a Certified Public Accountant and Chartered Global Management Accountant and has his FINRA Series 99 Operations Professional license. He graduated Cum Laude from the University of Delaware with a B.S. in Accounting.

We believe Mr. Pfeffer's experience in corporate governance and capital markets qualifies him to serve on our board of directors.

Family Relationships

There are no family relationships between or among any of our directors or executive officers. There are no family relationships among our officers and directors and those of our subsidiaries and affiliated companies.

Board Composition and Classified Board Structure

Our business and affairs are organized under the direction of our board of directors, which currently consists of four members. Upon the closing of this offering, our board of directors will be divided into three classes: Class I (William C. St. Laurent), Class II (David Pfeffer) and Class III (Douglas Miscoll, Daniel Jones). The term of office of the initial Class I directors will expire at the first annual meeting of the stockholders following the closing of this offering, the term of office of the initial Class II directors will expire at the second annual meeting of the stockholders following the closing of this offering, and the term of office of the initial Class III directors will expire at the third annual meeting of the stockholders following the closing of this offering. At each annual meeting of stockholders, commencing with the first annual meeting of stockholders following the closing of this offering, each of the successors elected to replace the directors of a class whose term shall have expired at such annual meeting shall be elected to hold office for a three-year term and until the third annual meeting next succeeding his or her election and until his or her respective successor shall have been duly elected and qualified or until his or her death, resignation, or removal.

The primary responsibilities of our board of directors are to provide oversight, strategic guidance, counseling and direction to our management. Our board of directors meets on a regular basis. Upon completion of this offering, our bylaws will be amended and restated to provide that the authorized number of directors may be changed only by resolution of the board of directors. We have no formal policy regarding board diversity. Our priority in selection of board members is identification of members who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business and understanding of the competitive landscape.

Director Independence

The Nasdaq Marketplace Rules require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq Marketplace Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act.

Under Rule 5605(a)(2) of the Nasdaq Marketplace Rules, a director will only qualify as an "independent director" if, in the opinion of our 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. In order to be considered independent for purposes of Rule 10A-3 of the Exchange Act, 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, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

Our board of directors has reviewed the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that each of William St. Laurent, Doug Miscoll and David Pfeffer is an "independent director" as defined under Rule 5605(a)(2) of the Nasdaq Marketplace Rules. Our board of directors also determined that the directors who will each serve on our audit committee, our compensation committee, and our nominating and corporate governance committee following this offering, satisfy the independence standards for such committees established by the SEC and the Nasdaq Marketplace Rules, as applicable. In making such determinations, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

Board Committees

Our board of directors will establish three standing committees — audit, compensation, and nominating and corporate governance — each of which will operate under a charter approved by our board of directors. Prior to the completion of this offering, copies of each committee's charter will be posted on the Investor Relations section of our website, which is located at www.seqll.com. Each committee has the composition and responsibilities described below. Our board of directors may from time to time establish other committees.

Audit Committee

Our audit committee consists of David Pfeffer who is the chair of the committee and Douglas Miscoll. Our board of directors has determined that each of the members of our audit committee satisfies the Nasdaq Marketplace Rules and SEC independence requirements. The functions of this committee include, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;

- reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
- reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and discussing the statements and reports with our independent auditors and management;
- reviewing with our independent auditors and management significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management is implemented; and
- reviewing and evaluating on an annual basis the performance of the audit committee, including compliance of the audit committee with its charter.

Our board of directors has determined that David Pfeffer qualifies as an “audit committee financial expert” within the meaning of applicable SEC regulations and meets the financial sophistication requirements of the Nasdaq Marketplace Rules. In making this determination, our board of directors has considered Mr. Pfeffer’s extensive financial experience and business background. Both our independent registered public accounting firm and management periodically will meet privately with our audit committee.

Compensation Committee

Our compensation committee will consist of Doug Miscoll and David Pfeffer. Our Board has determined that each of the members of our compensation committee satisfies the Nasdaq Marketplace Rules independence requirements. The functions of this committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) our overall compensation strategy and policies;
- reviewing and approving the compensation, the performance goals and objectives relevant to the compensation, and other terms of employment of our executive officers;
- reviewing and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- reviewing and approving the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- reviewing with management and approving our disclosures under the caption “Compensation Discussion and Analysis” in our periodic reports or proxy statements to be filed with the SEC; and
- preparing the report that the SEC requires in our annual proxy statement.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee will consist of Douglas Miscoll, who is the chair of the committee, and David Pfeffer. Our board of directors has determined that each of the members of this committee satisfies the Nasdaq Marketplace Rules independence requirements. The functions of this committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our board of directors consistent with criteria approved by our board of directors;

- evaluating director performance on our board of directors and applicable committees of our board of directors and determining whether continued service on our board of directors is appropriate;
- evaluating, nominating and recommending individuals for membership on our board of directors; and
- evaluating nominations by stockholders of candidates for election to our board of directors.

Scientific Advisory Board

Our executive team is supported by our Scientific Advisory Board. The members of our Scientific Advisory Board provide scientific advice regarding our tSMS technology to our executive team. Each member of our Scientific Advisory Board was selected based on experience with our tSMS technology and familiarity with our tSMS sequencers. The members of our Scientific Advisory Board are not required to provide any particular services to us and are not currently compensated.

Bradley Bernstein, MD, Ph.D. — Professor of Pathology, Harvard Medical School, HHMI Investigator, Sr. Associate Member of the Broad Institute. SeqLL collaborator and co-inventor on patent application describing single molecule ChIP-Seq application on the HeliScope.

Patrice Milos, Ph.D. — Healthcare Executive, formerly CEO, Claritas Genomics, formerly CSO, Helicos. Dr. Milos was responsible for scientific strategy and applications development at Helicos from 2007 to 2012. She is a vocal advocate of the technology and advises SeqLL on scientific and business strategy.

Philip Kapranov, Ph.D. — Professor and Director, Institute of Genomics at HuaQiao University, Xiamen, China. Former Helicos employee and long-time collaborator of SeqLL, Dr. Kapranov's laboratory purchased the first SeqLL HeliScope in China, which his lab uses for their work on non-coding RNA.

Tim McCaffrey, MD, Ph.D. — Professor of Medicine and Director, Division of Genomic Medicine, George Washington University. Dr. McCaffrey is a close collaborator of SeqLL and has used the tSMS platform to identify several panels of RNA transcripts that are highly predictive biomarkers in the fields of cardiovascular disease, infection and inflammation. He has co-founded a company to commercialize diagnostics based on those discoveries.

Claes Wahlstaedt, MD, Ph.D. — Director, Center for Therapeutic Innovation and Assoc. Dean for Therapeutic Innovation, University of Miami Health System. Dr. Wahlstaedt is an internationally recognized leader in the discovery of novel drug therapies with a long-standing interest in genomics and epigenetics. Dr. Wahlstaedt advises SeqLL on applications development and scientific strategy.

Code of Business Conduct and Ethics

Prior to the closing of this offering, our board of directors will adopt a written code of conduct that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We intend to post on our website a current copy of the code and all disclosures that are required by law or Nasdaq Marketplace Rules concerning any amendments to, or waivers from, any provision of the code.

Board Leadership Structure

Our board of directors is free to select the Chairman of the board of directors and a Chief Executive Officer in a manner that it considers to be in the best interests of our company at the time of selection. Currently, Daniel Jones serves as our Chief Executive Officer and William St. Laurent serves as Chairman of the board of directors. We currently believe that this leadership structure is in our best interests and strikes an appropriate balance between our Chief Executive Officer's responsibility for the day-to-day management of our company and the Chairman of the board of directors' responsibility to provide oversight. As our founder, Mr. St. Laurent provides a strong link between management and our board of directors, which we believe promotes clear communication and enhances strategic planning and implementation of corporate strategies. Our board has not designated a lead independent director.

Our board of directors, as a whole and also at the committee level, plays an active role overseeing the overall management of our risks. Our Audit Committee reviews risks related to financial and operational items with our management and our independent registered public accounting firm. Our board of directors is in regular contact with our Chief Executive Officer and Chief Financial Officer, who report directly to our board of directors and who supervise day-to-day risk management.

Role of Board in Risk Oversight Process

We face a number of risks, including those described under the caption “Risk Factors” contained elsewhere in this prospectus. Our board of directors believes that risk management is an important part of establishing, updating and executing on our business strategy. Our board of directors has oversight responsibility relating to risks that could affect our corporate strategy, business objectives, compliance, operations, and the financial condition and performance. Our board of directors focuses its oversight on the most significant risks facing us and, on our processes, to identify, prioritize, assess, manage and mitigate those risks. Our board of directors receives regular reports from members of our senior management on areas of material risk to us, including strategic, operational, financial, legal and regulatory risks. While our board of directors has an oversight role, management is principally tasked with direct responsibility for management and assessment of risks and the implementation of processes and controls to mitigate their effects on us.

EXECUTIVE COMPENSATION

The following table sets forth total compensation paid to our named executive officers for the years ended December 31, 2018 and 2017. Individuals we refer to as our “named executive officers” include our Chief Executive Officers and our Chief Financial Officer whose salary and bonus for services rendered in all capacities exceeded \$100,000 during the fiscal year ended December 31, 2018. Currently, we do not have employment agreements with any of our executive officers, although we may enter into employment agreements with our officers in the future.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$) ⁽⁴⁾	Non- Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	Total (\$)
Daniel Jones	2018	140,000	0	257,000	0	0	0	397,000
Chief Executive Officer ⁽¹⁾	2017	140,000	0	0	0	0	0	140,000
Elizabeth Reczek	2018	62,000	0	0	0	0	0	62,000
Former Chief Executive Officer ⁽²⁾	2017	155,000	0	0	0	0	0	155,000
John W. Kennedy	2018	74,000	0	195,000	0	0	0	269,000
Chief Financial Officer ⁽³⁾	2017	60,000	0	0	0	0	0	60,000

- (1) Mr. Jones became our CEO on May 28, 2018. Prior to May 28, 2018, he was our President.
- (2) Ms. Reczek served as our CEO in 2017 and up to May 17, 2018 when she resigned from the Company.
- (3) Mr. Kennedy served as a business consultant to us until August 2017 and not as our Chief Financial Officer.
- (4) The amounts reported in this column reflect the aggregate grant date fair value of stock options granted in fiscal 2018 determined in accordance with FASB ASC Topic 718. These amounts reflect our expected accounting expense for these stock options and do not represent the actual economic value that may be realized by each named executive officer. There can be no assurance that these amounts will ever be realized. For information on the assumptions used in valuing these awards, refer to Note 5 to the consolidated financial statements included elsewhere in this Registration Statement on Form S-1.

Through December 31, 2018, we paid \$276,000 in salary to our executive officers. The Company also granted 508,106 stock options to various executives, directors and key employees to purchase 508,106 shares of the Company’s common stock at an exercise price equal to \$2.46 per share.

SeqLL Inc. 2014 Equity Incentive Plan

Our board of directors and our stockholders originally approved our 2014 Equity Incentive Plan, or the 2014 Plan, in April 2014. Our 2014 Plan allows for the grant of equity-based awards to our and our affiliates’ officers, employees, directors and key persons. We are amending and restating our 2014 Plan in connection with this offering. Our board of directors approved the amendment and restatement of our 2014 Plan on September 28, 2018 and our stockholders approved it on April 15, 2019. Our stockholders are expected to approve the amendment and restatement of our 2014 Plan prior to effectiveness of this registration statement. The description below is of our 2014 Plan as amended and restated, except as otherwise noted.

Purpose

The purpose of our 2014 Plan, as amended and restated, is to encourage and enable our and our affiliates’ officers, employees, directors and other key persons (including consultants and prospective employees) upon whose judgment, initiative and efforts we largely depend for the successful conduct of our business to acquire a proprietary interest in our company.

Eligibility

Participants in our 2014 Plan may include full or part-time officers, employees, directors and key persons (including advisors and consultants) of our company or our affiliates who are selected to receive awards from time to time by the administrator in its sole discretion.

Administration

Our 2014 Plan is administered by our compensation committee, or, if at any time our compensation committee is not in existence, our board of directors. In addition, to the extent applicable law permits, our board of directors may delegate any of its authority under our 2014 Plan to another committee or one or more officers, and our compensation committee may delegate any of its authority hereunder to a sub-committee or to one or more officers, except that no such delegation is permitted with respect to awards made to individuals who are subject to Section 16 of the Exchange Act unless the delegation is to another committee consisting entirely of “nonemployee directors” within the meaning of Rule 16b-3 of the Exchange Act. Subject to the provisions of our 2014 Plan, the administrator has the power to administer the plan, including but not limited to, the power to select the eligible officers, employees, directors, and key employees to whom awards are granted; to determine the number of shares to be covered by each award; to determine the terms and conditions of any award and to amend any outstanding award.

Authorized Shares

As of April 10, 2019, prior to the amendment and restatement of our 2014 Plan in connection with this offering, a total of 1,081,081 shares of our common stock were authorized for issuance under our 2014 Plan. Of those shares, 916,208 were subject to outstanding awards and 164,873 shares remained available for future awards under our 2014 Plan. Following the amendment and restatement of our 2014 Plan, there will be a total of 1,891,891 shares reserved for future awards. All of the authorized shares may be issued pursuant to incentive stock options. The shares available for issuance may be authorized but unissued shares or shares reacquired by us and held in its treasury. The share reserve under our 2014 Plan is depleted by the maximum number of shares, if any, that may be issuable under an award as determined at the time of grant. However, awards that may only be settled in cash (determined at the time of grant) do not deplete the share reserve.

If (1) an award lapses, expires, terminates or is cancelled without the issuance of shares, (2) it is determined during or at the conclusion of the term of an award that all or some portion of the shares with respect to which the award was granted will not be issuable on the basis that the conditions for such issuance will not be satisfied, (3) shares are forfeited under an award, (4) shares are issued under any award and we subsequently reacquire them pursuant to rights reserved upon the issuance, (5) an award or a portion thereof is settled in cash, or shares are withheld by us in payment of the exercise price or withholding taxes of an award, then such shares will be recredited to the reserve and may again be used for new awards. However, shares recredited to reserve pursuant to clause (4) in the preceding sentence may not be issued pursuant to incentive stock options.

Adjustments to Shares

If, as a result of any reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar change in our capital stock, the outstanding shares are increased or decreased or are exchanged for a different number or kind of shares or other securities of our company, or additional shares or new or different shares or other securities of our company or other non-cash assets are distributed with respect to such shares or other securities, or, if, as a result of any merger, consolidation or sale of all or substantially all of our assets, the outstanding shares are converted into or exchanged for a different number or kind of securities of our company or any successor entity (or a parent or subsidiary thereof), the administrator will make an appropriate or proportionate adjustment in (1) the maximum number of shares reserved for issuance under our 2014 Plan; (2) the number and kind of shares or other securities subject to any then outstanding awards under our 2014 Plan; and (3) the exercise price for each share subject to any then outstanding stock options. The administrator also may adjust the number of shares subject to outstanding awards and the exercise price and the terms of outstanding awards to take

into consideration material changes in accounting practices or principles, extraordinary dividends, acquisitions or dispositions of stock or property or any other event if it is determined by the administrator that such adjustment is appropriate to avoid distortion in the operation of our 2014 Plan, subject to the limitations described in our 2014 Plan.

Effect of a Sale Event

Unless otherwise provided in an award or other agreement, upon a “sale event,” if the successor or surviving corporation (or parent thereof) so agrees, then, without the consent of any holder of an award (or other person with rights in an award), some or all outstanding awards may be assumed, or replaced with the same type of award with similar terms and conditions, subject to adjustments described in our 2014 Plan, by the successor or surviving corporation (or parent thereof) in the sale event. A “sale event” is generally defined for this purpose as (1) any person becoming the beneficial owner of 50% or more of the combined voting power of our then-outstanding securities (subject to exceptions and other limitations scribed in our 2014 Plan), (2) our stockholders approving a plan of complete liquidation or dissolution of our company, (3) the consummation of (a) an agreement for the sale or disposition of all or substantially all of our assets (other than to certain excluded persons), (b) a merger, consolidation or reorganization of our company with or involving any other corporation (subject to specified exceptions), or (4) a change in the majority of our board of directors that is not approved by a supermajority of the existing board. More detailed descriptions and additional information on limitations relating to each of these sale events is are in our 2014 Plan.

If, after a sale event in which the awards are assumed or replaced, the award holder experiences a termination event as a result of a termination of service without cause, due to death or disability, or as a result of a resignation for good reason, in each case within 24 months after a sale event, then the award holder’s awards will be vested in full or deemed earned in full (assuming target performance, if applicable).

To the extent the awards are not assumed or replaced in the sale event, then, (1) each option will become immediately and fully vested and, unless the administrator determines otherwise, will be canceled on the sale event in exchange for a cash payment equal to the excess of the price paid in the sale event over the exercise price of the option, and all options with an exercise price lower than the price paid in the sale event will be canceled for no consideration, (2) restricted stock and restricted stock units (not subject to performance goals) will be vested in full and settled, along with any accompanying dividend equivalent units, and (3) all awards subject to performance goals with outstanding performance periods will be canceled in exchange for a cash payment equal to the amount that would have been due under the award if performance had been satisfied at the better of target or the performance trend through the sale event.

Solely with respect to awards granted on and after the completion of this offering, and except as otherwise expressly provided in any agreement with an award holder, if the receipt of any payment by an award holder under the circumstances described above would result in the payment by the award holder of any excise tax provided for in Section 280G and Section 4999 of the Code, then the amount of such payment shall be reduced to the extent required to prevent the imposition of such excise tax.

Limit on Director Awards

The maximum value of awards granted during a single fiscal year to any non-employee director, taken together with any cash fees paid during the fiscal year to the non-employee director in respect of the director’s service as a member of our board of directors during such year (including service as a member or chair of any committees of the board), shall not exceed \$800,000 in total value for the first year of service and \$400,000 for future years of service (calculating the value of any such awards based on the grant date fair value of such awards for financial reporting purposes).

Types of Awards

Awards under our 2014 Plan may consist of incentive stock options, non-qualified stock options, restricted stock awards, unrestricted stock awards, restricted stock units, or any combination of those awards. Some provisions of our 2014 Plan relating to these award types are summarized below.

Stock Options

A stock option is an award entitling the recipient to acquire shares, at such exercise price as determined by the administrator (which may not be lower than the fair market value of the underlying shares on the date of grant) and subject to such restrictions and conditions as the administrator may determine at the time of grant. Conditions may be based on continuing employment (or other service relationship) and/or achievement of pre-established performance goals and objectives. Stock options granted under our 2014 Plan may be either non-qualified stock options or incentive stock options. Incentive stock options may be granted only to our employees or employees of our subsidiaries, and must certain requirements specified in our 2014 Plan and the Code. Stock options will become exercisable at such time or times as determined by the administrator at or after the grant date and set forth in the stock option agreement. The administrator may at any time accelerate the exercisability of all or any portion of any stock option.

Restricted Stock

A restricted stock award is a grant (or sale, at such purchase price as determined by the administrator) of shares that are subject to such restrictions and conditions as the administrator may determine at the time of grant. Conditions may be based on continuing employment (or other service relationship) or achievement of pre-established performance goals and objectives. The terms and conditions of each such agreement shall be determined by the administrator.

Unrestricted Stock

The administrator may grant (or sell at par value or such higher purchase price determined by the administrator) unrestricted shares, in respect of past services, in exchange for cancellation of a compensation right, as a bonus, or any other valid consideration, or in lieu of any cash compensation due to such individual.

Restricted Stock Units and Dividend Equivalent Units

The administrator may grant restricted stock units representing the right to receive a future payment of cash, the amount of which is determined by reference to our shares, shares or a combination of cash and shares. The administrator will determine all terms and conditions of an award of restricted stock units, including but not limited to the number granted, in what form they will be settled, whether performance goals must be achieved for the restricted stock units to be earned, the length of any vesting or performance period and the date of payment, and whether the grant will include dividend equivalent units. The administrator will determine all terms and conditions of an award of dividend equivalent units, including whether payment will be made in cash or shares. However, no dividend equivalent units may be paid with respect to restricted stock units that are not earned or that do not become vested.

Termination of Employment or Service

Except as otherwise provided in any award agreement or an award holder's employment offer letter, severance letter or services agreement, or as determined by administrator at the time of the award holder's termination of employment or service:

- If the termination is for cause, the award holder will forfeit all outstanding awards immediately upon termination and will not be permitted to exercise any stock options following termination.
- If the termination is due to the award holder's death or disability (when the award holder could not have been terminated for cause), the award holder will forfeit the unvested portion of any award, and any vested stock options will remain exercisable until the earlier of the original stock option expiration date or 12 months from the date of termination.
- If the termination was for any reason other than cause, death or disability (when the award holder could not have been terminated for cause), the award holder will forfeit the unvested portion of any award, and any vested stock options will remain exercisable until the earlier of the original stock option expiration date or three months from the date of termination.

Term of Plan and Plan Amendments

Our 2014 Plan, as amended and restated, will become effective upon the completion of this offering. Our 2014 Plan will continue until all shares reserved for issuance under our 2014 Plan have been issued, or, if earlier, until such time as the administrator terminates our 2014 Plan pursuant as described below. No incentive stock options may be granted after the ten (10) year anniversary of the date of stockholder approval of the amendment and restatement of our 2014 Plan unless the stockholders have approved an extension.

Our board of directors may, at any time, amend, terminate or discontinue our 2014 Plan, except that our stockholders must approve any amendment to the extent approval is required by Section 16 of the Exchange Act, the Code, the listing requirements of any principal securities exchange or market on which our shares are then traded or any other applicable law. In addition, stockholders must approve any amendment to our 2014 Plan that would materially increase the number of shares reserved (except as permitted by the adjustment provisions of our 2014 Plan) or that would diminish the protections afforded by the anti-repricing provisions of our 2014 Plan.

Any termination of our 2014 Plan will not affect the authority of our board of directors and the administrator to administer outstanding awards or affect the rights of award holders with respect to awards previously granted to them.

Award Amendments, Cancellation and Disgorgement

Subject to the anti-repricing and other requirements of our 2014 Plan, the administrator may modify, amend or cancel any award. However, except as otherwise provided in our 2014 Plan or an award agreement, consent from the award holder is required to any amendment that materially diminishes the holder's rights under the award. Our 2014 Plan includes exceptions to the consent requirement for actions necessary to comply with applicable law or the listing requirements of securities exchanges, to preserve favorable accounting or tax treatment of any award for our company or to the extent the administrator determines that an action does not materially and adversely affect the value of the award or is in the best interest of the affected award holder or any other person who has an interest in the award.

The administrator has full power and authority to terminate or cause an award holder to forfeit an award, and require an award holder to disgorge to us, any gains attributable to the award, if the award holder engages in any action constituting, as determined by the administrator in its discretion, cause for termination, or a breach of any award agreement or any other agreement between the award holder and us or one of our affiliates concerning noncompetition, non-solicitation, confidentiality, trade secrets, intellectual property, non-disparagement or similar obligations. In addition, any awards granted pursuant to our 2014 Plan, and any shares issued or cash paid pursuant to an award, will be subject to any recoupment or clawback policy that is adopted by us from time to time, or any recoupment or similar requirement otherwise made applicable to us by law, regulation or listing standards.

Repricing and Backdating Prohibited

Notwithstanding anything in our 2014 Plan to the contrary, and except for the adjustments provided for in our 2014 Plan, neither the administrator nor any other person may (1) amend the terms of outstanding stock options to reduce the exercise or grant price of such outstanding stock options; (2) cancel outstanding stock options in exchange for stock options with an exercise or grant price that is less than the exercise or grant price of the original stock options; or (3) cancel outstanding stock options with an exercise or grant price above the current fair market value of a share in exchange for cash or other securities. In addition, the administrator may not make a grant of a stock option with a grant date that is effective prior to the date the administrator takes action to approve the award.

Director Compensation

We did not provide any compensation to our non-employee directors for their service on our board of directors during 2017. Our named executive officers who also served on our board of directors did not receive any additional compensation for their service on our board of directors during 2017. For service on our board, beginning September 6, 2018, our directors initially receive stock options for 16,216 shares of common stock and \$1,000 per month as compensation.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information concerning the ownership of our common stock as of May 15, 2019, with respect to: (i) each person, or group of affiliated persons, known to us to be the beneficial owner of more than five percent of our common stock; (ii) each of our directors; (iii) each of our named executive officers; and (iv) all of our current directors and executive officers as a group.

Applicable percentage ownership is based on 8,403,775 shares of common stock outstanding as of May 15, 2019 and reflects the issuance of 3,538,913 shares of common stock issuable upon the conversion of all shares of our outstanding preferred stock and the conversion of our outstanding convertible notes and promissory note consented by the holder of such notes immediately prior to our initial public offering. The percentage of beneficial ownership after this offering assumes the sale and issuance of shares of common stock in this offering and no exercise by the underwriters of their option to purchase additional shares of common stock.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting or investment power with respect to such securities. In addition, pursuant to such rules, we deemed outstanding shares of common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of May 15, 2019. We did not deem such shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the beneficial owners named in the table below have sole voting and investment power with respect to all shares of our common stock that they beneficially own, subject to applicable community property laws.

Name and Address of Beneficial Owner ⁽¹⁾	Beneficial Ownership Prior to Offering		Beneficial Ownership After the Offering	
	Number of Shares	Percentage	Number of Shares	Percentage
5% Stockholders, Executive Officers and Directors				
Daniel Jones ⁽²⁾	2,545,134	26.66%	2,545,134	25.63%
John W. Kennedy ⁽³⁾	135,135	1.58%	135,135	1.37%
Douglas Miscoll ⁽⁴⁾	58,445	*	58,448	*
William C. St. Laurent ⁽⁵⁾	6,173,096	66.86%	6,173,096	62.93%
David Pfeffer ⁽⁶⁾	16,216	*	16,216	*
All directors and executive officers as a group (5 persons)	8,928,026	95.60%	8,778,736	89.93%

* Represents beneficial ownership of less than 1%.

- (1) Except as otherwise noted below, the address for each person or entity listed is c/o SeqLL Inc., 317 New Boston Street, Suite 210, Woburn, Massachusetts 01801.
- (2) Includes stock options for 178,378 shares of common stock issued to Mr. Jones pursuant to our 2014 Plan, 97,297 of such shares vested on November 2, 2018 and 81,081 of such shares shall vest upon our initial public offering.
- (3) Includes stock options for 135,135 shares of common stock issued to Mr. Kennedy pursuant to our 2014 Plan, of which 67,567 vested on November 2, 2018, and 67,568 shall vest upon our initial public offering.
- (4) Includes stock options for 16,216 shares of common stock issued to Mr. Miscoll upon becoming a member of our Board of Directors, which vested on November 2, 2018.
- (5) Includes 1,008,687 shares of common stock and 17,459 warrants issued to St. Laurent Investments, LLC and \$1,265,710 in notes issued in 2018 to 2019 that convert at the consummation of the offering into 408,291 shares of common stock. Mr. William C. St. Laurent is the Managing Partner of St. Laurent Investments, LLC. Also, includes 486,486 and 60,506 warrants issued by the Company on September 30, 2018 to St. Laurent Investments, LLC, 5,211 warrants issued to Mr. St. William C.

Laurent, individually, and 592,824 shares and warrants issued to William C. St. Laurent Descendants' Trust, and 592,824 shares and warrants issued to Georges C. St. Laurent III Descendants' Trust. Also, includes 2,984,592 shares owned by Mr. St. Laurent's family members over which Mr. St. Laurent has voting power and control over. Also, includes 16,216 stock options issued to Mr. William C. St. Laurent upon becoming a member of our Board of Directors, which vested on November 2, 2018. The address of St. Laurent Investments, LLC is 120 NE 136 Avenue, Suite 200, Vancouver, WA 98684.

- (6) Includes options for 16,216 shares of common stock issued to Mr. Pfeffer upon becoming a member of our Board of Directors, which vested on November 2, 2018.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

We do not have a formal written policy for the review and approval of transactions with related parties. Our unwritten policy with regard to transactions with related persons is that all material transactions are to be reviewed by the entire Board for any possible conflicts of interest. The Board is responsible for review, approval, or ratification of “related-person transactions” involving the Company and related persons.

With the exception of the transactions set forth below, the Company was not a party to any transaction (in which the amount involved exceeded the lesser of \$120,000 or 1% of the average of our assets for the last two fiscal years) in which a director, executive officer, holder of more than five percent of our common stock, or any member of the immediate family of any such person has or will have a direct or indirect material interest and no such transactions are currently proposed.

True Bearing Diagnostics, Inc.

True Bearing Diagnostics Inc. (“True Bearing”) is a related party to William C. St. Laurent, the Chairman of our Board of Directors. At December 31, 2018, the Company had receivables due from the True Bearing in the amount of \$128,280, for sequencing services and materials provided to the related party in the ordinary course of business.

For the year ended December 31, 2018 and 2017, the Company had revenues from sales of sequencing kits, sequencing services and materials sales to True Bearing of \$128,280 and \$0, respectively.

For the three months ended March 31, 2019 and 2018, the Company had revenues from sales of sequencing kits, sequencing services and equipment sales to True Bearing, of \$350 and \$0, respectively.

Stonemill Center

Stonemill Center and Floral Finance are related parties to William C. St. Laurent, the Chairman of our Board of Directors. For the year ended December 31, 2018, the Company incurred expenses payable to the Stonemill Center for reimbursement of legal fees amounting to \$16,627, expenses payable to Floral Finance for reimbursement of legal fees amounting to \$9,849.

For the three months ended March 31, 2019 and 2018, the Company incurred expenses payable to the Stonemill Center for reimbursement of legal fees amounting to \$0 and \$16,627, respectively.

St. Laurent Realty, Inc.

St. Laurent Realty, Inc. is a related party to William C. St. Laurent, the Chairman of our Board of Directors. William C. St. Laurent, is also the Chief Executive Officer of St. Laurent Realty, Inc. St. Laurent Realty, Inc. and the Company share certain administrative expenses (administrative and accounting services).

For the years ended December 31, 2018 and 2017, the Company incurred expenses payable to St. Laurent Realty, Inc. for services related to clerical and accounting amounting to \$27,913 and \$250, respectively.

At December 31, 2018 and 2017, the Company had outstanding payables of \$27,913 and \$250 to St. Laurent Realty, Inc.

St. Laurent Institute, Inc.

St. Laurent Institute, Inc. is a related party to William C. St. Laurent, the Chairman of our Board of Directors. William C. St. Laurent, is also the President of St. Laurent Institute, Inc. The Company provides sequencing services to St. Laurent Institute, Inc. in the ordinary course of business.

For the years ended December 31, 2018 and 2017, the Company had revenues from sales of sequencing kits, sequencing services and equipment sales to the St. Laurent Institute of \$0 and \$25,500, respectively.

For the years ended December 31, 2018 and 2017, the Company incurred expenses payable to the St. Laurent Institute for services related to sequence analysis amounting to \$0 and \$113,954, respectively. At December 31, 2018 and 2017, the Company had outstanding payables of \$113,954 in each year to the St. Laurent Institute.

St. Laurent Investments, LLC

On March 6, 2018, St. Laurent Investments, LLC loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On March 22, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 965 shares of common stock.

On April 3, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 965 shares of common stock.

On May 1, 2018, St. Laurent Investments, LLC loaned the Company \$125,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 2,412 shares of common stock.

On May 16, 2018, St. Laurent Investments, LLC loaned the Company \$70,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,351 shares of common stock.

On May 29, 2018, St. Laurent Investments, LLC loaned the Company \$125,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 2,412 shares of common stock.

On June 12, 2018, St. Laurent Investments, LLC loaned the Company \$80,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,544 shares of common stock.

On June 27, 2018, St. Laurent Investments, LLC loaned the Company \$80,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,544 shares of common stock.

On July 10, 2018, St. Laurent Investments, LLC loaned the Company \$90,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,737 shares of common stock.

On July 26, 2018, St. Laurent Investments, LLC loaned the Company \$60,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,158 shares of common stock.

On September 5, 2018, St. Laurent Investments, LLC loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On September 20, 2018, St. Laurent Investments, LLC loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On September 30, 2018, the Company entered into an Exchange Agreement with St. Laurent Investments, LLC (the "SLT") to exchange the outstanding the SLT's promissory notes in the amount of \$3,135,000 for (i) 1,866,071 shares of the Company's Series A-2 Preferred Stock; (ii) warrants equal to 60,506 shares of common stock expiring after September 30, 2023 and at an exercise price of \$3.10; (iii) warrants equal to 486,486 shares of common stock expiring after September 30, 2023 and at an exercise

price of \$3.10 and (iv) a new promissory note in the amount of \$360,710 for the accrued interest for the converted SLT notes as of September 30, 2018, which is convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing.

On October 17, 2018, St. Laurent Investments, LLC loaned the Company \$60,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,157 shares of common stock.

On November 2, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 964 shares of common stock.

On November 9, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 964 shares of common stock.

On November 16, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 964 shares of common stock.

On November 29, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 964 shares of common stock.

On December 21, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 964 shares of common stock.

On December 27, 2018, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 964 shares of common stock.

On January 31, 2019, St. Laurent Investments, LLC loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On February 7, 2019, St. Laurent Investments, LLC loaned the Company \$85,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,640 shares of common stock.

On February 21, 2019, St. Laurent Investments, LLC loaned the Company \$85,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,640 shares of common stock.

On March 20, 2019, St. Laurent Investments, LLC loaned the Company \$175,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 3,378 shares of common stock.

On April 8, 2019, St. Laurent Investments, LLC loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On April 29, 2019, St. Laurent Investments, LLC loaned the Company \$175,000 in a one-year promissory note yielding 10% per annum.

On May 17, 2019, St. Laurent Investments, LLC loaned the Company \$50,000 in a one-year promissory note yielding 10% per annum.

Genomic Diagnostic Technologies, Inc.

On April 11, 2014, the Company issued Genomic Diagnostic Technologies, Inc. ("GDT") 2,376,486 common shares in exchange for GDT's interest in SeqLL, LLC.

On May 30, 2014, GDT invested \$500,000 for 844,594 shares of Series A-1 Preferred Stock.

On January 6, 2015, GDT transferred 1,188,243 shares of common stock to Georges C. St. Laurent III, and another 1,188,243 shares of common stock to Wendy St. Laurent.

On December 31, 2018 GDT transferred 422,297 shares of common stock to Georges C. St. Laurent III Descendants' Trust.

On December 31, 2018 GDT transferred 422,297 shares of common stock to William C. St. Laurent Descendants' Trust.

For the three months ended March 31, 2019 and 2018, the Company incurred expenses payable Genomic Diagnostic Technologies for services related to clerical and accounting amounting to \$16,675 and \$0, respectively.

St. Laurent Family Investments

On May 30, 2014, Georges C. St. Laurent III invested \$10,000 for 16,891 shares of Series A-1 Preferred Stock.

On May 30, 2014, Georges C. St. Laurent Jr. invested \$500,000 for 844,594 shares of Series A-1 Preferred Stock.

On May 30, 2014, Eleanor St. Laurent invested \$100,000 for 168,918 shares of Series A-1 Preferred Stock.

On May 5, 2017, William C. St. Laurent, the Chairman of our Board of Directors, loaned the Company \$200,000 in a one-year promissory note yielding 10% per annum and was issued a warrant to purchase 3,860 shares of common stock.

On June 14, 2017, William C. St. Laurent loaned the Company \$70,000 in a one-year promissory note yielding 10% per annum and was issued a warrant to purchase 1,351 shares of common stock.

William C. St. Laurent Descendants Trust

On February 19, 2016, William C. St. Laurent Descendants Trust invested \$500,000 for 160,875 shares of Series A-2 Preferred Stock.

On December 31, 2018 William C. St. Laurent Descendants' Trust received 422,297 shares of common stock from Genomic Diagnostic Technologies, Inc.

Georges C. St. Laurent III Descendants Trust

On February 19, 2016, Georges C. St. Laurent III Descendants Trust invested \$500,000 for 160,875 shares of Series A-2 Preferred Stock. On December 31, 2018 Georges C. St. Laurent Descendants' Trust received 781,250 shares of common stock from Genomic Diagnostic Technologies, Inc.

Georges C. St. Laurent Trust UAB

On September 12, 2016, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$500,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 9,652 shares of common stock.

On September 14, 2016, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$500,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 9,652 shares of common stock.

On January 25, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$225,000 in one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 4,343 shares of common stock.

On January 30, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$25,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 482 shares of common stock.

On February 24, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$250,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 4,826 shares of common stock.

On May 4, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$200,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 3,860 shares of common stock.

On June 14, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$70,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,351 shares of common stock.

On October 13, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$1,000,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 19,304 shares of common stock.

On November 28, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On December 12, 2017, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On January 9, 2018, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$200,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 3,861 shares of common stock.

On February 6, 2018, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$100,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 1,930 shares of common stock.

On March 19, 2018, Georges C. St. Laurent Trust UAB (transferred to St. Laurent Investments, LLC on March 21, 2018) loaned the Company \$105,000 in a one-year convertible promissory note yielding 10% per annum and was issued a warrant to purchase 2,027 shares of common stock.

John W. Kennedy

On September 15, 2018, we executed an agreement to guarantee amounts owed by John W. Kennedy, our Chief Financial Officer, on a lease for Mr. Kennedy's housing. The annual rental amount due on the lease is \$32,400 and is paid by Mr. Kennedy.

Daniel Jones

On December 13, 2018, Daniel Jones, CEO, made a \$6,500 short-term, non-interest bearing loan to the Company. The loan was repaid on January 3, 2019. In March 2019, he made a \$14,000 short-term, non-interest bearing loan to the Company which is still outstanding.

DESCRIPTION OF CAPITAL STOCK

The following is a summary of the rights of our common stock and preferred stock, certain provisions of our amended and restated certificate of incorporation and our amended and restated bylaws as they will be in effect upon completion of this offering and applicable law. This summary does not purport to be complete and is qualified in its entirety by the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, copies of which have been or will be filed as exhibits to the registration statement of which this prospectus is a part.

Authorized Capital Stock

Immediately prior to the completion of this offering and upon the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of 80,000,000 shares of common stock, par value \$0.00001 per share, and 20,000,000 shares of undesignated preferred stock, par value \$0.00001 per share.

Common Stock

As the date of this prospectus, and after giving effect to the conversion of all of our outstanding preferred stock, convertible notes and promissory note into common stock in connection with this offering, there will be 8,403,775 shares of common stock issued and outstanding and there were 22 holders of record of our common stock, 596,396 shares of common stock issuable upon exercise of outstanding warrants, and 916,208 shares of common stock issuable upon exercise of outstanding stock options.

Under the terms of our amended and restated certificate of incorporation, holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. The holders of outstanding shares of common stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends at such times and in such amounts as our board of directors from time to time may determine. Our common stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of our company, the assets legally available for distribution to stockholders are distributable ratably among the holders of our common stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

As the date of this prospectus, there are 3,125,000 outstanding shares of Series A-1 preferred stock, which will be converted into 1,689,183 shares of common stock immediately prior to the closing of this offering, and 2,666,665 outstanding shares of Series A-2 preferred stock, which will be converted into 1,441,439 shares of common stock immediately prior to the closing of this offering.

Upon the closing of this offering, we will have no shares of our preferred stock outstanding, but our board of directors will be authorized, without further action by the stockholders, to create and issue one or more series of preferred stock and to fix the rights, preferences and privileges thereof. Among other rights, our board of directors may determine, without further vote or action by our stockholders:

- the number of shares constituting the series and the distinctive designation of the series;
- the dividend rate on the shares of the series, whether dividends will be cumulative, and if so, from which date or dates, and the relative rights of priority, if any, of payment of dividends on shares of the series;
- whether the series will have voting rights in addition to the voting rights provided by law and, if so, the terms of the voting rights;
- whether the series will have conversion privileges and, if so, the terms and conditions of conversion;

- whether or not the shares of the series will be redeemable or exchangeable, and, if so, the dates, terms and conditions of redemption or exchange, as the case may be;
- whether the series will have a sinking fund for the redemption or purchase of shares of that series, and, if so, the terms and amount of the sinking fund; and
- the rights of the shares of the series in the event of our voluntary or involuntary liquidation, dissolution or winding up and the relative rights or priority, if any, of payment of shares of the series.

Although we presently have no plans to issue any shares of preferred stock upon completion of the offering, any future issuance of shares of preferred stock, or the issuance of rights to purchase preferred shares, could, among other things, decrease the amount of earnings and assets available for distribution to the holders of common stock or could adversely affect the rights and powers, including voting rights, of the holders of the common stock.

Options

As of May 15, 2019, we had outstanding options to purchase an aggregate 916,208 shares of our common stock, with a weighted-average exercise price of \$1.77 per share all of which are issued under the 2014 Plan.

Warrants

On February 19, 2016, we issued a warrant to purchase up to 9,652 shares of our common stock to William C. St. Laurent Descendants Trust at an exercise price of \$3.10 per share, which is exercisable until February 19, 2021. In addition, on February 19, 2016, we issued a warrant to purchase up to 9,652 shares of our common stock to Georges C. St. Laurent III Descendants Trust at an exercise price of \$3.10 per share, which is exercisable through February 19, 2021.

On March 25, 2016, we issued a warrant to purchase up to 1,447 shares of our common stock to TempleSide Holdings Ltd. at an exercise price of \$3.10 per share, which is exercisable through March 25, 2021. In addition, on March 25, 2016, we issued a warrant to purchase up to 2,895 shares of our common stock to Tara Partners Fund LLC at an exercise price of \$3.10 per share, which is exercisable through March 25, 2021.

On September 12, 2016, we issued a warrant to purchase up to 9,652 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through September 12, 2021. On September 14, 2016, we issued a warrant to purchase up to 9,652 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through September 14, 2021.

On January 27, 2017, we issued a warrant to purchase up to 4,343 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through January 27, 2022. On February 22, 2017, we issued a warrant to purchase up to 482 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through February 22, 2022. On February 27, 2017, we issued a warrant to purchase up to 4,825 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through February 27, 2022. On May 4, 2017, we issued a warrant to purchase up to 3,860 shares of our common stock to William C. St. Laurent, which warrants are exercisable through May 4, 2022. On June 14, 2017, we issued a warrant to purchase up to 1,351 shares of our common stock to William C. St. Laurent, which warrants are exercisable through June 14, 2022. On November 27, 2017, we issued a warrant to purchase up to 1,930 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through November 27, 2022, and on December 13, 2017, we issued a warrant to purchase up to 1,930 shares of our common stock to the Georges C. St. Laurent Trust, which is exercisable through December 13, 2022.

From January 9, 2018 to September 19, 2018 we received proceeds aggregating \$1,435,000 pursuant to the issuance of convertible promissory notes (the "Notes"), and five-year warrants for the purchase of 27,699 shares of our common stock (the "Warrants"). The Notes bear interest at 10% per annum. On September 30, 2018, the Notes along with all outstanding prior senior convertible notes from the same lender totaling \$3,135,000 were exchanged for (i) 1,866,071 shares of Series A-2 Preferred Stock; (ii) a warrant for 486,486 shares of common stock exercisable at \$2.16 per share, which is exercisable through

September 30, 2023; (iii) a warrant for 60,506 shares of common stock exercisable at \$3.10 per share, which is exercisable through September 30, 2023 and (iv) a 1-year promissory note bearing 10% interest per annum and payable in cash upon a public offering in the amount of \$360,710 for the accrued interest under the Notes as of September 30, 2018, convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing.

On July 27, 2018, we issued a warrant to purchase up to 3,088 shares of our common stock to Terranova Capital Partners, Inc. at an exercise price of \$3.10 per share, which is exercisable through July 27, 2023.

On October 17, 2018, we issued a warrant to purchase up to 1,157 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through October 16, 2023.

On November 2, 2018, we issued a warrant to purchase up to 964 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through November 1, 2023.

On November 9, 2018, we issued a warrant to purchase up to 964 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through November 8, 2023.

On November 16, 2018, we issued a warrant to purchase up to 964 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through November 15, 2023.

On November 29, 2018, we issued a warrant to purchase up to 964 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through November 28, 2023.

On December 21, 2018, we issued a warrant to purchase up to 964 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through December 20, 2023.

On December 27, 2018, we issued a warrant to purchase up to 964 shares of our common stock to the St. Laurent Investments, LLC at an exercise price equal to the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through December 26, 2023.

On January 31, 2019, we issued a warrant to purchase up to 1,930 shares of our common stock to St. Laurent Investments, LLC at an exercise price the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through January 30, 2024.

On February 7, 2019, we issued a warrant to purchase up to 1,640 shares of our common stock to St. Laurent Investments, LLC at an exercise price the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through February 6, 2024.

On February 21, 2019, we issued a warrant to purchase up to 1,640 shares of our common stock to St. Laurent Investments, LLC at an exercise price the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through February 20, 2024.

On March 20, 2019, we issued a warrant to purchase up to 3,378 shares of our common stock to St. Laurent Investments, LLC at an exercise price the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through March 19, 2024.

On April 8, 2019, we issued a warrant to purchase up to 1,930 shares of our common stock to St. Laurent Investments, LLC at an exercise price the lower of \$3.10 per share or 80% of the share price paid by the purchasers of equity securities offered in the Company's next equity financing, which is exercisable through April 7, 2024.

Underwriters' Warrants

We are registering the offer and sale of Underwriters' Warrants (and the underlying shares of common stock) to purchase up to a total of 67,500 shares of our common stock. See "Underwriting" beginning on page [98](#) for a description of the Underwriters' Warrants.

Registration Rights

Demand Registration Rights

Pursuant to our amended and restated investors' rights agreement, beginning 180 days after of our initial public offering and subject to certain terms of limitation, parties to such agreement holding at least 50% of the registrable securities, (as defined therein as (i) common stock issuable or issued upon conversion of our preferred stock; (ii) common stock issued or issuable upon conversion and/or exercise of any other securities of the Company acquired by investors after the date hereof; (iii) common stock issuable or issued upon the exercise of certain warrants to purchase shares of our common stock issued to certain investors and (iv) any common stock 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) can request that we file a registration statement with respect to not less than \$5 million in value of registrable securities. Under specified circumstances, we also have the right to defer filing of a requested registration statement for a period of 90 days.

Pursuant to the Underwriters' Warrants, the underwriters can request that we file up to two registration statements registering all or a portion of the common stock issued or issuable upon exercise of such Underwriters' Warrant. Under specified circumstances, we have the right to defer filing of a requested registration statement for a period of not more than 60 days, which right may not be exercised more than once during any period of 12 consecutive months. These registration rights are subject to additional conditions and limitations, including that the underwriters are required to pay all of the expenses for the second demand registration.

Form S-3 Demand Registration Rights

Pursuant to our amended and restated investors' rights agreement, subject to certain terms of limitation, parties to such agreement holding at least 20% of the registrable securities have the right to demand that we file additional registration statements, including a shelf registration statement, for such holders on Form S-3. Under specified circumstances, we also have the right to defer filing of a requested registration statement for a period of 90 days.

Piggyback Registration Rights

Pursuant to our amended and restated investors' rights agreement and Underwriters' Warrants, whenever we propose to file a registration statement under the Securities Act, other than with respect to a registration related to employee benefit or similar plans, or corporate reorganizations or other transactions under Rule 145 under the Securities Act, the holders of registrable securities are entitled to notice of the registration and have the right to include their registrable securities in such registration. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement, including the right to exclude all such stockholder shares from this offering.

Expenses of Registration

We are required to pay expenses except for underwriting discounts, selling commissions, and stock transfer taxes relating to any Form S-3 or piggyback registration by the holders of registerable securities under the amended and restated investors' rights agreement, subject to certain limitations.

Expiration of Registration Rights

The registration rights described under our amended and restated investors' rights agreement will expire for each holder at such time (i) the company liquidates, (ii) Rule 144 or another similar exemption under the Securities Act is available for the sale of such investors' shares without limitation during a three-month period without registration, and (iii) the second anniversary of this offering.

Limitation of Liability and Indemnification Matters

Our amended and restated certificate of incorporation, which will become effective upon the completion of this offering, will limit the liability of our directors for monetary damages for breach of their fiduciary duties, except for liability that cannot be eliminated under the DGCL. Consequently, our directors will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except liability for any of the following:

- any breach of their duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases, or redemptions as provided in Section 174 of the DGCL; or
- any transaction from which the director derived an improper personal benefit.

Our amended and restated bylaws will also provide that we will indemnify our directors and executive officers and may indemnify our other officers and employees and other agents to the fullest extent permitted by law. Our amended and restated bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity, regardless of whether our amended and restated bylaws would permit indemnification. We plan on obtaining directors' and officers' liability insurance.

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. 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 under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and may be 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.

Indemnification of Officers and Directors

Our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective in connection with the completion of this offering, will provide that we will indemnify each of our directors and officers to the fullest extent permitted by the DGCL.

To the best of our knowledge, during the past two fiscal years, other than as set forth above, there were no material transactions, or series of similar transactions, or any currently proposed transactions, or series of similar transactions, to which we were or are to be a party, in which the amount involved exceeds the lesser of (A) \$120,000 or (B) one percent of our average total assets at year-end for the last two completed

fiscal years, and in which any director or executive officer, or any security holder who is known by us to own of record or beneficially more than 5% of any class of our common stock, or any member of the immediate family of any of the foregoing persons, has an interest (other than compensation to our officers and directors in the ordinary course of business).

Delaware Anti-Takeover Law and Provisions of Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Some provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Law

We are subject to Section 203 of the DGCL. Section 203 generally prohibits a publicly traded corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- 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 the corporation outstanding at the time the transaction commenced, excluding specified shares; or
- at or subsequent to the date of the transaction, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 $\frac{2}{3}$ % of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a “business combination” to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, lease, exchange, mortgage, pledge, transfer or other disposition of 10% or more of the assets of the corporation to or with the interested stockholder;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an “interested stockholder” as any person that is:

- the owner of 15% or more of the outstanding voting stock of the corporation;

- an affiliate or associate of the corporation who was the owner of 15% or more of the outstanding voting stock of the corporation at any time within three years immediately prior to the relevant date; or
- the affiliates and associates of the above.

Under specific circumstances, Section 203 makes it more difficult for an “interested stockholder” to effect various business combinations with a corporation for a three-year period, although the stockholders may, by adopting an amendment to the corporation’s certificate of incorporation or bylaws, elect not to be governed by this section, effective 12 months after adoption.

Our amended and restated certificate of incorporation and amended and restated bylaws do not exclude us from the restrictions of Section 203. We anticipate that the provisions of Section 203 might encourage companies interested in acquiring us to negotiate in advance with our board of directors since the stockholder approval requirement would be avoided if a majority of the directors then in office approve either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder.

Undesignated Preferred Stock

The ability of our board of directors, without action by the stockholders, to issue up to 20,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our board of directors could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Stockholder Meetings

Our amended and restated bylaws provide that a special meeting of stockholders may be called only by our chairman of the board, chief executive officer or president, or by a resolution adopted by a majority of our board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of Stockholder Action by Written Consent

Our amended and restated certificate of incorporation and amended and restated bylaws do not allow stockholders to act by written consent without a meeting.

Removal of Directors

Our amended and restated certificate of incorporation provides that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of the total voting power of all of our outstanding voting stock then entitled to vote in the election of directors.

Staggered Board

Our amended and restated certificate of incorporation provides for a staggered board of directors whereby directors serve staggered three-year terms.

Stockholders Not Entitled to Cumulative Voting

Our amended and restated certificate of incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Choice of Forum

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative form, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware Statutory or Common law: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us arising pursuant to any provision of the DGCL or our amended and restated certificate of incorporation or amended and restated bylaws; or (5) any action asserting a claim governed by the internal affairs doctrine. Our amended and restated certificate of incorporation also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum provision contained in our amended and restated certificate of incorporation is inapplicable or unenforceable if it is challenged in a proceeding or otherwise. This choice of forum provision has important consequences to our stockholders.

Amendment Provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue preferred stock, would require approval by holders of at least 66 $\frac{2}{3}$ % of the total voting power of all of our outstanding voting stock.

The provisions of the DGCL, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Elimination of Monetary Liability for Officers and Directors

Our amended and restated certificate of incorporation incorporates certain provisions permitted under the DGCL relating to the liability of directors. The provisions eliminate a director's liability for monetary damages for a breach of fiduciary duty. Our amended and restated certificate of incorporation also contains provisions to indemnify the directors, officers, employees or other agents to the fullest extent permitted by the DGCL. We believe that these provisions will assist us in attracting and retaining qualified individuals to serve as directors.

Exchange Listing

We have applied to list our common stock on the Nasdaq Capital Market under the trading symbol "SQL."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer, LLC. The transfer agent and registrar's address is 18 Lafayette Place, Woodmere, NY 11598.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market following this offering, or the possibility of such sales occurring, could cause the prevailing market price of our common stock to fall and impede our ability to raise capital through an offering of equity securities.

Upon the completion of this offering, we will have a total of 9,753,775 shares of common stock outstanding based upon 8,403,775 shares outstanding as of the date of this prospectus, assuming an initial public offering price of \$5.90 per share and assuming no exercise by the underwriters' option to purchase additional shares of common stock, and no exercise or conversion of outstanding options, Warrants or Notes to purchase shares of common stock prior to completion of this offering. All of the shares sold in this offering will be freely tradable unless held by our "affiliates," as defined in Rule 144 under the Securities Act. Shares purchased by affiliates may generally only be sold pursuant to an effective registration statement under the Securities Act or in compliance with Rule 144.

Lock-Up Agreements

We and all of our executive officers, directors and other certain holders of our outstanding common stock have entered into "lock-up" agreements. As a result of these contractual restrictions and the provisions of Rules 144 and 701 promulgated under the Securities Act, 9,916,379 common stock shares (including shares issued upon exercise of warrants and options) will be eligible for sale in the public market upon expiration of lock-up agreements 180 days after the date of this prospectus, subject, in certain circumstances to the volume, manner of sale and other limitations under Rule 144 and Rule 701, assuming the exercise of all outstanding options and warrants. The representatives may, in their discretion, release any of the securities subject to these lock-up agreements at any time.

Rule 144

In general, under Rule 144, as amended, a person (or persons whose shares are required to be aggregated) who is not deemed to have been an affiliate of ours at any time during the three months preceding a sale, and who has beneficially owned our common stock for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell those shares, subject only to the availability of current public information about us and provided that we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. If such person has held our shares for at least one year, such person can resell such shares under Rule 144(b)(1) without regard to any Rule 144 restrictions, including the 90-day public company and current public information requirements.

A person (or persons whose shares are aggregated) who is deemed to be an affiliate of ours and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately 97,508 shares immediately after this offering (assuming no exercise of the underwriters' option to purchase additional shares and no exercise or conversion of outstanding options, Notes or Warrants); or
- the average weekly trading volume of our common stock on the Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales are also subject to certain manner of sale provisions, notice requirements and the availability of current public information about us.

Rule 701

Under Rule 701 under the Securities Act, shares of our common stock acquired upon the exercise of currently outstanding options or pursuant to other rights granted under our stock plan may be resold, by:

- persons, other than affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject only to the manner-of-sale provisions of Rule 144; and
- our affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject to the manner-of-sale and volume limitations, current public information and filing requirements of Rule 144, in each case, without compliance with the six-month holding period requirement of Rule 144.

Notwithstanding the foregoing, our Rule 701 shares held by our executive officers and directors are subject to lock-up agreements as described above and in the section titled “Underwriting” and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Form S-8 Registration Statement

We intend to file a registration statement on Form S-8 under the Securities Act after the closing of this offering to register the shares of our common stock that are issuable pursuant to our Amended 2014 Plan. The registration statement is expected to be filed and become effective as soon as practicable after the completion of this offering. Accordingly, shares registered under the registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations applicable to affiliates and the lock-up arrangement described above, if applicable.

Registration Rights

After the closing of this offering, the holders of the Warrants, and Underwriters’ Warrants may convert and exercise their security instrument for shares of our common stock. These holders will be entitled to certain rights with respect to the registration of such shares under the Securities Act. If we register any securities for public sale other than for our initial public offering, these holders will have the right to include their shares in the registration statement. In an underwritten offering, we have agreed to use our best efforts to cause the shares to be included in the underwriting on the same terms and conditions as the securities being sold through any such underwriters.

Pursuant to our amended and restated investors’ rights agreement, subject to certain terms of limitation, parties to such agreement holding at least 20% of the registrable securities have the right to demand that we file additional registration statements, including a shelf registration statement, for such holders on Form S-3. Under specified circumstances, we also have the right to defer filing of a requested registration statement for a period of 90 days.

Pursuant to our amended and restated investors’ rights agreement and Underwriters’ Warrants, whenever we propose to file a registration statement under the Securities Act, other than with respect to a registration related to employee benefit or similar plans, or corporate reorganizations or other transactions under Rule 145 under the Securities Act, the holders of registrable securities are entitled to notice of the registration and have the right to include their registrable securities in such registration. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement, including the right to exclude all such stockholder shares from this offering.

**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 consequences 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 United States Internal Revenue Code of 1986, as amended, or 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, or 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 or under U.S. federal gift and estate tax rules, except to the limited extent set forth below. In addition, this discussion does not address tax considerations applicable to an investor’s particular circumstances or to 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;
- persons subject to the alternative minimum tax or the tax on net investment income;
- tax-exempt organizations;
- pension plans and tax-qualified retirement plans;
- controlled foreign corporations, passive foreign investment companies 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 five percent of our capital stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, “straddle,” “conversion transaction” or other risk reduction transaction;
- 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 or:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States or any political subdivision thereof, or otherwise treated as such 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 (1) 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 (2) that has made a valid election under applicable Treasury Regulations to be treated as a U.S. person.

If you are an individual, you are a resident alien if you are a lawful permanent resident of the U.S. (e.g., a green card holder) and you may, in many cases, be deemed to be a resident alien, as opposed to a nonresident alien, by virtue of being present in the U.S. for at least 31 days in the calendar year and for an aggregate of at least 183 days during a three-year period ending in and including the current calendar year. For these purposes, all the days present in the U.S. in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year are counted. Resident aliens are subject to U.S. federal income tax as if they are U.S. citizens. Such an individual is urged to consult his or her own tax advisor regarding the U.S. federal income tax consequences of the purchase, ownership or disposition of our common stock

Distributions

As described in the section of this prospectus titled “Dividend Policy,” we have never declared or paid cash dividends on our common stock, and we do not anticipate paying any dividends on our common stock 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 constitute a return of capital and will first reduce your basis in our common stock, but not below zero, and then will be treated as gain from the sale of stock. See “— Gain on Disposition of Common Stock.”

Subject to the discussions below on effectively connected income and Foreign Account Tax Compliance Act, or FATCA, withholding, 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 receive a reduced treaty rate, you must provide the applicable withholding agent with an IRS Form W-8BEN or W-8BEN-E or other appropriate version of IRS Form W-8 certifying qualification for the reduced rate. A non-U.S. holder of shares of our common stock eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If the non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder’s behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to the applicable withholding 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, such dividends are attributable to a permanent establishment or fixed base maintained by you in the United States) are generally exempt from the 30% U.S. federal withholding tax, subject to the discussion below on backup withholding and FATCA withholding. In order to obtain this exemption, you must provide the applicable withholding agent with a properly executed IRS Form W-8ECI or other applicable IRS Form W-8 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 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 below regarding backup withholding and FATCA withholding, you generally will not be required to pay 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.

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 interests relative to the fair market value of our U.S. and worldwide real property interests plus our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our common stock is regularly traded on an established securities market, your common stock will be treated as U.S. real property interests only if you actually (directly or indirectly) or constructively hold more than five percent of such regularly traded common stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock.

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 graduated 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 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.

Federal Estate Tax

Our common stock beneficially owned by an individual who is not a citizen or resident of the United States (as defined for U.S. federal estate tax purposes) at the time of his or her death will generally be includable in the decedent’s gross estate for U.S. federal estate tax purposes. Such stock, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax treaty provides otherwise.

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 be subject to information reporting and 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 and information reporting may apply if the applicable withholding 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 person's 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, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act (FATCA)

Provisions of the Code commonly referred to as FATCA, Treasury Regulations issued thereunder and official IRS guidance generally impose a U.S. federal withholding tax of 30% on dividends on, and 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 IRS 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 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 obligations under FATCA generally apply to dividends on our common stock and under current transition rules are expected to apply to the payment of gross proceeds of a sale or other disposition of our common stock made on or after January 1, 2019. 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 are encouraged to 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 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

WallachBeth Capital, LLC is acting as representative of the several underwriters of the offering, and we have entered into an underwriting agreement on the date of this prospectus, with them as underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters and the underwriters have agreed to purchase from us, at the public offering price per share less the underwriting discounts set forth on the cover page of this prospectus.

The underwriting agreement provides that the underwriters are obligated to purchase all the shares of common stock in the offering if any are purchased, other than those shares covered by the over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

Over-allotment Option

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel including the validity of the shares, and subject to other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The offering of the shares by the underwriters is also subject to the underwriters' right to reject any order in whole or in part.

We have granted to the underwriters a 45-day option to purchase on a pro rata basis up to 202,500 additional shares (15% of the shares of common stock sold in the offering) at the initial public offering price less the underwriting discounts and commissions. The option may be exercised only to cover any over-allotments of our common stock.

Discounts and Commissions

The underwriters propose to offer the shares of common stock initially at the public offering price on the cover page of this prospectus and to selling group members at that price less a selling concession of \$ per share equal to 9% of the public offering price. The underwriters and selling group members may allow a discount of \$ per share on sales to other broker/dealers. After the initial public offering the representatives may change the public offering price and concession and discount to broker/dealers.

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriters of their over-allotment option.

	Per Share	Total Without Over-Allotment Option	Total with Over-Allotment Option
Public offering price	\$	\$	\$
Underwriting discount (9%)	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

We estimate that our out of pocket expenses for this offering (not including any underwriting discounts and commissions) will be approximately \$875,000. The underwriters will not confirm sales to any accounts over which they exercise discretionary authority without first receiving a written consent from those accounts.

We will bear all of our fees, disbursements and expenses in connection with this offering. The underwriting agreement, however, provides that in the event the offering is terminated, any advance expense deposits paid to the underwriters will be returned to the extent that offering expenses are not actually incurred in accordance with FINRA Rule 5110(f)(2)(C).

We have agreed to pay the underwriters' non-accountable expenses allowance equal to 1% of the gross proceeds of the public offering of the shares (including shares that we may sell to the underwriters to cover over-allotments). We have also agreed to pay for a certain amount of the underwriters' accountable expenses including actual accountable road show expenses for the offering, the cost associated with the underwriters' use of book-building and compliance software for the offering, reasonable and documented

fees and disbursements of the underwriters' counsel up to an amount of \$75,000 (which maximum shall apply solely to such fees and disbursements of counsel and not to other accountable fees and expenses), background checks of our officers and directors, and other offering related expenses up to \$125,000, including the fees and disbursements of the underwriters' counsel.

We have agreed to issue to the underwriters the Underwriters' Warrants exercisable for 67,500 shares of common stock (5% of the shares of common stock sold in the offering) to be allocated in full to the underwriters or their designated affiliates. The Underwriters' Warrants are not included in the securities being sold in this offering. The shares issuable upon exercise of the Underwriters' Warrants are identical to those offered by this prospectus.

The Underwriters' Warrants will be exercisable at a per share price of \$7.38, which equals 125% of the public offering price, beginning six months after the effective date of the registration statement of which this prospectus is a part, which we refer to as the effective date, and for a period of five years from the effective date. As is customary, the number of shares to be issued under the Underwriters' Warrants and the exercise price will be subject to adjustments in certain events, including stock splits, stock dividends, and recapitalizations. Such warrants will be exercisable at any time, and from time to time, in whole or in part, commencing 180 days from the effective date of this offering. Such warrants and the common stock underlying such warrants will be deemed compensation by FINRA and will therefore be subject to a 180-day lock-up pursuant to Rule 5110(g)(1) of FINRA. The underwriter (or permitted assignees under Rule 5100(g)(1)) will not sell, transfer, assign, pledge or hypothecate such warrants or the securities underlying such warrants, nor will it engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of such warrants or the underlying securities for a period of 180 days from the date of effectiveness of the registration statement. The Underwriters' Warrants may not be transferred, assigned, sold or hypothecated nor will the underwriters be able to engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the underwriters' warrants or the common stock underlying the Underwriters' Warrants for a period of six months after the effective date except to officers, partners or registered representatives of the underwriter as permitted by FINRA or to dealers participating in the offering, all in accordance with Rule 5110(g)(1) of FINRA. The Underwriters' Warrants and shares of common stock underlying the Underwriters' Warrants are deemed compensation by FINRA. The terms and number of shares underlying the Underwriters' Warrants shall be modified if necessary to comply with FINRA rules or regulations.

Pursuant to the Underwriters' Warrants, the underwriters can request that we file up to two registration statements registering all or a portion of the common stock issued or issuable upon exercise of such Underwriters' Warrant. Under specified circumstances, we have the right to defer filing of a requested registration statement for a period of not more than 60 days, which right may not be exercised more than once during any period of 12 consecutive months. These registration rights are subject to additional conditions and limitations, including that the underwriters are required to pay all of the expenses for the second demand registration. We are registering the offer and sale of the Underwriters' Warrants (and underlying shares of common stock) under the registration statement of which this prospectus is a part.

Right of First Refusal

Upon the closing of this offering, we will grant to WallachBeth Capital, LLC the right of first negotiation to co-manage any public underwriting or private placement of debt or equity securities (excluding (i) shares issued under any compensation or stock option plan approved by the stockholders of our company, (ii) shares issued in payment of the consideration for an acquisition or as part of strategic partnerships and transactions and (iii) conventional banking arrangements and commercial debt financing) of our company or any subsidiary or successor of our company, with the underwriters receiving the right to underwrite or place a number of the securities to be sold therein having an aggregate purchase price therein equal to a minimum of the aggregate purchase price of the shares offered by us in this offering (excluding any shares that we may sell to the underwriters to cover over-allotments), until twelve months after completion of this offering.

Lock-up Agreements

We have agreed that we will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock, or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, without the prior written consent of the representatives for a period of 180 days after the date of this prospectus, except (a) issuances pursuant to the conversion or exchange of convertible or exchangeable securities (including cashless or “net” exercises, other than broker-assisted cashless exercises) or the exercise of warrants or options, in each case outstanding on the date of this prospectus and described in this prospectus, (b) grants of employee stock options pursuant to the terms of a plan described in this prospectus, (c) issuances pursuant to the exercise of such options, or (d) satisfaction of certain existing contractual obligations.

All of our executive officers, directors and other certain holders of our capital stock and securities convertible into or exchangeable for our capital stock have agreed that, subject to certain exceptions, for a period of 180 days after the date of this prospectus, they will not, without the prior written consent of the representatives, directly or indirectly, offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale, or otherwise dispose of or hedge any of our shares of common stock, any options or warrants to purchase our shares of common stock, or any securities convertible into, or exchangeable for or that represent the right to receive our shares of common stock. The representatives may, in their discretion, release any of the securities subject to these lock-up agreements at any time. Upon the expiration of the lock-up period, all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Pricing of the Offering

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be negotiated between us and the representatives. In determining the initial public offering price of our common stock, the representatives will consider:

- the prospects for the industry in which we compete;
- our financial information;
- the ability of our management and our business potential and earning prospects;
- the prevailing securities markets at the time of this offering; and
- the recent market prices of, and the demand for, publicly traded shares of generally comparable companies.

We intend to apply to list the shares of our common stock on the Nasdaq Capital Market under the symbol “SQL.”

Indemnification

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act, liabilities arising from breaches of the representations and warranties contained in the underwriting agreement and to contribute to payments that the underwriters may be required to make for these liabilities.

Price Stabilization

In connection with the offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the

underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.

- Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the 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 over-allotment option. If the underwriters sell more shares than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representative to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids 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 the 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. These transactions may be effected on the Nasdaq or otherwise and, if commenced, may be discontinued at any time.

Electronic Distribution

A prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters, or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations.

LEGAL MATTERS

Certain legal matters with respect to the shares of common stock offered hereby will be passed upon by Foley & Lardner LLP, Jacksonville, Florida. Certain other legal matters will be passed upon for the underwriters by Carmel, Milazzo & DiChiara LLP, New York, New York.

EXPERTS

The financial statements of SeqLL Inc. as of December 31, 2018 and 2017 and for each of the years then ended have been audited by Wolf & Company, P.C., an independent registered public accounting firm, as stated in their report appearing herein. Such financial statements are included in this prospectus and registration statement in reliance upon the report (which report includes an explanatory paragraph relating to our ability to continue as a going concern) of Wolf & Company, P.C., appearing elsewhere herein, and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock offered in 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 and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us and our common stock, we refer you to the registration statement and to its exhibits and schedules. Statements in this prospectus about the contents of any contract, agreement or other document is not necessarily complete and, in each instance, we refer you to the copy of such contract, agreement or document filed as an exhibit to the registration statement, with each such statement being qualified in all respects by reference to the document to which it refers. You may inspect the registration statement and its exhibits and schedules and other information on SEC's website at www.sec.gov.

We also maintain a website at www.seqll.com, at which, following the completion of this offering, you may access our SEC filings free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus. You may also request a copy of these filings, at no cost, by writing us at 317 New Boston Street, Suite 210, Woburn, Massachusetts 01801, or telephoning us at (781) 460-6016.

SEQLL INC.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors of SeqLL Inc.:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of SeqLL Inc. (the “Company”) as of December 31, 2018 and 2017, and the related consolidated statements of operations, changes in stockholders’ deficit and cash flows for the years then ended, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has recurring losses from operations which raises substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s 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 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 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Wolf & Company, P.C.

Wolf & Company, P.C.

We have served as the Company’s auditor since 2018.

Boston, Massachusetts

April 22, 2019

SeqLL Inc.
Consolidated Balance Sheets
December 31, 2018 and 2017

	2018	2017
Assets		
Current assets		
Cash and cash equivalents	\$ 64,694	\$ 30,058
Accounts receivable	236,607	44,910
Inventory	720,503	783,573
Prepaid expenses	2,413	2,438
Total current assets	1,024,217	860,979
Other assets		
Property and equipment, net	126,327	189,971
Other assets	29,733	28,565
Total assets	\$ 1,180,277	\$ 1,079,515
Liabilities and Stockholders' Deficit		
Current liabilities		
Accounts payable	\$ 283,187	\$ 100,647
Accounts payable – related parties	168,343	114,204
Accrued expenses	97,569	239,371
Deferred revenue	—	82,245
Notes payable	—	287,439
Convertible promissory notes	—	1,970,000
Loan payable	6,500	—
Deferred rent	20,381	31,518
Total current liabilities	575,980	2,825,424
Non-current liabilities		
Liability related to warrants	—	8,474
Convertible promissory notes, long term	990,710	—
Total non-current liabilities	990,710	8,474
Total liabilities	1,566,690	2,833,898
Commitments and contingencies		
Stockholders' deficit		
Preferred stock, \$0.00001 par value; 8,779,762 and 4,017,857 shares authorized at December 31, 2018 and 2017, respectively; 5,791,665 and 3,854,165 shares issued and outstanding at December 31, 2018 and 2017, respectively	58	38
Common stock, \$0.00001 par value; 20,299,261 shares authorized at December 31, 2018 and 2017; 4,864,862 shares issued and outstanding at December 31, 2018 and 2017	49	49
Additional paid-in capital	6,804,871	2,548,904
Accumulated deficit	(7,191,391)	(4,303,374)
Total stockholders' deficit	(386,413)	(1,754,383)
Total liabilities and stockholders' deficit	\$ 1,180,277	\$ 1,079,515

See report of independent registered public accounting firm and the accompanying notes to these consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.
Consolidated Statements of Operations

	Years Ended December 31,	
	2018	2017
Revenue		
Sales	\$ 756,303	\$ 1,138,052
Other revenue	22,765	200,700
Total revenue	779,068	1,338,752
Cost of sales	674,281	1,084,518
Gross profit	104,787	254,234
Operating expenses		
Research and development	1,039,260	974,531
General and administrative	1,466,814	806,897
Total operating expenses	2,506,074	1,781,428
Operating loss	(2,401,287)	(1,527,194)
Other income and expenses		
Gain on settlement of liabilities	182,439	—
Debt conversion expense	(438,873)	—
Interest and other expenses	(230,296)	(179,740)
Total other expenses, net	(486,730)	(179,740)
Net Loss	<u>\$(2,888,017)</u>	<u>\$(1,706,934)</u>
Net loss per share – basic and diluted	<u>\$ (0.59)</u>	<u>\$ (0.35)</u>
Weighted average common shares – basic and diluted	<u>4,864,862</u>	<u>4,864,862</u>

See report of independent registered public accounting firm and the accompanying notes to these consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.
Consolidated Statements of Stockholders' Deficit
For the Years Ended December 31, 2018 and 2017

	Preferred stock		Common stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount			
Balance as of December 31, 2016	<u>3,854,165</u>	<u>38</u>	<u>4,864,862</u>	<u>\$49</u>	<u>\$2,437,883</u>	<u>\$ 2,596,440</u>	<u>\$ 158,470</u>
Stock-based compensation	—	—	—	—	111,021	—	111,021
Net loss	—	—	—	—	—	(1,706,934)	(1,706,934)
Balance as of December 31, 2017	<u>3,854,165</u>	<u>38</u>	<u>4,864,862</u>	<u>49</u>	<u>2,548,904</u>	<u>(4,303,374)</u>	<u>(1,754,383)</u>
Issuance of preferred stock in private placement	71,429	1	—	—	119,999	—	120,000
Conversion of debt into preferred stock	1,866,071	19	—	—	3,134,981	—	3,135,000
Stock-based compensation expense	—	—	—	—	553,640	—	553,640
Reclassification of derivative warrant liability into equity	—	—	—	—	8,474	—	8,474
Fair value of warrants issued in connection with debt conversion	—	—	—	—	438,873	—	438,873
Net loss	—	—	—	—	—	(2,888,017)	(2,888,017)
Balance as of December 31, 2018	<u>5,791,665</u>	<u>\$58</u>	<u>4,864,862</u>	<u>\$49</u>	<u>\$6,804,871</u>	<u>\$ (7,191,391)</u>	<u>\$ (386,413)</u>

See report of independent registered public accounting firm and the accompanying notes to these consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.
Consolidated Statements of Cash Flows

	Years Ended December 31,	
	2018	2017
Cash Flows from Operating Activities		
Net loss	\$(2,888,017)	\$(1,706,934)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation	63,644	72,636
Gain on settlement of liabilities	(182,439)	—
Stock-based compensation	553,640	111,021
Debt conversion expense	438,873	—
Issuance of derivative warrants	—	2,456
Changes in operating assets and liabilities:		
Accounts receivable – customers	(191,697)	155,057
Accounts receivable – related party	—	46,807
Prepaid expenses	25	2,709
Inventory	63,070	351,378
Other assets	(1,168)	(6,576)
Accounts payable	182,490	49,667
Accounts payable – related parties	54,189	114,204
Accrued expenses	218,908	—
Deferred revenue	(82,245)	(311,808)
Deferred rent	(11,137)	(6,214)
Net cash used in operating activities	<u>(1,781,864)</u>	<u>(1,125,597)</u>
Cash Flows from Investing Activities		
Purchase of property and equipment	—	(11,081)
Net cash used in investing activities	<u>—</u>	<u>(11,081)</u>
Cash Flows from Financing Activities		
Proceeds from issuance of convertible promissory notes	1,795,000	970,000
Proceeds from loan payable	6,500	—
Proceeds from issuance of preferred stock	120,000	—
Payment of notes payable	(105,000)	(10,517)
Net cash provided by financing activities	<u>1,816,500</u>	<u>959,483</u>
Net increase (decrease) in cash and cash equivalents	34,636	(177,195)
Cash and cash equivalents, beginning of year	30,058	207,253
Cash and cash equivalents, end of year	<u>\$ 64,694</u>	<u>\$ 30,058</u>
Supplemental disclosure of cash flow information and non-cash transactions		
Cash paid for interest	<u>\$ 197</u>	<u>\$ 15,000</u>
Conversion of convertible notes payable into preferred stock	<u>\$ 3,135,000</u>	<u>\$ —</u>
Reclassification of derivative warrant liability to additional paid-in capital	<u>\$ 8,474</u>	<u>\$ —</u>
Conversion of accrued interest into new convertible notes payable	<u>\$ 360,710</u>	<u>\$ —</u>

See report of independent registered public accounting firm and the accompanying notes to these consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL, Inc.**Notes to Consolidated Financial Statements
December 31, 2018 and 2017****Note 1 — General**

SeqLL, Inc. (the “Company” or “SeqLL”) was incorporated as a Delaware corporation on April 3, 2014 (“Inception”). On April 8, 2014, SeqLL acquired a 100% ownership interest in SeqLL, LLC (“Subsidiary”), a domestic limited liability company formed on March 11, 2013 in the State of Massachusetts. SeqLL is a holding company of the Subsidiary and is a life sciences company focused on the development and application of innovative genetic analysis technologies and the monetization of that technology and related intellectual property. The Subsidiary purchased technology to enable the rapid analysis of large volumes of genetic material by directly sequencing single molecules of DNA or RNA. The Subsidiary’s principal office is located in Woburn, Massachusetts.

Since its inception, the Company has devoted substantially most of its effort to business planning, and research and development. The Company has incurred net losses of \$2,888,017 and \$1,706,934 and had negative cash flow from operating activities of \$1,781,864 and \$1,125,597 for the years ended December 31, 2018 and 2017, respectively, and had an accumulated deficit of \$7,191,391 as of December 31, 2018. These conditions among others raise substantial doubts about the Company’s ability to continue as a going concern. The Company’s ability to continue to operate is dependent upon raising additional funds to finance its activities. It is expected that the Company’s primary investor is going to continue funding ongoing operations as they have in the past since the Company’s founding in 2013. However, if the Company is not successful in securing additional outside financing, there are no assurances that the investor will continue to fund the Company to an adequate level of financing needed for the long-term development and commercialization of its products.

The consolidated financial statements do not include any adjustments with respect to the carrying amounts of assets and liabilities and their classification that might be necessary should the Company be unable to continue as a going concern. The Company management and the Board of Directors believe that the Company’s existing financial resources are adequate to satisfy its expected liquidity requirements through the end of second quarter of 2019.

On May 17, 2018, the Company’s Chief Executive Officer, Dr. Elizabeth Reczek, Ph.D., resigned from the Company, thereby terminating her employment agreement. Her resignation is not the result of any disagreement with the Company. The Company paid Dr. Reczek any compensation that was earned but unpaid prior to resignation. Dr. Reczek’s stock options for 194,594 shares of common stock expired unexercised as of August 14, 2018.

On August 20, 2018, the Company’s Board voted John W. Kennedy to be their Chief Financial Officer and Secretary.

Stock Split

On April 15, 2019, the Company’s stockholders approved an amendment to the Company’s certificate of incorporation (the “Amendment”) to effect a 1.85-for-1 reverse stock split of shares of the Company’s outstanding common stock, such that each 1.85 shares of common stock, \$0.00001 par value, becomes one share of common stock, \$0.00001 par value per share. The Amendment became effective on April 17, 2019 when filed with the Secretary of State of the State of Delaware.

All share and per share data in the consolidated financial statements and notes have been retroactively adjusted to reflect the stock split for all periods presented.

See report of independent registered public accounting firm

SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 2 — Significant Accounting Policies**

A summary of significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements follows:

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”). The consolidated financial statements include the accounts of SeqLL and its wholly-owned subsidiary, SeqLL, LLC. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company had no cash equivalents at December 31, 2018 and 2017.

Accounts Receivable

In the normal course of business, the Company provides credit to its customers and performs credit evaluations of these customers. The Company periodically reviews accounts receivables for doubtful accounts. There were no doubtful accounts as of December 31, 2018 and 2017.

Inventory

Inventory consists of finished goods, work-in-process and raw materials and is valued at the lower of cost or market, determined by the first-in, first-out (“FIFO”) method. As the Company manufactures the finished goods and work-in-process materials, overhead costs are included in inventory. On an annual basis, the Company evaluates the carrying cost of finished goods, work-in-process and raw materials items. To the extent that such costs exceed future demand estimates and /or exhibit historical turnover at rates less than current inventory levels, the Company records a reserve for excess and obsolete inventories to reduce the carrying value of inventories. Inventory balance consisted of the following:

	December 31, 2018	December 31, 2017
Raw Materials	\$ 61,024	\$ 60,518
Work in Process	218,275	281,851
Finished Goods	441,204	441,204
Total Inventory	<u>\$ 720,503</u>	<u>\$ 783,573</u>

Property and Equipment

Property and equipment are recorded at cost and depreciated over the estimated useful lives of the related assets using the straight-line method. Lab equipment is depreciated over a five-year period. Leasehold improvements are depreciated over the shorter of the useful life and the term of the lease. When assets are retired or otherwise disposed of, the cost of these assets and related accumulated depreciation or amortization are eliminated from the balance sheet and any resulting gains or losses are included in the statement of operations in the period of disposals.

See report of independent registered public accounting firm

SeqLL, Inc.**Notes to Consolidated Financial Statements
December 31, 2018 and 2017****Note 2 — Significant Accounting Policies (Continued)**Long-lived Assets

The Company assesses, on an annual basis, the recoverability of the carrying amount of long-lived assets used in continuing operations. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flow expected to be generated by the asset. A loss is recognized when expected future cash flow (undiscounted and without interest) are less than the carrying amount of the asset. The impairment loss is determined as the difference by which the carrying amount of the asset exceeds its fair value. No impairment was recognized during the periods ending December 31, 2018 and 2017.

Deferred Rent Liability

The Company's office lease agreement is subject to scheduled escalations in rent throughout its term. Accordingly, the Company recorded the related rent expense on a straight-line basis that resulted in a deferred rent liability of \$20,381 and \$31,518 on December 31, 2018 and 2017, respectively.

Revenue Recognition

Revenue from genetic sequencing services and equipment sales are recognized when there is persuasive evidence of an arrangement, service has been rendered or product has been delivered, the sales price is determinable, and collectability is reasonably assured. Service is deemed to be rendered when the results have been reported to the customer who ordered the sequencing. To the extent that sequencing services have been prepaid, but results have not yet been reported, recognition of all related revenue is deferred until results are reported.

Grants Revenue

The Subsidiary receives government research grants that provide reimbursement payments for work performed under multiple sequencing projects. Grants revenue is recognized when the related expenses are incurred. The Subsidiary is subject to independent verification of expenditures and research results under the contract terms. In the years ended December 31, 2018 and 2017, the Company earned grant revenue of \$22,765 and \$200,700, respectively.

Stock-based Compensation

The Company's share-based compensation program grants awards which may include stock options and restricted stock awards. The fair values of stock option grants are estimated as of the date of the grant using the Black-Scholes option valuation model. The fair values of restricted stock awards are based on fair value of Company's common stock on the date of the grant. The fair values of the stock-based awards, including the actual forfeitures, are then expensed over the requisite service period, generally the vesting period, for each award.

For awards granted to consultants and non-employees, compensation expense is recognized over the vesting period of the awards, which is generally the period during which services are rendered by such consultants and non-employees.

Research and Development Expenses

The Company expenses all research and development costs as incurred. Included in research and development costs are wages, stock-based compensation and benefits of employees and other operational costs related to the Company's research and development activities, including facility-related expenses and external costs of outside contractors engaged by the Company.

See report of independent registered public accounting firm

SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 2 — Significant Accounting Policies (Continued)**Earnings per Share

The Company has adopted ASC 260, “Earnings Per Share” (“EPS”) which requires presentation of basic and diluted EPS on the face of the income statement for all entities with complex capital structures and requires a reconciliation of the numerator and denominator of the basic EPS computation to the numerator and denominator of the diluted EPS computation. In the accompanying financial statements, basic and diluted net loss per common share is computed by dividing net loss in each period by the weighted average number of shares of common stock outstanding during such period. For the periods presented, common stock equivalents, consisting of options, convertible preferred stock and warrants, were not included in the calculation of the diluted loss per share because to do so would be anti-dilutive.

Segments

The Company operates in a single business segment that includes the design, development and manufacturing of genetic analysis technologies.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (“ASU 2014-09”) to provide updated guidance on revenue recognition. ASU 2014-09 requires a company to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies may need to use more judgment and make more estimates than under today’s guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price, and allocating the transaction price to each separate performance obligation. This standard is effective for fiscal years beginning after December 15, 2018, as well as quarterly and interim financial statements for fiscal years beginning after December 15, 2019.

The Company is in process of evaluating the impact of adopting ASU 2014-09 on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) and subsequently issued several amendments including ASU 2018-11 (collectively, “Topic 842”), which establishes new accounting and disclosure requirements for leases. Topic 842 requires lessees to classify most leases as either finance or operating leases and to initially recognize a lease liability and right-of-use asset. Entities may elect to account for certain short-term leases (with a term of one year or less) using a method similar to the current operating lease model. The statements of operations will include, for finance leases, separate recognition of interest on the lease liability and amortization of the right-of-use asset and for operating leases, a single lease cost, calculated so that the cost of the lease is allocated over the lease term on a straight-line basis. These leases will be required to be presented on the balance sheet in accordance with the requirements of Topic 842, which is effective for the Company for annual reporting periods beginning after December 15, 2019, including interim periods therein, with early adoption permitted. Topic 842 may be applied using a modified retrospective approach or by applying the new standard as of the adoption date. The Company intends to adopt Topic 842 in the first quarter of 2020 by applying the new standard as of the adoption date and, consequently, financial information for the comparative periods will not be updated. The Company has not yet completed the analysis of how adopting this guidance will affect its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. ASU 2018-07 expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from

See report of independent registered public accounting firm

SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 2 — Significant Accounting Policies (Continued)**

nonemployees. An entity should apply the requirements of Topic 718 to non-employees awards except for specific guidance on inputs to an option pricing model and the attribution of cost. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards, and that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606 Revenue from Contracts with Customers. The Company is currently evaluating the impact of adopting this guidance.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, Disclosure Update and Simplification, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. This final rule is effective on November 5, 2018. The Company will adopt this release in the first quarter of 2019.

Note 3 — Property and Equipment, net

Property and equipment are recorded at historical cost and consist of the following:

	December 31, 2018	December 31, 2017
Lab Equipment	\$ 294,509	\$ 294,509
Leasehold Improvements	74,390	74,390
	<u>368,899</u>	<u>368,899</u>
Less accumulated depreciation and amortization	(242,572)	(178,928)
	<u>\$ 126,327</u>	<u>\$ 189,971</u>

Depreciation expense amounted to \$63,644 and \$72,636 for the years ended December 31, 2018 and 2017, respectively.

Note 4 — Accrued Expenses

Accrued expenses consist of the following:

	December 31, 2018	December 31, 2017
Employee compensation	\$ 23,712	\$ 22,550
Accrued Interest	56,829	192,006
Professional and legal fees	10,000	17,422
Other	7,028	7,393
	<u>\$ 97,569</u>	<u>\$ 239,371</u>

See report of independent registered public accounting firm

SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017

Note 5 — Stock Option Plan

The Company's 2014 Equity Incentive Plan (the "Plan") permits the grant of share options and shares to its employees and certain non-employees for up to 1,081,081 shares.

	Number of Options	Weighted-Average Exercise Price per Share	Weighted Average Remaining Contractual Term (in Years)	Aggregate Intrinsic Value
Outstanding as of January 1, 2018	586,486	\$ 0.90	7.98	\$557,250
Granted	535,133	2.46	—	—
Exercised	—	—	—	—
Cancelled/Forfeited	(237,842)	1.01		
Outstanding as of December 31, 2018	<u>883,777</u>	<u>\$ 1.51</u>	<u>8.54</u>	<u>\$611,100</u>
Exercisable at December 31, 2018	<u>800,020</u>	<u>\$ 1.46</u>	<u>8.60</u>	<u>\$486,220</u>

As of December 31, 2018, there were 197,297 shares available for future issuance under the Plan. Generally, option awards are granted with an exercise price equal to the market price of the Company's stock at the date of grant and vest over a period of four years. No option may have a term in excess of ten years from the option grant date. Share awards generally vest over a period of four years. Certain option and share awards provide for accelerated vesting if there is a change in control (as defined by the Plan).

The following table provides the assumptions used in determining the fair value of share-based awards for the year ended December 31, 2018. There were no options granted in 2017.

	2018
Risk-free interest rate	2.99 – 3.00%
Expected option life	5.00 – 5.25
Expected dividend yield	—%
Expected stock price volatility	67%

The Company's expected stock price volatility assumption is based on the volatility of comparable public companies. The Company used a simplified method to estimate the expected life assumption. The risk-free interest rate is based on the yield of U.S. Treasury securities consistent with the life of the option. No dividend yield was assumed as the Company does not pay dividends on its common stock.

The Company has periodically granted stock options and restricted stock awards to consultants for services, pursuant to the Company's stock plans at the fair market value on the respective dates of grant. Should the Company terminate any of its consulting agreements, the unvested options underlying the agreements would also be cancelled.

The weighted-average fair value of all options granted during the year ended December 31, 2018 estimated as of the grant date using the Black-Scholes option valuation model, was \$1.43 per share. During the years ended December 31, 2018 and 2017, the Company recorded \$553,640 and \$111,021 of stock-based compensation expense associated with vesting of stock options, respectively. As of December 31, 2018, there was \$308,195 of unrecognized compensation expense related to unvested share-based compensation awards, which will be recognized over a weighted average period of approximately one year.

See report of independent registered public accounting firm

SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 6 — Related Party Transactions**

On December 13, 2018, Daniel Jones, CEO, made a \$6,500 short-term, non-interest bearing loan to the Company. The loan was repaid on January 3, 2019.

For the years ended December 31, 2018 and 2017, the Company had revenues from sales of sequencing kits, sequencing services and equipment sales to the St. Laurent Institute, of \$0 and \$300,000, respectively. For the years ended December 31, 2018 and 2017, the Company had revenues from sales of sequencing kits, sequencing services and equipment sales to the True Bearing Diagnostics, of \$128,280 and \$0, respectively.

For the years ended December 31, 2018 and 2017, the Company incurred expenses payable to the Stonemill Center for reimbursement of legal fees amounting to \$16,627 and \$0, respectively.

For the years ended December 31, 2018 and 2017, the Company incurred expenses payable to Floral Finance for reimbursement of legal fees amounting to \$9,849 and \$0, respectively.

For the years ended December 31, 2018 and 2017, the Company incurred expenses payable to St. Laurent Realty, Inc. for services related to clerical and accounting amounting to \$27,913 and \$250, respectively.

For the years ended December 31, 2018 and 2017, the Company incurred expenses payable to the St. Laurent Institute for services related to sequence analysis amounting to \$113,954 in each year.

At December 31, 2018 and 2017, the Company had the following outstanding payables to related parties:

	December 31, 2018	December 31, 2017
Floral Finance	\$ 9,849	\$ —
St. Laurent Institute	113,954	113,954
St. Laurent Realty, Inc.	27,913	250
Stonemill Center	16,627	—
	<u>\$ 168,343</u>	<u>\$ 114,204</u>

William St. Laurent, a member of the Company's board of directors, relatives of Mr. St. Laurent and entities controlled by the St. Laurent family are controlling shareholders of the Company. These entities are all St. Laurent family-owned entities and are therefore related parties.

Note 7 — Income Taxes

The Company is subject to United States federal and Massachusetts state income taxes at an approximate combined rate of 29% in 2018. During the years ended December 31, 2018 and 2017, there was no provision for income taxes as the Company incurred losses during both periods. Deferred tax assets and liabilities reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company records a full valuation allowance against its deferred tax assets as the Company believes it is more likely than not the deferred tax assets will not be realized. The primary component of the Company's deferred tax assets are its net operating loss carryforwards. The valuation allowance against deferred tax assets was approximately \$832,000 and \$748,000 as of December 31, 2018 and 2017, respectively.

On December 22, 2017, The Tax Cuts and Jobs Act (the "Act") was enacted. The Act significantly revised the United States corporate income tax law by lowering the corporate federal income tax rate from 35% to 21%. As of December 31, 2017, the Company has assessed the effects of the corporate rate reduction on its existing deferred tax balances which resulted in a \$557,000 reduction in the deferred tax assets. Since the Company maintains a full valuation allowance on its deferred tax assets, a corresponding

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SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 7 — Income Taxes (Continued)**

reduction in the valuation allowance equal to the effect of the rate reduction on the ending deferred tax asset was also reflected. In addition to the rate reduction, the Act also requires companies with foreign subsidiaries to pay a one-time transition tax on earnings that were previously tax deferred. As of December 31, 2017, the Company did not maintain any foreign subsidiaries and did not have previously deferred foreign earnings subject to the transition tax.

The income tax benefit differs from the amount of income tax determined by applying the U.S. federal income tax rate to pretax income for the years ended December 31, 2018 and 2017 due to the following:

	2018	2017
Computed “expected” tax benefit	-21.0%	-34.0%
Increase (decrease) in income taxes resulting from:		
State taxes, net of federal benefit	-8.0%	-8.0%
Permanent differences	0.0%	0.0%
Increase in valuation reserve	29.0%	42.0%
	<u>0.0%</u>	<u>0.0%</u>

Note 8 — Notes Payable

In March 2013, the Subsidiary entered into a Purchase Agreement (the “Purchase Agreement”) with Helicos Biosciences Company (“Helicos”) to purchase certain assets related to DNA and RNA sequencing for a purchase price of \$575,000. In conjunction with the Purchase Agreement, the Company issued to Helicos a note payable (the “Note”) in the amount of \$500,000 to finance the asset purchase. The interest rate on the Note equals 3% per annum and is payable monthly. The Note is collateralized by primarily all of the assets the Subsidiary acquired from Helicos.

The principal and interest outstanding at December 31, 2017 on the Note was \$287,439. On March 15, 2018, the Company negotiated a final settlement payment for the Note in the amount of \$105,000 and recorded a gain on extinguishment of \$182,439. The Note was cancelled and forgiven upon legal acceptance of payment.

During the year ended December 31, 2018 and 2017, the Company entered into a series of convertible promissory notes (the “Promissory Notes”) with certain preferred stockholders amounting to \$1,795,000 and \$970,000, respectively, including accrued interest at 10% per annum. The Promissory Notes are convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing and had a one-year term. In connection with each of the Promissory Notes, the Company was obliged to issue a warrant to purchase the number of common shares equal to 6% of the total amount of shares related to the conversion of the Promissory Notes at the exercise price equal to the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing.

On September 30, 2018, the Company exchanged \$3,135,000 of Promissory Notes held by St. Laurent Investments, LLC, a related party, and their rights to receive warrants for (i) 1,866,071 shares of Series A-2 Preferred Stock; (ii) a warrant to purchase 486,486 shares of common stock exercisable at \$2.16 per share as an inducement to enter into the exchange; (iii) a 1-year promissory note bearing 10% interest per annum and payable in cash upon a public offering in the amount of \$360,710 for the accrued interest under the Promissory Notes as of September 30, 2018. In connection with the conversion of Promissory Notes, the life of outstanding warrants to purchase 60,506 shares of the Company’s common stock was modified to a five-year term from the conversion date of September 30, 2018. The Company calculated the fair value at issuance and the incremental cost related to the modification of the term of these warrants and determined it to be immaterial.

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Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 8 — Notes Payable (Continued)**

In connection with all the Promissory Notes issued in 2018, including those exchanged for Preferred Stock on September 30, 2018, warrants to purchase 34,633 shares of the Company's common stock were issued to noteholders and 3,088 shares were issued to a financing agent. The grant-date fair value of these warrants was approximately \$19,400.

The Promissory Notes are secured by substantially all assets of the Company.

In the year ended December 31, 2018, the Company recorded debt conversion expense in the amount of \$438,873 for warrants to purchase 486,486 shares of the Company's common stock at \$2.16 per share issued as an inducement for the exchange of the Promissory Notes.

Note 9 — Preferred Stock

On July 27, 2018, the Company received \$120,000 in new investment capital from the issuance of 71,429 shares of Series A-2. The placement agent, Terranova Capital Partners, earned a warrant for 3,088 shares of common stock exercisable at \$3.10 per share.

On September 30, 2018, the Company exchanged \$3,135,000 of Promissory Notes held by St. Laurent Investments, LLC, a related party, for 1,866,071 shares of Series A-2 Convertible Preferred Stock.

The rights and preferences at December 31, 2018 of the Series A-1 Preferred Stock ("Series A-1") and Series A-2 Preferred Stock ("Series A-2") collectively the "Preferred Stock", are as follows:

Voting rights: Series A-1 and Series A-2 preferred stockholders are entitled to vote together with all other classes and series of stock and have the right to receive notice of any stockholder's meetings. Each preferred stock is entitled to the number of votes equal to the number of shares of common stock into which each share of the applicable preferred stock is convertible at the time of such vote.

Conversion Rights: The Series A Preferred Stock may be converted at any time at the election of the holder into Common Stock at an initial conversion price determined by dividing the Series A-1 Original Issue Price of \$0.32 by the Series A-1 Conversion Price of \$0.59; and the Series A-2 Original Issue Price of \$1.68 by the Series A-2 Conversion Price of \$3.10; both are subject to adjustment for stock splits, stock combinations and the like, and to a weighted-average adjustment for future issuances of Common Stock, warrants or rights to purchase Common Stock or securities convertible into Common Stock for a consideration per share that is less than the then-applicable conversion price, subject to certain exceptions listed in the Charter.

The Series A Preferred Stock is subject to automatic conversion upon (i) the closing of an initial public offering of the Common Stock at a price per share equal to at least \$5.00 (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalization or the like) in an underwritten public offering in which the Company raises gross proceeds of at least \$10 million or (ii) the consent of holders of at least a majority of the then-outstanding shares of Preferred Stock voting together as a single class.

Liquidation Preferences: In the event of any voluntary or involuntary liquidation, deemed liquidation event, dissolution or winding up of the Company, as defined, the holders of the preferred stock are entitled to be paid out of the assets of the Company before any payments are to be made to any other shareholders. The liquidation price to be paid is the greater of the original issue price for Series A-1 (\$0.32 per share) and Series A-2 (\$1.68 per share), plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series A-1 and Series A-2 been converted into Common Stock immediately prior to such liquidation. The aggregate liquidation price was \$5,479,997 at December 31, 2018.

Redemption Rights: SeqLL has the right to redeem any outstanding shares of preferred stock at a redemption price equal to the original issue price (\$0.32 per share for Series A-1 and \$1.68 per share for Series A-2) plus all accrued but unpaid dividends thereon.

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SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 9 — Preferred Stock (Continued)**

Dividends: The dividend rate per share of Series A-1 is \$0.0256 per annum and \$0.1344 per annum for each share of Series A-2. Dividends of preferred stock are not cumulative. As of December 31, 2018, no dividends have been declared by the Company's Board of Directors.

Note 10 — Common Stock Warrants

In 2018, management made the determination that the warrants to purchase common stock were no longer required to be recorded as derivative liabilities. Therefore, \$8,474 of warrant liability was reclassified to additional paid-in capital.

The following table summarizes information with regard to outstanding warrants to purchase common stock as of December 31, 2018.

Issuance Date	Number of Shares Issuable Upon Exercise of Outstanding Warrants	Exercise Price	Expiration Date
2/19/2016	9,652	\$ 3.10	2/18/2021
2/19/2016	9,652	\$ 3.10	2/18/2021
3/25/2016	2,895	\$ 3.10	3/24/2021
3/25/2016	1,447	\$ 3.10	3/24/2021
5/4/2017	3,860	\$ 3.10	5/3/2022
6/14/2017	1,351	\$ 3.10	6/13/2022
8/30/2018	3,088	\$ 3.10	8/29/2023
9/30/2018	60,506	\$ 3.10	9/29/2023
9/30/2018	486,486	\$ 2.16	9/29/2023
10/17/2018	1,157	\$ 3.10	10/16/2023
11/2/2018	964	\$ 3.10	11/1/2023
11/9/2018	964	\$ 3.10	11/9/2023
11/16/2018	964	\$ 3.10	11/15/2023
11/29/2018	964	\$ 3.10	11/28/2023
12/21/2018	964	\$ 3.10	12/20/2023
12/27/2018	964	\$ 3.10	12/26/2023
Total	585,878		

At December 31, 2018, the weighted average remaining life of the outstanding warrants is 4.63 years, all warrants are exercisable, and the aggregate intrinsic value for the warrants outstanding was \$144,000.

Note 11 — Commitments and Contingencies

In November 2014, the Company entered an office space lease in Woburn, Massachusetts (the "Lease"), which was considered the Company's corporate headquarters, which expires January 31, 2020. Rent expense for this lease was \$92,665 per year for years ended December 31, 2018 and 2017.

On September 15, 2018, the Company executed an agreement to guarantee amounts owed upon default by John W. Kennedy, our Chief Financial Officer, on a lease for Mr. Kennedy's housing. The annual rental amount due on the lease is \$32,400 and is paid by Mr. Kennedy.

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SeqLL, Inc.

Notes to Consolidated Financial Statements
December 31, 2018 and 2017**Note 11 — Commitments and Contingencies** (Continued)

The future minimum lease commitments under non-cancellable leases described above are as follows for the fiscal year ending December 31:

2019	\$133,024
2020	27,489
Total	<u>\$160,513</u>

Note 12 — Subsequent Events

During 2019, the Company has entered into a series of convertible promissory notes with St. Laurent Investments, amounting to \$545,000. These convertible promissory notes accrue interest at 10% per annum and are convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing. In connection with these convertible promissory notes, the Company is obligated to issue warrants to purchase the number of common shares equal to 6% of the total amount of shares related to the conversion of these convertible promissory notes at the exercise price equal to the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing.

On April 15, 2019, the Company's stockholders approved an amendment to the Company's certificate of incorporation (the "Amendment") to effect a 1.85-for-1 reverse stock split of all shares of the Company's outstanding common stock, such that each 1.85 shares of common stock, \$0.00001 par value, becomes one share of common stock, \$0.00001 par value per share. The Amendment became effective on April 17, 2019 when filed with the Secretary of State of the State of Delaware.

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SeqLL Inc.
Condensed Consolidated Balance Sheets
(Unaudited)

	<u>March 31,</u> <u>2019</u>	<u>December 31,</u> <u>2018</u>
<u>Assets</u>		
Current assets		
Cash and cash equivalents	\$ 52,176	\$ 64,694
Accounts receivable		
Customers	218,552	236,607
Inventory	699,072	720,503
Prepaid expenses	1,618	2,413
Total current assets	<u>971,418</u>	<u>1,024,217</u>
Other assets		
Property and equipment, net	111,616	126,327
Other assets	24,733	29,733
Total assets	<u>\$ 1,107,767</u>	<u>\$ 1,180,277</u>
<u>Liabilities and Stockholders' Deficit</u>		
Current liabilities		
Accounts payable	\$ 363,051	\$ 283,187
Accounts payable – related parties	185,018	168,343
Accrued expenses	137,278	97,569
Loan Payable – related parties	14,000	6,500
Deferred rent	17,289	20,381
Total current liabilities	<u>716,636</u>	<u>575,980</u>
Non-current liabilities		
Notes payable – related parties	270,000	270,000
Convertible promissory notes, long term	1,165,710	720,710
Total non-current liabilities	<u>1,435,710</u>	<u>990,710</u>
Total liabilities	<u>2,152,346</u>	<u>1,566,690</u>
Commitments and contingencies		
Stockholders' deficit		
Preferred stock, \$0.00001 par value; 8,779,762 shares authorized at March 31, 2019 and December 31, 2018; 5,791,665 shares issued and outstanding at March 31, 2019 and December 31, 2018	58	58
Common stock, \$0.00001 par value; 20,299,261 shares authorized at March 31, 2019 and December 31, 2018; 4,864,862 shares issued and outstanding at March 31, 2019 and December 31, 2018	49	49
Additional paid-in capital	6,810,688	6,804,871
Accumulated deficit	<u>(7,855,374)</u>	<u>(7,191,391)</u>
Total stockholders' deficit	<u>(1,044,579)</u>	<u>(386,413)</u>
Total liabilities and stockholders' deficit	<u>\$ 1,107,767</u>	<u>\$ 1,180,277</u>

See notes to the unaudited condensed consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended March 31,	
	2019	2018
Revenue		
Sales	\$ 106,855	\$ 291,200
Other revenue	—	22,765
Total revenue	106,855	313,965
Cost of sales	16,449	20,781
Gross profit	90,406	293,184
Operating expenses		
Research and development	393,391	275,867
General and administrative	332,557	327,664
Total operating expenses	725,948	603,531
Operating loss	(635,542)	(310,347)
Other income and expenses		
Gain on settlement of liabilities	—	182,439
Interest and other expenses	(28,441)	(54,849)
Total other expenses, net	(28,441)	127,590
Net Loss	\$ (663,983)	\$ (182,757)
Net loss per share – basic and diluted	\$ (0.14)	\$ (0.04)
Weighted average common shares – basic and diluted	4,864,862	4,864,862

See notes to the unaudited condensed consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.
Condensed Consolidated Statement of Changes in Stockholders' Deficit
For the Three Months Ended March 31, 2019 and 2018
(Unaudited)

	Preferred stock		Common stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance as of December 31, 2018	5,791,665	\$58	4,864,862	\$49	\$6,804,871	\$ (7,191,391)	\$ (386,413)
Stock-based compensation expense	—	—	—	—	5,817	—	5,817
Net loss	—	—	—	—	—	(663,983)	(663,983)
Balance as of March 31, 2019	5,791,665	\$58	4,864,862	\$49	\$6,810,688	\$ (7,855,374)	\$ (1,044,579)
Balance as of December 31, 2017	3,854,165	\$38	4,864,862	\$49	\$2,548,904	\$ (4,303,374)	\$ (1,754,383)
Stock-based compensation expense	—	—	—	—	16,328	—	16,328
Reclassification of derivative warrant liability into equity	—	—	—	—	8,474	—	8,474
Net loss	—	—	—	—	—	(182,757)	(182,757)
Balance as of March 31, 2018	3,854,165	\$38	4,864,862	\$49	\$2,573,706	\$ (4,486,131)	\$ (1,912,338)

See notes to the unaudited condensed consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Three Months Ended March 31,	
	2019	2018
Cash Flows from Operating Activities		
Net loss	\$(663,983)	\$(182,757)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation	14,711	17,497
Stock-based compensation	5,817	16,328
Changes in operating assets and liabilities:		
Accounts receivable – customers	18,055	(123,812)
Prepaid expenses	795	802
Inventory	21,431	(28,052)
Other assets	5,000	(15,000)
Accounts payable	79,914	226,363
Accounts payable – related parties	16,625	(114,204)
Accrued expenses	39,709	65,504
Deferred revenue	—	(82,245)
Deferred rent	(3,092)	(25,438)
Net cash used in operating activities	<u>(465,018)</u>	<u>(245,014)</u>
Cash Flows from Financing Activities		
Proceeds from issuance of convertible promissory notes - related parties	445,000	555,000
Payment of loan payable – related parties	(6,500)	—
Proceeds from loan payable – related parties	14,000	—
Payment of notes payable	—	(287,439)
Net cash provided by financing activities	<u>452,500</u>	<u>267,561</u>
Net increase (decrease) in cash	(12,518)	22,547
Cash, beginning of period	64,694	30,058
Cash, end of period	<u>\$ 52,176</u>	<u>\$ 52,605</u>
Supplemental disclosure of cash flow information and non-cash transactions		
Reclassification of derivative warrant liability to additional paid-in capital	<u>\$ —</u>	<u>\$ 8,474</u>

See notes to the unaudited condensed consolidated financial statements
Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

SeqLL Inc.**Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)****Note 1 — General**

SeqLL, Inc. (the “Company” or “SeqLL”) was incorporated as a Delaware corporation on April 3, 2014 (“Inception”). On April 8, 2014, SeqLL acquired a 100% ownership interest in SeqLL, LLC (“Subsidiary”), a domestic limited liability company formed on March 11, 2013 in the State of Massachusetts. SeqLL is a holding company of the Subsidiary and is a life sciences company focused on the development and application of innovative genetic analysis technologies and the monetization of that technology and related intellectual property. The Subsidiary purchased technology to enable the rapid analysis of large volumes of genetic material by directly sequencing single molecules of DNA or RNA. The Subsidiary’s principal office is located in Woburn, Massachusetts.

Since its inception, the Company has devoted substantially most of its effort to business planning, and research and development. The Company has incurred net losses of \$663,983 and \$182,757 and had negative cash flow from operating activities of \$465,018 and \$245,014 for the three months ended March 31, 2019 and 2018, respectively, and had an accumulated deficit of \$7,855,374 as of March 31, 2019. These conditions among others, raise substantial doubts about the Company’s ability to continue as a going concern. The Company’s ability to continue to operate is dependent upon raising additional funds to finance its activities. The Company filed an S-1 registration statement with the Securities and Exchange Commission (“SEC”) in November 2018 to raise up to \$10 million and is currently awaiting SEC approval to declare the S-1 effective. A prospective Initial Public Offering (“IPO”) is projected during the second calendar quarter of 2019. However, there can be no assurances the Company will successfully complete an IPO. In the event the Company does not complete the IPO or secure other outside financing, it is anticipated by the Board of Directors and management that the Company’s primary investor would continue to fund the operating deficits as they have since the Company’s founding in 2013. However, there can be no assurances that the primary investor would continue to fund the Company’s operating deficits for the long-term.

The unaudited condensed consolidated financial statements do not include any adjustments with respect to the carrying amounts of assets and liabilities and their classification that might be necessary should the Company be unable to continue as a going concern. The Company’s management and Board of Directors anticipate that the Company’s current financial resources are sufficient to satisfy its operating requirements through September 30, 2019.

Stock Split

On April 15, 2019, the Company’s stockholders approved an amendment to the Company’s certificate of incorporation (the “Amendment”) to effect a 1.85-for-1 reverse stock split of shares of the Company’s outstanding common stock, such that each 1.85 shares of common stock, \$0.00001 par value, becomes one share of common stock, \$0.00001 par value per share. The Amendment became effective on April 17, 2019 when filed with the Delaware Secretary of State.

All share and per share data in the unaudited condensed consolidated financial statements and notes have been retroactively adjusted to reflect the stock split for all periods presented.

SeqLL Inc.

Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)

Note 2 — Significant Accounting Policies

A summary of significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements follows:

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements include the accounts of SeqLL and its wholly-owned subsidiary, SeqLL, LLC. All intercompany accounts and transactions have been eliminated in consolidation.

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions of the Securities and Exchange Commission Regulation S-X. The unaudited condensed consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal and recurring nature that are necessary to present fairly the balances and results for the interim period included herein. The results of operations for the three months ended March 31, 2019 are not necessarily indicative of the results to be expected for the year ending December 31, 2019 or for any other future annual or interim period. The accompanying condensed consolidated balance sheet as of December 31, 2018 included herein was derived from the audited consolidated financial statements as of that date. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2018.

Use of Estimates

The preparation of the financial statements in conformity with U.S. GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates and changes in estimates may occur.

Inventory

Inventory consists of finished goods, work-in-process and raw materials and is valued at the lower of cost or market, determined by the first-in, first-out ("FIFO") method. As the Company manufactures the finished goods and work-in-process materials, overhead costs are included in inventory. On an annual basis, the Company evaluates the carrying cost of finished goods, work-in-process and raw materials items. To the extent that such costs exceed future demand estimates and/or exhibit historical turnover at rates less than current inventory levels, the Company records a reserve for excess and obsolete inventories to reduce the carrying value of inventories. Inventory consisted of the following:

	<u>March 31, 2019</u>	<u>December 31, 2018</u>
Raw Materials	\$ 61,354	\$ 61,024
Work in Process	196,514	218,275
Finished Goods	<u>441,204</u>	<u>441,204</u>
Total Inventory	<u>\$699,072</u>	<u>\$720,503</u>

Revenue Recognition

Revenue from genetic sequencing services and equipment sales are recognized when there is persuasive evidence of an arrangement, service has been rendered or product has been delivered, the sales price is

SeqLL Inc.

Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)

Note 2 — Significant Accounting Policies (Continued)

determinable, and collectability is reasonably assured. Service is deemed to be rendered when the results have been reported to the customer who ordered the sequencing. To the extent that sequencing services have been prepaid, but results have not yet been reported, recognition of all related revenue is deferred until results are reported.

As indicated in Recent Accounting Pronouncements below, the Company has not yet adopted Financial Accounting Standards Board (“FASB”) Accounting Standards Update (“ASU”) No. 2014-09, Revenue from Contracts with Customers (“ASU 2014-09”).

Stock-based Compensation

The Company’s share-based compensation program grants awards include stock options and restricted stock awards. The fair value of stock option grants is estimated as of the date of the grant using the Black-Scholes option pricing model. The fair value of restricted stock awards is based on the fair value of the Company’s common stock on the date of the grant. The fair value of the stock-based awards, including the actual forfeitures, are then expensed over the requisite service period, generally the vesting period, for each award.

The Company’s expected stock price volatility assumption is based on the volatility of comparable public companies. The Company used a simplified method to estimate the expected life assumption. The risk-free interest rate is based on the yield of U.S. Treasury securities consistent with the life of the option. No dividend yield was assumed as the Company does not pay dividends on its common stock.

The Company has periodically granted stock options and restricted stock awards to consultants for services, pursuant to the Company’s stock plans at the fair market value on the respective dates of grant. Should the Company terminate any of its consulting agreements, the unvested options underlying the agreements would be cancelled. For awards granted to consultants and non-employees, compensation expense is recognized over the vesting period of the awards, which is generally the period services are rendered by such consultants and non-employees.

No share options were granted for the three months ended March 31, 2019. The assumptions used in determining the fair value of share-based awards granted in 2018 are as follows:

	2018
Risk-free interest rate	2.99 – 3.00%
Expected option life	5.00 – 5.25
Expected dividend yield	—%
Expected stock price volatility	67%

Earnings per Share

The Company applies ASC 260, “Earnings Per Share” (“EPS”) which requires presentation of basic and diluted EPS on the face of the income statement for all entities with complex capital structures and requires a reconciliation of the numerator and denominator of the basic EPS computation to the numerator and denominator of the diluted EPS computation. In the accompanying financial statements, basic and diluted net loss per common share is computed by dividing net loss in each period by the weighted average number of shares of common stock outstanding during such period. For the periods presented, common stock equivalents, consisting of options, convertible preferred stock and warrants, were not included in the calculation of the diluted loss per share because to do so would be anti-dilutive.

SeqLL Inc.**Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)****Note 2 — Significant Accounting Policies (Continued)**Segments

The Company operates in a single business segment that includes the design, development and manufacturing of genetic analysis technologies.

Reclassifications

Certain amounts have been reclassified in the 2018 financial statements to conform to the current period presentation.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers, to provide updated guidance on revenue recognition. ASU 2014-09 requires a company to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies may need to use more judgment and make more estimates than under today's guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price, and allocating the transaction price to each separate performance obligation. This standard is effective for fiscal years beginning after December 15, 2018, as well as quarterly and interim financial statements for fiscal years beginning after December 15, 2019.

The Company is in process of evaluating the impact of adopting ASU 2014-09 on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) and subsequently issued several amendments including ASU 2018-11 (collectively, "Topic 842"), which establishes new accounting and disclosure requirements for leases. Topic 842 requires lessees to classify most leases as either finance or operating leases and to initially recognize a lease liability and right-of-use asset. Entities may elect to account for certain short-term leases (with a term of one year or less) using a method similar to the current operating lease model. The statements of operations will include, for finance leases, separate recognition of interest on the lease liability and amortization of the right-of-use asset and for operating leases, a single lease cost, calculated so that the cost of the lease is allocated over the lease term on a straight-line basis. These leases will be required to be presented on the balance sheet in accordance with the requirements of Topic 842, which is effective for the Company for annual reporting periods beginning after December 15, 2019, including interim periods therein, with early adoption permitted. Topic 842 may be applied using a modified retrospective approach or by applying the new standard as of the adoption date. The Company intends to adopt Topic 842 in the first quarter of 2020 by applying the new standard as of the adoption date and, consequently, financial information for the comparative periods will not be updated. The Company has not yet completed the analysis of how adopting this guidance will affect its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. ASU 2018-07 expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. An entity should apply the requirements of Topic 718 to non-employees awards except for specific guidance on inputs to an option pricing model and the attribution of cost. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards, and that

SeqLL Inc.

Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)

Note 2 — Significant Accounting Policies (Continued)

Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606 Revenue from Contracts with Customers. The Company is currently evaluating the impact of adopting this guidance.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, Disclosure Update and Simplification, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. This final rule is effective on November 5, 2018. The Company has adopted this release in the first quarter of 2019.

Note 3 — Property and Equipment, net

Property and equipment are recorded at historical cost and consist of the following:

	March 31, 2019	December 31, 2018
Lab Equipment	\$ 294,509	\$ 294,509
Leasehold Improvements	74,390	74,390
	368,899	368,899
Less accumulated depreciation and amortization	(257,283)	(242,572)
	<u>\$ 111,616</u>	<u>\$ 126,327</u>

Depreciation expense amounted to \$14,711 and \$17,497 for the three months ended March 31, 2019 and 2018, respectively.

Note 4 — Accrued Expenses

Accrued expenses consist of the following:

	March 31, 2019	December 31, 2018
Employee compensation	\$ 38,980	\$23,712
Accrued Interest	85,270	56,829
Professional and legal fees	—	10,000
Other	13,028	7,028
	<u>\$137,278</u>	<u>\$97,569</u>

SeqLL Inc.

Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)

Note 5 — Stock Option Plan

The Company's 2014 Equity Incentive Plan (the "Plan") permits the grant of share options and shares to its employees and certain non-employees for up to 1,081,081 shares.

	Number of Options	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in Years)	Aggregate Intrinsic Value
Outstanding as of December 31, 2018	883,777	\$ 1.51	8.54	\$611,100
Granted	—	—		—
Exercised	—	—		—
Cancelled/Forfeited	(27,027)	2.46		
Outstanding as of March 31, 2019	856,750	1.74	8.25	\$611,100
Exercisable at March 31, 2019	<u>800,020</u>	<u>\$ 1.81</u>	<u>8.31</u>	<u>\$502,548</u>

Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

As of March 31, 2019, there were 224,331 shares available for future issuance under the Plan. Generally, option awards are granted with an exercise price equal to the market price of the Company's stock at the date of grant and vest over a period of four years. No option may have a term in excess of ten years from the option grant date. Share awards generally vest over a period of four years. Certain option and share awards provide for accelerated vesting if there is a change in control (as defined by the Plan).

During the three months ended March 31, 2019 and 2018, the Company recorded \$5,817 and \$16,328 of stock-based compensation associated with vesting of stock options, respectively. As of March 31, 2019, there was \$299,903 of unrecognized compensation expense related to unvested share-based compensation awards, which will be recognized over a weighted average period of approximately one year.

Note 6 — Related Party Transactions

On December 13, 2018, Daniel Jones, CEO, made a \$6,500 short-term, non-interest bearing loan to the Company. The loan was repaid on January 3, 2019. In March 2019, he made a \$14,000 short-term, non-interest bearing loan to the Company which is still outstanding.

For the three months ended March 31, 2019 and 2018, the Company had revenues from sales of sequencing kits, sequencing services and equipment sales to the True Bearing Diagnostics, of \$350 and \$0, respectively.

For the three months ended March 31, 2019 and 2018, the Company incurred expenses payable to the Stonemill Center for reimbursement of legal fees amounting to \$0 and \$16,627, respectively.

For the three months ended March 31, 2019 and 2018, the Company incurred expenses payable Genomic Diagnostic Technologies for services related to clerical and accounting amounting to \$16,675 and \$0, respectively.

SeqLL Inc.

**Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)**

Note 6 — Related Party Transactions (Continued)

At March 31, 2019 and December 31, 2018, the Company had the following outstanding payables to related parties:

	March 31, 2019	December 31, 2018
Floral Finance	\$ 9,849	\$ 9,849
Genomic Diagnostic Technologies	16,675	—
St. Laurent Institute	113,954	113,954
St. Laurent Realty, Inc.	27,913	27,913
Stonemill Center	16,627	16,627
	<u>\$185,018</u>	<u>\$168,343</u>

William St. Laurent, a member of the Company's board of directors, relatives of Mr. St. Laurent and entities controlled by the St. Laurent family are controlling shareholders of the Company. These entities are all St. Laurent family-owned entities and are therefore related parties.

Note 7 — Notes Payable

William C. St. Laurent, a member of the Company's board of directors, entered into an agreement in 2017 to loan the Company \$270,000 with interest accruing at 10% per annum. This loan will be paid back in full in the Company's next Qualified Financing, as defined.

During the three months ended March 31, 2019, the Company entered into a series of convertible promissory notes (the "Promissory Notes") with certain preferred stockholders amounting to \$445,000, with interest accruing at 10% per annum. The Promissory Notes have one-year term and are convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next Qualified Financing, as defined. In connection with the Promissory Notes issued as of March 31, 2019, warrants to purchase shares of the Company's common stock were issued to noteholders in the amount of 8,588 shares. The grant-date fair value of these warrants is approximately \$5,000.

In the three months ended March 31, 2019 and 2018, interest expense was \$28,441 and \$54,849, respectively.

Note 8 — Preferred Stock

The rights and preferences at March 31, 2019 of the Series A-1 Preferred Stock ("Series A-1") and Series A-2 Preferred Stock ("Series A-2") collectively the "Preferred Stock", are as follows:

Voting rights: Series A-1 and Series A-2 preferred stockholders are entitled to vote together with all other classes and series of stock and have the right to receive notice of any stockholder's meetings. Each preferred stock is entitled to the number of votes equal to the number of shares of common stock into which each share of the applicable preferred stock is convertible at the time of such vote.

Conversion Rights: The Preferred Stock may be converted at any time at the election of the holder into Common Stock at an initial conversion price determined by dividing the Series A-1 Original Issue Price of \$0.32 by the Series A-1 Conversion Price of \$0.59; and the Series A-2 Original Issue Price of \$1.68 by the Series A-2 Conversion Price of \$3.10; both are subject to adjustment for stock splits, stock combinations

SeqLL Inc.

**Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)****Note 8 — Preferred Stock (Continued)**

and the like, and to a weighted-average adjustment for future issuances of Common Stock, warrants or rights to purchase Common Stock or securities convertible into Common Stock for a consideration per share that is less than the then-applicable conversion price, subject to certain exceptions listed in the Charter.

The Series A Preferred Stock is subject to automatic conversion upon (i) the closing of an initial public offering of the Common Stock at a price per share equal to at least \$9.25 (as adjusted for any stock splits, stock dividends, combinations, subdivisions, recapitalization or the like) in an underwritten public offering in which the Company raises gross proceeds of at least \$10 million or (ii) the consent of holders of at least a majority of the then-outstanding shares of Preferred Stock voting together as a single class.

Liquidation Preferences: In the event of any voluntary or involuntary liquidation, deemed liquidation event, dissolution or winding up of the Company, as defined, the holders of the preferred stock are entitled to be paid out of the assets of the Company before any payments are to be made to any other shareholders. The liquidation price to be paid is the greater of the original issue price for Series A-1 (\$0.32 per share) and Series A-2 (\$1.68 per share), plus any dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series A-1 and Series A-2 been converted into Common Stock immediately prior to such liquidation. The aggregate liquidation price was \$5,479,997 at March 31, 2019.

Redemption Rights: SeqLL has the right to redeem any outstanding shares of preferred stock at a redemption price equal to the original issue price (\$0.32 per share for Series A-1 and \$1.68 per share for Series A-2) plus all accrued but unpaid dividends thereon.

Dividends: The dividend rate per share of Series A-1 is \$0.0256 per annum and \$0.1344 per annum for each share of Series A-2. Dividends of preferred stock are not cumulative. As of March 31, 2019, no dividends have been declared by the Company's Board of Directors.

SeqLL Inc.

Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)

Note 9 — Common Stock Warrants

The following table summarizes information with regard to outstanding warrants to purchase common stock as of March 31, 2019.

Issuance Date	Number of Shares Issuable Upon Exercise of Outstanding Warrants	Exercise Price	Expiration Date
2/19/2016	9,652	\$ 3.10	2/18/2021
2/19/2016	9,652	\$ 3.10	2/18/2021
3/25/2016	2,895	\$ 3.10	3/24/2021
3/25/2016	1,447	\$ 3.10	3/24/2021
5/4/2017	3,860	\$ 3.10	5/3/2022
6/14/2017	1,351	\$ 3.10	6/13/2022
8/30/2018	3,088	\$ 3.10	8/29/2023
9/30/2018	60,506	\$ 3.10	9/29/2023
9/30/2018	486,486	\$ 2.16	9/29/2023
10/17/2018	1,157	\$ 3.10	10/16/2023
11/2/2018	964	\$ 3.10	11/1/2023
11/9/2018	964	\$ 3.10	11/8/2023
11/16/2018	964	\$ 3.10	11/15/2023
11/29/2018	964	\$ 3.10	11/28/2023
12/21/2018	964	\$ 3.10	12/20/2023
12/27/2018	964	\$ 3.10	12/26/2023
1/31/2019	1,930	\$ 3.10	1/30/2024
2/7/2019	1,640	\$ 3.10	2/6/2024
2/21/2019	1,640	\$ 3.10	2/20/2024
3/20/2019	3,378	\$ 3.10	3/18/2024
	<u>594,466</u>		

Reflects a 1.85-for-1 reverse stock split effective April 17, 2019

At March 31, 2019, the weighted average remaining life of the outstanding warrants is 4.39 years, all warrants are exercisable, and the aggregate intrinsic value for the warrants outstanding was \$144,000.

Note 10 — Commitments and Contingencies

In November 2014, the Company entered an office space lease in Woburn, Massachusetts (the "Lease"), which was considered the Company's corporate headquarters, which expires January 31, 2020. Rent expense for this lease was \$23,166 for the three months ended March 31, 2019 and 2018.

The future minimum lease commitments under non-cancellable leases described above are as follows for the period ending March 31:

2019	\$ 82,466
2020	27,489
Total	<u>\$109,955</u>

SeqLL Inc.**Notes to Condensed Consolidated Financial Statements
For the Three Months ended March 31, 2019
(Unaudited)****Note 11 — Subsequent Events**

Since March 31, 2019, the Company has issued one-year promissory notes for an aggregate of \$225,000 that accrue interest at 10% per annum. These notes are not convertible.

On March 31, 2019 the Company renegotiated an extension for all the Convertible Promissory Notes issued to St. Laurent Investments LLC in 2019 to be paid in full on either July 1, 2020, or a later date mutually agreed upon.

Also, since March 31, 2019, the Company issued a \$100,000 convertible promissory note to St. Laurent Investments. The convertible promissory note accrues interest at 10% per annum and is convertible into common stock at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing. In connection with these convertible promissory notes, the Company is obligated to issue warrants to purchase the number of common shares equal to 6% of the total amount of shares related to the conversion of these convertible promissory notes at the exercise price equal to the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company's next equity financing.

On April 15, 2019, the Company approved to carry out a reverse split of its shares, exchanging each 1.85 shares of Common Stock either issued or outstanding for one post-reverse split Common Stock share (see Note 1). No fractional shares were issued in connection with the Reverse Stock Split, and the Holders who otherwise would be entitled to receive fractional shares of Common Stock would be entitled to receive cash (without interest or deduction) in lieu of such fractional share interests. Holders of record as of April 16, 2019 were subject to the Reverse Stock Split.

On April 15, 2019, the Company's Board agreed to i) increase the authorized shares of the Company's common stock to 80 million shares and preferred stock into 20 million shares upon a successful Initial Public Offering "IPO"; ii) increase the pool of options under the Company's 2014 Equity Incentive Plan to 3,500,000 upon consummation of the IPO; and iii) award three new hires with a total of 60,000 equity stock options.

1,350,000 Shares of

Common Stock



PRELIMINARY PROSPECTUS

, 2019

WallachBeth Capital, LLC

Through and including _____, 2019 (90 days after the date of this prospectus), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table indicates 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 estimated except the Securities and Exchange Commission registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the Nasdaq Capital Market listing fee.

	Amount to be Paid
SEC registration fee	\$ 1,271
FINRA filing fee	\$ 2,071
The Nasdaq Capital Market initial listing fee	\$ 45,000
Printing and engraving expenses	\$100,000
Accounting fees and expenses	\$150,000
Legal fees and expenses	\$425,000
Transfer agent and registrar fees	\$ 1,500
Miscellaneous fees and expenses	\$150,000
Total	<u>\$874,842</u>

Item 14. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except for breaches of the director's duty of loyalty to the corporation or its stockholders, acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of a law, authorizations of the payments of a dividend or approval of a stock repurchase or redemption in violation of Delaware corporate law or for any transactions from which the director derived an improper personal benefit. Our certificate of incorporation will provide that no director will be liable to us or our stockholders for monetary damages for breach of fiduciary duties as a director, subject to the same exceptions as described above. We also expect to maintain standard insurance policies that provide coverage (1) to our directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments we may make to such officers and directors.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with a threatened, pending, or completed action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person 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 corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, indemnification is limited to expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with defense or settlement of such action or suit and no indemnification shall be made with respect to any claim, issue, or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of 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. In addition, to the extent that a present or former director or officer of a corporation has

been successful on the merits or otherwise in defense of any action, suit, or proceeding described above (or 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. Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative, or investigative action, suit, or proceeding may be advanced by the corporation upon receipt of an undertaking by such person to repay such amount if it is ultimately determined that such person is not entitled to indemnification by the corporation under Section 145 of the General Corporation Law of the State of Delaware. Our amended and restated certificate of incorporation will provide that we will, to the fullest extent permitted by law, indemnify any person made or threatened to be made a party to an action or proceeding by reason of the fact that he or she (or his or her testators or intestate) is or was our director or officer or serves or served at any other corporation, partnership, joint venture, trust or other enterprise in a similar capacity or as an employee or agent at our request, including service with respect to employee benefit plans maintained or sponsored by us, against expenses (including attorneys'), judgments, fines, penalties and amounts paid in settlement incurred in connection with the investigation, preparation to defend, or defense of such action, suit, proceeding, or claim. However, we are not required to indemnify or advance expenses in connection with any action, suit, proceeding, claim, or counterclaim initiated by us or on behalf of us. Our amended and restated bylaws will provide that we will indemnify and hold harmless each person who was or is a party or threatened to be made a party to any action, suit, or proceeding by reason of the fact that he or she is or was our director or officer, or is or was serving at our request in a similar capacity of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans (whether the basis of such action, suit, or proceeding is an action in an official capacity as a director or officer or in any other capacity while serving as a director or officer) to the fullest extent authorized by the Delaware General Corporation Law against all expense, liability and loss (including attorney's fees, judgments, fines, ERISA excise taxes, or penalties and amounts paid in settlement) reasonably incurred or suffered by such person in connection with such action, suit or proceeding, and this indemnification continues after such person has ceased to be an officer or director and inures to the benefit of such person's heirs, executors and administrators. The indemnification rights also include the right generally to be advanced expenses, subject to any undertaking required under Delaware General Corporation Law, and the right generally to recover expenses to enforce an indemnification claim or to defend specified suits with respect to advances of indemnification expenses.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding securities sold and issued by us since April 1, 2016 that were not registered under the Securities Act, as well as the consideration received by us for such securities and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

- (1) Option Agreement with Abhijeet Shinde dated December 1, 2016 for 43,243 incentive stock options pursuant to the 2014 Plan.
- (2) Option Agreement with Andrea Ashford Hicks dated July 24, 2016 for 16,216 nonstatutory stock options pursuant to the 2014 Plan.
- (3) Option Agreements with certain employees dated November 9, 2016 for an aggregate 233,513 stock options pursuant to the 2014 Plan.
- (4) Option Agreement with certain employees dated December 9, 2016 for an aggregate 5,405 incentive stock options pursuant to the 2014 Plan.
- (5) On March 15, 2018, the Company negotiated a final settlement payment for the promissory notes issued to Helicos Biosciences Company in the amount of \$105,000 (the "Helicos Note"). The principal and interest outstanding at December 31, 2017 on the Helicos Note was \$290,416. The Helicos Note was cancelled and forgiven upon legal acceptance of payment. The Notes carry a warrant in the amount equal to 6% of the Helicos Note to purchase stock of the Company.
- (6) Through the date ending September 5, 2018, the Company entered into a series of convertible promissory notes with certain preferred stockholders amounting \$3,314,315 and accruing interest at 10% per annum. On September 30, 2018, the Company entered into an Exchange Agreement

with St. Laurent Investments, LLC (the “SLT”) to exchange the outstanding SLT’s promissory notes in the amount of \$3,135,000 for (i) 1,866,071 shares of the Company’s Series A-2 Preferred Stock; (ii) warrants equal to 60,521 shares of common stock; (iii) warrants equal to 486,486 shares of common stock and (iv) a new promissory note in the amount of \$360,710 for the accrued interest for the SLT notes as of September 30, 2018.

- (7) Option Agreements with certain employees and consultants dated April 15, 2019 for an aggregate 32,431 stock options pursuant to the 2014 Plan.
- (8) During the fourth quarter of 2018, the Company entered into a series of convertible promissory notes with SLT amounting to \$360,000. These convertible promissory notes accrue interest at 10% per annum and are convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing. In connection with these convertible promissory notes, the Company issued 6,941 warrants to purchase common shares at an exercise price equal to the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing.
- (9) Through April 8, 2019, the Company has entered into a series of convertible promissory notes with SLT amounting to \$545,000. These convertible promissory notes accrue interest at 10% per annum and are convertible at the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing. In connection with these convertible promissory notes, the Company is obligated to issue warrants to purchase the number of common shares equal to 6% of the total amount of shares related to the conversion of these convertible promissory notes at the exercise price equal to the lower of \$3.10 per share or a 20% discount to the share price paid by the purchasers of equity securities in the Company’s next equity financing.

The offers, sales and issuances of securities listed above, were deemed exempt from registration under Section 4(a)(2) of the Securities Act or Regulation D promulgated thereunder in that the issuance of securities did not involve a public offering. The recipients of such securities in each of these transactions represented their intention to acquire the securities for investment purposes only and not with a view to or for sale in connection with any distribution thereof. The offers, sales and issuances of securities listed above, were deemed exempt from registration in reliance on Section 4(a)(2) of the Securities Act or Rule 701 promulgated thereunder as transactions pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of such securities were our employees, directors or bona fide consultants and received the securities under our equity incentive plans. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act and appropriate legends were affixed to the securities issued in such transactions.

Item 16. Exhibits and Financial Statement Schedules.

(a) *Exhibits.*

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and are incorporated by reference herein.

(b) *Financial Statement Schedules.*

All other schedules are omitted because they are not required, are not applicable, or the information is included in the financial statements or the related notes to financial statements thereto.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or 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 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 Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment 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.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities: the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the

underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) Provide to the underwriter at the closing specified in the underwriting agreements certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

(7) 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.

(8) 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

In reviewing the agreements included as exhibits to this registration statement, please remember they are included to provide you with information regarding their terms and are not intended to provide any other factual or disclosure information about us, our subsidiaries or other parties to the agreements. The agreements contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement and:

- *should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate;*
- *have been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement;*
- *may apply standards of materiality in a way that is different from what may be viewed as material to you or other investors; and*
- *were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.*

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. We acknowledge that, notwithstanding the inclusion of the foregoing cautionary statements, we are responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this registration statement not misleading. Additional information about us may be found elsewhere in the prospectus included in this registration statement.

Exhibit Number	Description of Exhibits
<u>1.1**</u>	<u>Form of Underwriting Agreement</u>
<u>3.1⁽¹⁾</u>	<u>Amended and Restated Certificate of Incorporation, as currently in effect</u>
<u>3.2⁽¹⁾</u>	<u>Bylaws, as currently in effect</u>
<u>3.3**</u>	<u>Form of Amended and Restated Certificate of Incorporation to be in effect upon the completion of this offering</u>
<u>3.4⁽¹⁾</u>	<u>Form of Amended and Restated Bylaws, to be in effect upon the completion of this offering</u>
<u>4.1**</u>	<u>Specimen common stock certificate</u>
<u>4.2**</u>	<u>Form of Underwriters' Warrant (included in Exhibit 1.1)</u>
<u>4.3⁽¹⁾</u>	<u>Form of Convertible Note</u>
<u>4.4⁽¹⁾</u>	<u>Form of Outstanding Warrant</u>
<u>5.1**</u>	<u>Opinion of Foley & Lardner LLP</u>
<u>10.1⁽¹⁾#</u>	<u>Amended and Restated 2014 Equity Incentive Plan</u>
<u>10.2⁽¹⁾</u>	<u>License Agreement dated March 15, 2013 between SeqLL, LLC and Helicos Biosciences Corporation</u>
<u>10.3⁽¹⁾</u>	<u>Sub-License Agreement dated March 15, 2013 between SeqLL, LLC and Helicos Biosciences Corporation</u>
<u>10.4⁽¹⁾</u>	<u>Amended and Restated Investors Rights Agreement</u>
<u>10.5⁽¹⁾</u>	<u>Commercial Lease dated November 25, 2014 by and between SeqLL, LLC, JAM Cambridge Ventures, LLC and RAM Cambridge Venture LLC</u>
<u>10.6⁽¹⁾</u>	<u>First Amendment to the Lease Agreement dated April 1, 2016, by and between SeqLL, LLC, JAM Cambridge Ventures, LLC and RAM Cambridge Venture LLC</u>
<u>10.7⁽¹⁾</u>	<u>Amended and Restated Right of First Refusal and Co-Sale Agreement</u>

Exhibit Number	Description of Exhibits
<u>10.8⁽¹⁾</u>	<u>Exchange Agreement dated September 30, 2018 by and between SeqLL Inc. and St. Laurent Investments, LLC</u>
<u>10.9⁽¹⁾</u>	<u>Form of Stock Option Agreement</u>
<u>10.10⁽¹⁾</u>	<u>Series A-1 Preferred Stock Purchase Agreement</u>
<u>10.11⁽¹⁾</u>	<u>Series A-2 Preferred Stock Purchase Agreement</u>
<u>10.12⁽¹⁾</u>	<u>First Amendment to Series A-2 Preferred Stock Purchase Agreement</u>
<u>21.1⁽¹⁾</u>	<u>Subsidiaries of the Registrant</u>
<u>23.1**</u>	<u>Consent of Wolf & Company, P.C., independent registered public accounting firm</u>
<u>23.2**</u>	<u>Consent of Foley & Lardner LLP (included in Exhibit 5.1)</u>
<u>24.1**</u>	<u>Power of Attorney (included on signature page to this registration statement)</u>

** Filed herewith.

(1) Included in the Registrant's Registration Statement on Form S-1 (File No. 333-230985) filed on April 23, 2019 and incorporated herein by reference.

Indicates a management contract or compensatory plan.

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 Woburn, State of Massachusetts, on this 21st day of May, 2019.

SEQLL INC.

By: /s/ Daniel Jones

Daniel Jones
Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned directors and officers of SeqLL Inc., hereby severally constitute and appoint Daniel Jones and John Kennedy, and each of them, our true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any subsequent registration statements pursuant to Rule 462 of the Securities Act of 1933, as amended and to file the same, with all exhibits thereto, and 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 we might or could do in person, hereby ratifying and confirming all that each of said attorney-in-fact or 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, 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/ Daniel Jones</u> Daniel Jones	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	May 21, 2019
<u>/s/ John W. Kennedy</u> John W. Kennedy	Chief Financial Officer and Secretary <i>(Principal Financial and Accounting Officer)</i>	May 21, 2019
<u>/s/ William C. St. Laurent</u> William C. St. Laurent	Director	May 21, 2019
<u>/s/ Douglas Miscoll</u> Douglas Miscoll	Director	May 21, 2019
<u>/s/ David Pfeffer</u> David Pfeffer	Director	May 21, 2019

UNDERWRITING AGREEMENT

May [*], 2019

WallachBeth Capital, LLC
Harborside Financial Center Plaza 5
185 Hudson Street, Suite 1410
Jersey City, NJ 07311

As Representative of the several Underwriters named on Schedule 1 attached hereto

Ladies and Gentlemen:

The undersigned, SeqLL Inc., a Delaware corporation (the “Company”), hereby confirms its agreement (this “Agreement”) with WallachBeth Capital, LLC (hereinafter the “Representative”) and with the other underwriters named on Schedule 1 hereto for which the Representative is acting as representative (the Representative and such other underwriters being collectively called the “Underwriters” or, individually, an “Underwriter”) as follows:

1. Purchase and Sale of Shares.

(a) Shares.

(i) Nature and Purchase of Shares.

(A) On the basis of the representations and warranties herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell to the several Underwriters an aggregate of up to 1,350,000 shares of its common stock, par value \$0.00001 per share (the “Common Stock”). The shares of Common Stock referred to in this Section 1(a) are hereinafter referred to as the “Firm Shares.”

(B) The Underwriters, severally and not jointly, agree to purchase from the Company the number of Firm Shares set forth opposite their respective names on Schedule 1 attached hereto and made a part hereof at a purchase price of \$[*] (the “Purchase Price”) per Firm Share (or 91% of the public offering price per Firm Share); The Firm Shares are to be offered initially to the public at the offering price set forth on the cover page of the Prospectus (as defined in Section 2(a)(i)(A) hereof).

(ii) Share Payment and Delivery.

(A) Delivery and payment for the Firm Shares shall be made no later than 2:00 p.m., Eastern time, on the second Business Day following the effective date (the “Effective Date”) of the Registration Statement (as defined in Section 2(a)(i)(A) below) (or the third Business Day following the Effective Date if the Registration Statement is declared effective after 4:01 p.m., Eastern time) or at such earlier time as shall be agreed upon by the Representative and the Company, at the offices of Carmel, Milazzo & DiChiara LLP, 55 West 39th Street, 18th Floor, New York, NY 10018 (“Representative Counsel”), or at such other place (or by electronic transmission) as shall be agreed upon by the Representative and the Company. The hour and date of delivery and payment for the Firm Shares is called the “Closing Date.”

(B) Payment for the Firm Shares shall be made on the Closing Date by wire transfer in federal (same day) funds, payable to the order of the Company upon delivery of the certificates (in form and substance satisfactory to the Underwriters) representing the Firm Shares (or through the facilities of the Depository Trust Company (“DTC”) or via a DWAC transfer), for the account of the Underwriters. The Firm Shares shall be registered in such name or names and in such authorized denominations as the Representative may request in writing prior to the Closing Date. The Company shall not be obligated to sell or deliver the Firm Shares except upon tender of payment by the Representative for all of the Firm Shares or via delivery versus payment for the Firm Shares. The term “Business Day” means any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions are authorized or obligated by law to close in New York, New York.

(iii) Over-allotment Option.

(A) Option Shares. For the purposes of covering any over-allotments in connection with the distribution and sale of the Firm Shares, the Company hereby grants to the Underwriters an option (the "Over-allotment Option") to purchase, in the aggregate, up to (a) 202,500 additional shares of Common Stock (the "Option Shares"), representing fifteen percent (15%) of the Firm Shares sold in the Offering, from the Company. The purchase price to be paid per Option Share shall be \$[*] per Option Share (or 91% of the public offering price per Option Share). The Firm Shares, the Option Shares and the shares of Common Stock issuable upon exercise of the Representative's Warrants (as set forth below), are collectively referred to as the "Public Securities." The Public Securities shall be issued directly by the Company and shall have the rights and privileges described in the Registration Statement, the Pricing Prospectus and the Prospectus referred to below. The offering and sale of the Public Securities is herein referred to as the "Offering."

(B) Exercise of Option. The Over-allotment Option granted pursuant to Section 1(a)(iii)(A) hereof may be exercised by the Representative as to all (at any time) or any part (from time to time) for any number of the Option Shares within 45 days after the Effective Date. The Underwriters shall not be under any obligation to purchase any the Option Shares prior to the exercise of the Over-allotment Option. The Over-allotment Option granted hereby may be exercised by the giving of oral notice to the Company from the Representative, which must be confirmed in writing by overnight mail or email or facsimile or other electronic transmission setting forth the number of the Option Shares to be purchased and the date and time for delivery of and payment for the Option Shares (the "Option Closing Date"), which shall not be later than five full Business Days after the date of the written notice or such other time as shall be agreed upon by the Company and the Representative, at the offices of Representative's Counsel, or at such other place (including remotely by facsimile or other electronic transmission) as shall be agreed upon by the Company and the Representative. If such delivery and payment for the Option Shares does not occur on the Option Closing Date, the Option Closing Date will be as set forth in the notice. Upon exercise of the Over-allotment Option with respect to all or any portion of the Option Shares subject to the terms and conditions set forth herein, (i) the Company shall become obligated to sell to the Underwriters the number of the Option Shares specified in such notice and (ii) each of the Underwriters, acting severally and not jointly, shall purchase a number of Option Shares equal to that percentage of the total number of the Option Shares then being purchased multiplied by the number of Option Shares opposite the name of such Underwriter as set forth in Schedule 1.

(C) Payment and Delivery. Payment for the Option Shares shall be made on the Option Closing Date by wire transfer in Federal (same day) funds, payable to the order of the Company upon delivery to the Underwriters of certificates (in form and substance satisfactory to the Underwriters) representing the Option Shares (or through the facilities of DTC or DWAC transfer) for the account of the Underwriters. The Option Shares shall be registered in such name or names and in such authorized denominations as the Representative may request in writing prior to the Option Closing Date. The Company shall not be obligated to sell or deliver the Option Shares except upon tender of payment by the Representative for applicable Option Shares.

(iv) Representative's Warrant.

(A) Warrant Amount; Term. The Company hereby agrees to issue to the Representative (and/or its designees) on the Closing Date, a five-year warrant (the "Representative's Warrant") for the purchase of 67,500 shares of Common Stock (5% of the number of Firm Shares) pursuant to a warrant agreement in the form attached hereto as Exhibit A (the "Representative's Warrant Agreement"), at an initial exercise price of \$[*], which is equal to 125% of the Purchase Price per Share. The Representative's Warrant and the shares of Common Stock issuable upon exercise of the Representative's Warrant are hereinafter referred to together as the "Representative's Securities." The Representative understands and agrees that there are significant restrictions pursuant to FINRA Rule 5110 against transferring the Representative's Warrant and the underlying securities within 180 days after the Effective Date and by its acceptance thereof shall agree that it will not sell, transfer, assign, pledge or hypothecate the Representative's Warrant, or any portion thereof, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities for a period of 180 days following the Effective Date to anyone other than (i) an Underwriter or a selected dealer in connection with the Offering, or (ii) a bona fide officer or partner of the Representative or of any such Underwriter or selected dealer; or as otherwise expressly permitted by Rule 5110(g), and only if any such transferee agrees to the foregoing lock-up restrictions.

(B) Delivery. Delivery of the Representative's Warrant Agreement shall be made on the Closing Date and shall be issued in the name or names and in such authorized denominations as the Representative may request.

2. Representations and Warranties of the Company. The Company represents and warrants to the Underwriters as of the Applicable Time (as defined below) and as of the Closing Date and as of each Option Closing Date, as follows (unless otherwise indicated, all references to the Company in this Section 2 shall refer to the Company, its subsidiaries and its variable interest entities):

(a) Filing of Registration Statement.

(i) Pursuant to the Securities Act.

(A) The Company has filed with the U.S. Securities and Exchange Commission (the "Commission") a registration statement, and an amendment or amendments thereto, on Form S-1 (File No. 333- 230985), including any related prospectus or prospectuses, for the registration of the Public Securities and the Representative's Securities under the Securities Act of 1933, as amended (the "Securities Act"), which registration statement and amendment or amendments have been prepared by the Company in conformity in all material respects with the requirements of the Securities Act and the rules and regulations of the Commission under the Securities Act (the "Securities Act Regulations") and will contain all material statements that are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations. Except as the context may otherwise require, such registration statement, as amended, on file with the Commission at the time the registration statement became effective (including the Preliminary Prospectus included in the registration statement, financial statements, schedules, exhibits and all other documents filed as a part thereof or incorporated therein by reference and all information deemed to be a part thereof as of the Effective Date pursuant to paragraph (b) of Rule 430A of the Securities Act Regulations (the "Rule 430A Information")), is referred to herein as the "Registration Statement." If the Company files any registration statement pursuant to Rule 462(b) of the Securities Act Regulations, then after such filing, the term "Registration Statement" shall include such registration statement filed pursuant to Rule 462(b). The Registration Statement has been declared effective by the Commission on the date hereof.

(B) Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "Preliminary Prospectus." The Preliminary Prospectus that was included in the Registration Statement immediately prior to the Applicable Time is hereinafter called the "Pricing Prospectus." The final prospectus in the form first furnished to the Underwriters for use in the Offering is hereinafter called the "Prospectus." Any reference to the "most recent Preliminary Prospectus" shall be deemed to refer to the latest Preliminary Prospectus included in the Registration Statement.

(C) “Applicable Time” means 4:30 p.m., Eastern time, on the date of this Agreement.

(ii) Pursuant to the Exchange Act. The Company has filed with the Commission a Form 8-A providing for the registration pursuant to Section 12(b) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), of the Common Stock. The registration of the Common Stock under the Exchange Act has been declared effective by the Commission on or prior to the date hereof. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act, nor has the Company received any notification that the Commission is contemplating terminating such registration.

(b) Stock Exchange Listing. The Common Stock has been approved for listing on The NASDAQ Capital Market (the “Exchange”), subject to official notice of issuance, and the Company has taken no action designed to, or likely to have the effect of, delisting the Common Stock from the Exchange, nor has the Company received any notification that the Exchange is contemplating terminating such listing.

(c) No Stop Orders, etc. Neither the Commission nor, to the Company’s knowledge, any state regulatory authority has issued any order preventing or suspending the use of the Registration Statement, any Preliminary Prospectus or the Prospectus or has instituted or, to the Company’s knowledge, threatened to institute, any proceedings with respect to such an order. The Company has complied with each request (if any) from the Commission for additional information.

(d) Disclosures in Registration Statement.

(i) Compliance with Securities Act and 10b-5 Representation.

(A) Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. Each Preliminary Prospectus, including the prospectus filed as part of the Registration Statement as originally filed or as part of any amendment or supplement thereto, and the Prospectus, at the time each was filed with the Commission, complied in all material respects with the requirements of the Securities Act and the Securities Act Regulations. Each Preliminary Prospectus delivered to the Underwriters for use in connection with this Offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(B) Neither the Registration Statement nor any amendment thereto, at its effective time, as of the Applicable Time, at the Closing Date or at any Option Closing Date, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading.

(C) The Pricing Prospectus, as of the Applicable Time, at the Closing Date or at any Option Closing Date, did not, does not and will not include an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to statements made or statements omitted in reliance upon and in conformity with written information furnished to the Company with respect to the Underwriters by the Representative expressly for use in the Prospectus or any amendment thereof or supplement thereto. The parties acknowledge and agree that such information provided by or on behalf of any Underwriter consists solely of disclosure contained in the “Underwriting – Discounts and Commissions” section of the Prospectus (the “Underwriters’ Information”); and

(D) Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Date or at any Option Closing Date, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that this representation and warranty shall not apply to the Underwriters' Information.

- (ii) Disclosure of Agreements. The agreements and documents described in the Registration Statement, the Pricing Prospectus and the Prospectus conform in all material respects to the descriptions thereof contained therein and there are no agreements or other documents required by the Securities Act and the Securities Act Regulations to be described in the Registration Statement, the Pricing Prospectus and the Prospectus or to be filed with the Commission as exhibits to the Registration Statement, that have not been so described or filed. Each agreement or other instrument (however characterized or described) to which the Company is a party or by which it is or may be bound or affected and (i) that is referred to in the Registration Statement, the Pricing Prospectus and the Prospectus, and (ii) is material to the Company's business, has been duly authorized and validly executed by the Company, is in full force and effect in all material respects and is enforceable against the Company and, to the Company's knowledge, the other parties thereto, in accordance with its terms, except (x) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally, (y) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws, and (z) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought. None of such agreements or instruments has been assigned by the Company, and neither the Company nor, to the Company's knowledge, any other party is in material default thereunder and, to the Company's knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a material default thereunder, except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus. To the Company's knowledge, performance by the Company of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its assets or business (each, a "Governmental Entity"), including, without limitation, those relating to environmental laws and regulations, that would reasonably be expected to constitute a Material Adverse Change (as hereinafter defined).
- (iii) Prior Securities Transactions. Since January 1, 2018, no securities of the Company have been sold by the Company or by or on behalf of, or for the benefit of, any person or persons controlling, controlled by or under common control with the Company, except as disclosed in the Registration Statement, the Pricing Prospectus and the Preliminary Prospectus.
- (iv) Regulations. The disclosures in the Registration Statement, the Pricing Prospectus and the Prospectus concerning the effects of federal, state, local and all foreign laws, rules and regulations relating to the Company's business as currently contemplated are correct in all material respects and no other such regulations are required to be disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus which are not so disclosed.

(e) Changes after Dates in Registration Statement.

(i) No Material Adverse Change. Since the respective dates as of which information is given in the Registration Statement, the Pricing Prospectus and the Prospectus, except as otherwise specifically stated therein: (i) there has been no material adverse change in the financial position or results of operations of the Company, nor to the Company's knowledge, any change or development that, singularly or in the aggregate, would involve a material adverse change, in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company (a "Material Adverse Change"); (ii) there have been no material transactions entered into by the Company, other than as contemplated pursuant to this Agreement; and (iii) no officer or director of the Company has resigned from any position with the Company.

(ii) Recent Securities Transactions, etc. Subsequent to the respective dates as of which information is given in the Registration Statement, the Pricing Prospectus and the Prospectus, and except as may otherwise be indicated or contemplated herein or disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company has not: (i) issued any securities (other than (i) grants under any stock compensation plan and (ii) shares of common stock issued upon exercise or conversion of option, warrants or convertible securities described in the Registration Statement, the Pricing Prospectus and the Prospectus) or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.

(f) Independent Accountants. To the knowledge of the Company, Wolf & Company, P.C. (the "Auditor"), whose report is filed with the Commission as part of the Registration Statement, the Pricing Prospectus and the Prospectus, is an independent registered public accounting firm as required by the Securities Act and the Securities Act Regulations and the Public Company Accounting Oversight Board. Except as may otherwise be disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus, the Auditor has not, during the periods covered by the financial statements included in the Registration Statement, the Pricing Prospectus and the Prospectus, provided to the Company any non-audit services, as such term is used in Section 10A(g) of the Exchange Act.

(g) Financial Statements, etc. The financial statements, including the notes thereto and supporting schedules included in the Registration Statement, the Pricing Prospectus and the Prospectus, fairly present in all material respects the financial position and the results of operations of the Company at the dates and for the periods to which they apply; and such financial statements have been prepared in conformity with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("GAAP"), consistently applied throughout the periods involved (provided that unaudited interim financial statements are subject to year-end audit adjustments that are not expected to be material in the aggregate and do not contain all footnotes required by GAAP); and the supporting schedules included in the Registration Statement present fairly in all material respects the information required to be stated therein. Except as included therein, no historical or pro forma financial statements are required to be included in the Registration Statement, the Pricing Prospectus or the Prospectus under the Securities Act or the Securities Act Regulations. The pro forma and pro forma as adjusted financial information and the related notes, if any, included in the Registration Statement, the Pricing Prospectus and the Prospectus have been properly compiled and prepared in all material respects in accordance with the applicable requirements of the Securities Act and the Securities Act Regulations and present fairly in all material respects the information shown therein, and the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions and circumstances referred to therein. All disclosures contained in the Registration Statement, the Pricing Prospectus or the Prospectus regarding "non-GAAP financial measures" (as such term is defined by the rules and regulations of the Commission), if any, comply with Regulation G of the Exchange Act and Item 10 of Regulation S-K of the Securities Act, to the extent applicable. Each of the Registration Statement, the Pricing Prospectus and the Prospectus discloses all material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationships of the Company with unconsolidated entities or other persons that may have a material current or future effect on the Company's financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses. Except as disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus, (a) the Company has not incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions other than in the ordinary course of business, (b) the Company has not declared or paid any dividends or made any distribution of any kind with respect to its capital stock, (c) there has not been any change in the capital stock of the Company (other than (i) grants under any stock compensation plan and (ii) shares of common stock issued upon exercise or conversion of option, warrants or convertible securities described in the Registration Statement, the Pricing Prospectus and the Prospectus), and (d) there has not been any Material Adverse Change in the Company's long-term or short-term debt.

(h) Authorized Capital; Options, etc. The Company had, at the date or dates indicated in the Registration Statement, the Pricing Prospectus and the Prospectus, the duly authorized, issued and outstanding capitalization as set forth therein. Based on the assumptions stated in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company will have on the Closing Date the adjusted stock capitalization set forth therein. Except as set forth in, or contemplated by, the Registration Statement, the Pricing Prospectus and the Prospectus, on the Effective Date, as of the Applicable Time, on the Closing Date and any Option Closing Date, there will be no stock options, warrants, or other rights to purchase or otherwise acquire any authorized, but unissued shares of Common Stock of the Company or any security convertible or exercisable into shares of Common Stock of the Company, or any contracts or commitments to issue or sell shares of Common Stock or any such options, warrants, rights or convertible securities.

(i) Valid Issuance of Securities, etc.

(i) Outstanding Securities. All issued and outstanding securities of the Company issued prior to the transactions contemplated by this Agreement have been duly authorized and validly issued and are fully paid and non-assessable; the holders thereof have no rights of rescission with respect thereto, and are not subject to personal liability by reason of being such holders; and except as disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus, none of such securities were issued in violation of the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company. The securities of the Company to be outstanding upon consummation of the Offering conform in all material respects to all statements relating thereto contained in the Registration Statement, the Pricing Prospectus and the Prospectus. The offers and sales of the outstanding shares of Common Stock were at all relevant times either registered under the Securities Act and the applicable state securities or “blue sky” laws or, based in part on the representations and warranties of the purchasers of such shares, exempt from such registration requirements.

(ii) Securities Sold Pursuant to this Agreement. The Public Securities and Representative’s Securities have been duly authorized for issuance and sale and, when issued and paid for, will be validly issued, fully paid and non-assessable; the holders thereof are not and will not be subject to personal liability by reason of being such holders; the Public Securities and Representative’s Securities are not and will not be subject to the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company; and all corporate action required to be taken for the authorization, issuance and sale of the Public Securities and Representative’s Securities has been duly and validly taken; the shares of Common Stock issuable upon exercise of the Representative’s Warrants (the “Underlying Common Stock”) have been duly authorized and reserved for issuance by all necessary corporate action on the part of the Company and when paid for and issued in accordance with such Representative’s Warrants or exercised on a cashless basis as set forth in such Representative’s Warrants, as the case may be, such shares of Underlying Common Stock will be validly issued, fully paid and non-assessable; the Public Securities and Representative’s Securities conform in all material respects to all statements with respect thereto contained in the Registration Statement, the Pricing Prospectus and the Prospectus.

(j) Registration Rights of Third Parties. Except as set forth in the Registration Statement, the Pricing Prospectus and the Prospectus, no holders of any securities of the Company or any rights exercisable for or convertible or exchangeable into securities of the Company have the right to require the Company to register any such securities of the Company under the Securities Act or to include any such securities in a registration statement to be filed by the Company (except for any such rights that have been waived).

(k) Validity and Binding Effect of Agreements. This Agreement and the Representative's Warrant Agreement have been duly and validly authorized by the Company, and, when executed and delivered, will constitute, the valid and binding agreements of the Company, enforceable against the Company in accordance with their respective terms, except: (i) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally; (ii) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws; and (iii) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefor may be brought.

(l) No Conflicts, etc. The execution, delivery and performance by the Company of this Agreement, the Representative's Warrant Agreement and all ancillary documents, the consummation by the Company of the transactions herein and therein contemplated and the compliance by the Company with the terms hereof and thereof do not and will not, with or without the giving of notice or the lapse of time or both: (i) result in a breach of, or conflict with any of the terms and provisions of, or constitute a material default under, or result in the creation, modification, termination or imposition of any lien, charge or encumbrance upon any property or assets of the Company pursuant to the terms of any agreement or instrument to which the Company is a party; (ii) result in any violation of the provisions of the Company's Articles of Incorporation (as the same may be amended or restated from time to time, the "Charter") or the by-laws of the Company (as the same may be amended or restated from time to time, the "Bylaws"); or (iii) violate any existing applicable law, rule, regulation, judgment, order or decree of any Governmental Entity as of the date hereof, except in the cases of clauses (i) and (iii) for such breaches, conflicts or violations which would not reasonably be expected to have a Material Adverse Change.

(m) Regulatory. Except as described in the Registration Statement, the Pricing Prospectus and the Prospectus or as would not reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change: (i) the Company has not received notice from any Governmental Entity alleging or asserting noncompliance with any Applicable Laws (as defined in clause (ii) below) or Authorizations (as defined in clause (iii) below); (ii) the Company is and has been in material compliance with federal, state or foreign statutes, laws, ordinances, rules and regulations applicable to the Company (collectively, "Applicable Laws"); (iii) the Company possesses all licenses, certificates, approvals, clearances, consents, authorizations, qualifications, registrations, permits, and supplements or amendments thereto required by any such Applicable Laws and/or to carry on its businesses as now conducted ("Authorizations") and such Authorizations are valid and in full force and effect and the Company is not in violation of any term of any such Authorizations, except for any violations which would not reasonably be expected to have a Material Adverse Change; (iv) the Company has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Entity or third party alleging that any product, operation or activity is in violation of any Applicable Laws or Authorizations or has any knowledge that any such Governmental Entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, nor, to the Company's knowledge, has there been any material noncompliance with or violation of any Applicable Laws by the Company that could reasonably be expected to require the issuance of any such communication or result in an investigation, corrective action, or enforcement action by any Governmental Entity; and (v) the Company has not received notice that any Governmental Entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any knowledge that any such Governmental Entity has threatened or is considering such action. Neither the Company nor, to the Company's knowledge, any of its directors, officers, employees or agents has been convicted of any crime under any Applicable Laws.

(n) No Defaults; Violations. No material default exists in the due performance and observance of any term, covenant or condition of any material license, contract, indenture, mortgage, deed of trust, note, loan or credit agreement, or any other agreement or instrument evidencing an obligation for borrowed money, or any other material agreement or instrument to which the Company is a party or by which the Company may be bound or to which any of the properties or assets of the Company is subject. The Company is not (i) in violation of any term or provision of its Charter or Bylaws, or (ii) in violation of any franchise, license, permit, applicable law, rule, regulation, judgment or decree of any Governmental Entity applicable to the Company, except for such defaults or violations the consequences of which would not reasonably be expected to result in a Material Adverse Change.

(o) Corporate Power; Licenses; Consents.

(i) Conduct of Business. Except as described in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company has all requisite corporate power and authority, and has all necessary authorizations, approvals, orders, licenses, certificates and permits of and from all governmental regulatory officials and bodies that it needs as of the date hereof to conduct its business purpose as described in the Registration Statement, the Pricing Prospectus and the Prospectus, except where such failure to have such necessary authorizations, approvals, orders, licenses, certificates and permits would not reasonably be expected to result in a Material Adverse Change.

(ii) Transactions Contemplated Herein. The Company has all corporate power and authority to enter into this Agreement and to carry out the provisions and conditions hereof, and all consents, authorizations, approvals and orders required in connection therewith have been obtained. No consent, authorization or order of, and no filing with, any court, government agency or other body is required for the valid issuance, sale and delivery of the Public Securities and the consummation of the transactions and agreements contemplated by this Agreement, and the Representative's Warrant and as contemplated by the Registration Statement, the Pricing Prospectus and the Prospectus, except with respect to applicable federal and state securities laws and the rules and regulations of the Financial Industry Regulatory Authority, Inc. ("FINRA") and of the Exchange.

(p) D&O Questionnaires. To the Company's knowledge, all information contained in the questionnaires (the "Questionnaires") completed by each of the Company's directors and officers immediately prior to the Offering (the "Insiders") as supplemented by all information concerning the Company's directors, officers and principal stockholders as described in the Registration Statement, the Pricing Prospectus and the Prospectus, provided to the Underwriters, is true and correct in all material respects and the Company has not become aware of any information which would cause the information disclosed in the Questionnaires to become materially inaccurate and incorrect.

(q) Litigation; Governmental Proceedings. There is no material action, suit, proceeding, inquiry, arbitration, investigation, litigation or governmental proceeding pending or, to the Company's knowledge, threatened against, or involving the Company or, to the Company's knowledge, any executive officer or director which has not been disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus which is required to be disclosed, in each case which individually or in the aggregate, is reasonably expected to result in a Material Adverse Change.

(r) Good Standing. The Company has been duly organized and is validly existing as a corporation and is in good standing under the laws of the State of Delaware as of the date hereof, and is duly qualified to do business and is in good standing in each other jurisdiction in which its ownership or lease of property or the conduct of business requires such qualification, except where the failure to qualify, singularly or in the aggregate, would not have or reasonably be expected to result in a Material Adverse Change.

(s) Insurance. The Company carries or is entitled to the benefits of insurance, with, to the Company's knowledge, reputable insurers, and in such amounts and covering such risks which the Company believes are reasonably adequate, and all such insurance is in full force and effect. The Company has no reason to believe that it will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to result in a Material Adverse Change.

(t) Transactions Affecting Disclosure to FINRA.

(i) Finder's Fees. Except as described in the Registration Statement, the Pricing Prospectus and the Prospectus, or as disclosed on Schedule 3 hereto, there are no claims, payments, arrangements, agreements or understandings relating to the payment of a finder's, consulting or origination fee by the Company or any Insider with respect to the sale of the Public Securities hereunder or any other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its stockholders that may affect the Underwriters' compensation, as determined by FINRA.

(ii) Payments Within 180 Days. Except as described in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) any FINRA member; or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the 180-day period immediately preceding the original filing of the Registration Statement, other than the payment to the Underwriters as provided hereunder in connection with the Offering.

(iii) Use of Proceeds. None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

(iv) FINRA Affiliation. There is no (i) officer or director of the Company, (ii) to the Company's knowledge, beneficial owner of 5% or more of any class of the Company's securities or (iii) to the Company's knowledge, beneficial owner of the Company's unregistered equity securities which were acquired during the 180-day period immediately preceding the original filing of the Registration Statement that, in each case, is an affiliate or associated person of a FINRA member participating in the Offering (as determined in accordance with the rules and regulations of FINRA).

(v) Information. All information provided by the Company in its FINRA Questionnaire to Representative Counsel specifically for use by Representative Counsel in connection with its Public Offering System filings (and related disclosure) with FINRA is true, correct and complete in all material respects.

(u) Foreign Corrupt Practices Act. Neither the Company nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any other person acting on behalf of the Company, has, directly or indirectly, given or agreed to give any money, gift or similar benefit (other than legal price concessions to customers in the ordinary course of business) to any customer, supplier, employee or agent of a customer or supplier, or official or employee of any governmental agency or instrumentality of any government (domestic or foreign) or any political party or candidate for office (domestic or foreign) or other person who was, is, or may be in a position to help or hinder the business of the Company (or assist it in connection with any actual or proposed transaction) that (i) might subject the Company to any damage or penalty in any civil, criminal or governmental litigation or proceeding, (ii) if not given in the past, might have had a Material Adverse Change or (iii) if not continued in the future, might adversely affect the assets, business, operations or prospects of the Company. The Company has taken reasonable steps to ensure that its accounting controls and procedures are sufficient to cause the Company to comply in all material respects with the Foreign Corrupt Practices Act of 1977, as amended.

(v) Compliance with OFAC. Neither the Company nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any other person acting on behalf of the Company, is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC"), and the Company will not, directly or indirectly, use the proceeds of the Offering hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(w) Money Laundering Laws. The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(x) Officers' Certificate. Any certificate signed by any duly authorized officer of the Company and delivered to the Representative or to Representative Counsel shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

(y) Lock-Up Agreements. Schedule 2 hereto contains a complete and accurate list of the Company's officers, and directors and a list of certain shareholders, as agreed to between the Company and the Representative (collectively, the "Lock-Up Parties"). The Company has caused each of the Lock-Up Parties to deliver to the Representative an executed Lock-Up Agreement, in the form attached hereto as Exhibit B (the "Lock-Up Agreement"), prior to the execution of this Agreement.

(z) Subsidiaries. Except as described in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company has no direct or indirect subsidiaries or variable interest entities and does not hold any equity interests in any other entity.

(aa) Related Party Transactions. There are no business relationships or related party transactions involving the Company or any other person required to be described in the Registration Statement, the Pricing Prospectus and the Prospectus that have not been described as required.

(bb) Board of Directors. The Board of Directors of the Company is comprised of the persons set forth under the heading of the Pricing Prospectus and the Prospectus captioned "Management — Directors and Executive Officers." The qualifications of the persons serving as board members and the overall composition of the board comply with the Exchange Act, the Exchange Act Regulations, the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder (the "Sarbanes-Oxley Act") applicable to the Company and the listing rules of the Exchange. At least one member of the Audit Committee of the Board of Directors of the Company qualifies as an "audit committee financial expert," as such term is defined under Regulation S-K and the listing rules of the Exchange. In addition, at least a majority of the persons serving on the Board of Directors qualify as "independent," as defined under the listing rules of the Exchange.

(cc) Sarbanes-Oxley Compliance.

(i) Disclosure Controls. The Company has developed and currently maintains disclosure controls and procedures that will comply with Rule 13a-15 or 15d-15 under the Exchange Act Regulations applicable to it, and except as disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus, such controls and procedures are effective to ensure that all material information concerning the Company will be made known on a timely basis to the individuals responsible for the preparation of the Company's Exchange Act filings and other public disclosure documents.

(ii) Compliance. The Company is, or at the Applicable Time and on the Closing Date will be, in material compliance with the provisions of the Sarbanes-Oxley Act applicable to it, and has implemented or will implement such programs and taken reasonable steps to ensure the Company's future compliance (not later than the relevant statutory and regulatory deadlines therefor) with all of the material provisions of the Sarbanes-Oxley Act.

(dd) Accounting Controls. The Company maintains systems of "internal control over financial reporting" (as defined under Rules 13a-15 and 15d-15 under the Exchange Act Regulations) that comply in all material respects with the requirements of the Exchange Act and have been designed by, or under the supervision of, its principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to, internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as disclosed in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company is not aware of any material weaknesses in its internal controls. The Company's auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses, if any, in the design or operation of internal controls over financial reporting which are known to the Company's management and that have adversely affected or are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and (ii) any fraud, if any, known to the Company's management, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls over financial reporting.

(ee) No Investment Company Status. The Company is not and, after giving effect to the Offering and the application of the proceeds thereof as described in the Registration Statement, the Pricing Prospectus and the Prospectus, will not be, required to register as an "investment company," as defined in the Investment Company Act of 1940, as amended.

(ff) No Labor Disputes. No labor dispute with the employees of the Company exists or, to the knowledge of the Company, is imminent.

(gg) Intellectual Property Rights. To the Company's knowledge, the Company has, or can acquire on reasonable terms, ownership of and/or license to, or otherwise has the right to use, all inventions, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), patents and patent rights trademarks, service marks and trade names, copyrights, (collectively "Intellectual Property") material to carrying on its businesses as described in the Pricing Prospectus. The Company has not received any correspondence relating to any Intellectual Property, including notice of: (A) infringement or misappropriation of, or conflict with, any Intellectual Property of a third party; (B) asserted rights of others with respect to any Intellectual Property of the Company; or (C) assertions that any Intellectual Property of the Company is invalid or otherwise inadequate to protect the interest of the Company, that in each case (if the subject of any unfavorable decision, ruling or finding), individually or in the aggregate, would have or would reasonably be expected to have a Material Adverse Change. To the Company's knowledge, there are no third parties who have been able to establish any material rights to any Intellectual Property, except for the retained rights of the owners or licensors of any Intellectual Property that is licensed to the Company. There is no pending or, to the Company's knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the validity, enforceability or scope of any Intellectual Property of the Company or (B) challenging the Company's rights in or to any Intellectual Property or (C) that the Company materially infringes, misappropriates or otherwise violates or conflicts with any Intellectual Property or other proprietary rights of others. The Company has complied in all material respects with the terms of each agreement described in the Registration Statement, Pricing Prospectus or Prospectus pursuant to which any Intellectual Property is licensed to the Company, and all such agreements related to products currently made or sold by the Company, or to product candidates currently under development, are in full force and effect.

(hh) Taxes. The Company has filed all returns (as hereinafter defined) required to be filed with taxing authorities prior to the date hereof or has duly obtained extensions of time for the filing thereof. Except as described in the Registration Statement, the Pricing Prospectus and the Prospectus, the Company has paid all taxes (as hereinafter defined) shown as due on such returns that were filed and has paid all taxes imposed on or assessed against the Company, except for such exceptions as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change. The provisions for taxes payable, if any, shown on the financial statements filed with or as part of the Registration Statement are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. Except as disclosed in writing to the Underwriters, (i) no issues have been raised (and are currently pending) by any taxing authority in connection with any of the returns or taxes asserted as due from the Company, and (ii) no waivers of statutes of limitation with respect to the returns or collection of taxes have been given by or requested from the Company. The term "taxes" mean all federal, state, local, foreign and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments or charges of any kind whatever, together with any interest and any penalties, additions to tax or additional amounts with respect thereto. The term "returns" means all returns, declarations, reports, statements and other documents required to be filed in respect to taxes.

(ii) Employee Benefit Laws. The Company is not in violation of or has not received notice of any violation with respect to any federal or state law relating to discrimination in the hiring, promotion or pay of employees, nor any applicable federal or state wages and hours law, nor any state law precluding the denial of credit due to the neighborhood in which a property is situated, the violation of any of which could reasonably be expected to have a Material Adverse Change.

(jj) Industry Data. The statistical and market-related data included in each of the Registration Statement, the Pricing Prospectus and the Prospectus are based on or derived from sources that the Company reasonably and in good faith believes are reliable and accurate or represent the Company's good faith estimates that are made on the basis of data derived from such sources.

(kk) Forward-Looking Statements. No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Registration Statement, the Pricing Prospectus or the Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(ll) Export and Import Laws. The Company, and, to the Company's knowledge, each of its affiliates, and any director, officer, agent or employee of, or other person associated with or acting on behalf of the Company, has acted at all times in compliance with applicable Export and Import Laws (as defined below) and there are no claims, complaints, charges, investigations or proceedings pending or expected or, to the knowledge of the Company, threatened between the Company or any of its Subsidiaries and any governmental authority under any Export or Import Laws. The term "Export and Import Laws" means the Arms Export Control Act, the International Traffic in Arms Regulations, the Export Administration Act of 1979, as amended, the Export Administration Regulations, and all other laws and regulations of the United States government regulating the provision of services to non-U.S. parties or the export and import of articles or information from and to the United States of America, and all similar laws and regulations of any foreign government regulating the provision of services to parties not of the foreign country or the export and import of articles and information from and to the foreign country to parties not of the foreign country.

(mm) Integration. Neither the Company, nor any of its affiliates, nor any person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause the Offering to be integrated with prior offerings by the Company for purposes of the Securities Act that would require the registration of any such securities under the Securities Act.

(nn) Confidentiality and Non-Competition. To the Company's knowledge, no director, officer, key employee or consultant of the Company is subject to any confidentiality, non-disclosure, non-competition agreement or non-solicitation agreement with any employer or prior employer that could reasonably be expected to materially affect his ability to be and act in his respective capacity of the Company or be expected to result in a Material Adverse Change.

(oo) Smaller Reporting Company. As of the time of filing of the Registration Statement, the Company was a "smaller reporting company," as defined in Rule 12b-2 of the Exchange Act Regulations.

3. Covenants of the Company. The Company covenants and agrees as follows:

(a) Amendments to Registration Statement. The Company shall deliver to the Representative, prior to filing, any amendment or supplement to the Registration Statement or Prospectus proposed to be filed after the Effective Date and not file any such amendment or supplement to which the Representative shall reasonably object in writing; provided however, that this Section 3(a) shall not be applicable with respect to any supplements to the Registration Statement filed solely for the purpose of supplementing the Registration Statement or Prospectus with a report filed with the Commission by the Company pursuant to the Exchange Act.

(b) Federal Securities Laws.

(i) Compliance. The Company shall comply with the requirements of Rule 430A of the Securities Act Regulations, and will notify the Representative promptly, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed; (ii) of the receipt of any comments from the Commission; (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or for additional information; (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any Preliminary Prospectus or the Prospectus, or of the suspension of the qualification of the Public Securities and Representative's Securities for offering or sale in any jurisdiction, or of the initiation or, to the Company's knowledge, threatening, of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the Securities Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the Securities Act in connection with the Offering of the Public Securities and Representative's Securities. The Company shall effect all filings required under Rule 424(b) of the Securities Act Regulations, in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and shall take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company shall use its commercially reasonable efforts to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof at the earliest possible moment.

(ii) Continued Compliance. The Company shall comply with the Securities Act, the Securities Act Regulations, the Exchange Act and the Exchange Act Regulations so as to permit the completion of the distribution of the Public Securities as contemplated in this Agreement and in the Registration Statement, the Pricing Prospectus and the Prospectus. If at any time when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172 of the Securities Act Regulations (“Rule 172”), would be) required by the Securities Act to be delivered in connection with sales of the Public Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; (ii) amend or supplement the Pricing Prospectus or the Prospectus in order that the Pricing Prospectus or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the Pricing Prospectus or the Prospectus, as the case may be, in order to comply with the requirements of the Securities Act or the Securities Act Regulations, the Company will promptly (A) give the Representative notice of such event; (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the Pricing Prospectus or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representative with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representative or counsel for the Underwriters shall reasonably object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company has given the Representative notice of any filings made pursuant to the Exchange Act or the Exchange Act Regulations within 48 hours prior to the Applicable Time. The Company shall give the Representative notice of its intention to make any such filing from the Applicable Time until the later of the Closing Date and the exercise in full or expiration of the Over-allotment Option specified in Section 10 hereof and will furnish the Representative with copies of the related document(s) a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representative or counsel for the Underwriters shall reasonably object.

(c) Delivery to the Underwriters of Registration Statements. The Company has delivered or made available or shall deliver or make available to the Representative and counsel for the Representative, without charge, signed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith) and signed copies of all consents and certificates of experts, and will also deliver to the Underwriters, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) for each of the Underwriters. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) Delivery to the Underwriters of Prospectuses. The Company has delivered or made available or will deliver or make available to each Underwriter, without charge, as many copies of each Preliminary Prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the Securities Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the Securities Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters may be delivered electronically and will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) Effectiveness and Events Requiring Notice to the Representative. The Company shall use its commercially reasonable efforts to cause the Registration Statement to remain effective with a current prospectus through the earlier of: (a) the expiration date of the Warrants (or the date all Warrants have been exercised or duly called, if earlier), and (b) the date that the Warrants may be sold by the holders thereof under Rule 144 without volume or manner of sale restrictions as evidenced by an opinion of counsel to the Company. The Company shall notify the Representative immediately and confirm the notice in writing: (i) of the effectiveness of the Registration Statement and any amendment thereto; (ii) of the issuance by the Commission of any stop order or of the initiation, or to the Company's knowledge, the threatening, of any proceeding for that purpose; (iii) of the issuance by any state securities commission of any proceedings for the suspension of the qualification of the Public Securities for offering or sale in any jurisdiction or of the initiation, or to the Company's knowledge, the threatening, of any proceeding for that purpose; (iv) of the mailing and delivery to the Commission for filing of any amendment or supplement to the Registration Statement or Prospectus; (v) of the receipt of any comments or request for any additional information from the Commission; and (vi) of the happening of any event during the period described in this Section 3(e) that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement, the Pricing Prospectus or the Prospectus untrue or that requires the making of any changes in (a) the Registration Statement in order to make the statements therein not misleading, or (b) in the Pricing Prospectus or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Commission or any state securities commission shall enter a stop order or suspend such qualification at any time, the Company shall use its commercially reasonable efforts to obtain promptly the lifting of such order.

(f) Listing. The Company shall use its commercially reasonable efforts to maintain the listing of the Common Stock on the Exchange for three (3) years after the date of this Agreement.

(g) Reports to the Representative; Transfer Agent.

(i) Periodic Reports, etc. For a period of one year after the date of this Agreement, the Company shall furnish or make available to the Representative copies of such financial statements and other periodic and special reports as the Company from time to time furnishes generally to holders of any class of its securities and also promptly furnish or make available to the Representative: (i) a copy of each periodic report the Company shall be required to file with the Commission under the Exchange Act and the Exchange Act Regulations; (ii) a copy of every press release and every news item and article with respect to the Company or its affairs which was released by the Company and filed or furnished on a Current Report on Form 8-K; (iii) a copy of each Current Report on Form 8-K prepared and filed by the Company; and (iv) five copies of each registration statement filed by the Company under the Securities Act. Documents filed with the Commission pursuant to its EDGAR system or otherwise filed with the Commission or made publicly available shall be deemed to have been delivered to the Representative pursuant to this Section 3(g)(i).

(ii) Transfer Agent. The Company shall maintain a transfer agent and registrar for the Common Stock.

(h) Payment of Expenses.

(i) General Expenses Related to the Offering. The Company hereby agrees to pay on the Closing Date and each Option Closing Date, to the extent not paid at the Closing Date or any prior Option Closing Date, expenses incident to the performance of the obligations of the Company under this Agreement, including: (a) all filing fees and communication expenses relating to the registration of the Public Securities to be sold in the Offering with the Commission; (b) all actual Public Offering Filing System filing fees associated with the review of the Offering by FINRA; (c) all fees and expenses relating to the listing of the Common Stock on the Exchange; (d) all fees, expenses and disbursements, if any, relating to the registration or qualification of the Public Securities under the “blue sky” securities laws of such states and other jurisdictions as the Representative may reasonably designate (including, without limitation, all filing and registration fees, and the reasonable fees and disbursements of “blue sky” counsel); (e) all actual fees, expenses and disbursements relating to the registration, qualification or exemption of the Public Securities under the securities laws of such foreign jurisdictions as the Representative may reasonably designate; (f) the costs of all mailing and printing of the Registration Statements, Prospectuses and all amendments, supplements and exhibits thereto and as many preliminary and final Prospectuses as the Representative may reasonably deem necessary; (g) the costs of preparing, printing and delivering certificates representing the Public Securities; (h) fees and expenses of the transfer agent for the Common Stock; (i) stock transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to the Underwriters; (j) the fees and expenses of the Company’s accountants; (k) the fees and expenses of the Company’s legal counsel and other agents and representatives; (l) the fees and expenses of the Underwriters’ legal counsel in the amount not to exceed \$75,000, (m) all reasonable and documented “road show” expenses for the Offering and (n) the due diligence fees and expenses of the Underwriters, including, without limitation, director and officer background checks and other diligence expenses, less \$25,000 representing a total retainer previously advanced as a retainer; provided that these actual accountable expenses of the underwriter shall not exceed \$125,000 in the aggregate, including the fees and disbursements of the underwriter’s counsel. The Representative may deduct from the net proceeds of the Offering payable to the Company on the Closing Date, or any Option Closing Date, if any, the expenses set forth herein (as limited by this Section 3(h)(i)) to be paid by the Company to the Underwriters, provided, however, that in the event that the Offering is terminated, the Company agrees to reimburse the Underwriters pursuant to Section 8(c) hereof. In the event the offering is terminated, the Advance received against reasonable out-of-pocket expenses incurred in connection with the offering will be returned to the issuer to the extent not actually incurred in accordance with FINRA Rule 5110(f)(2)(C).

(ii) Non-accountable Expenses. The Company further agrees that, in addition to the expenses payable pursuant to Section 3(h)(i) clauses (d) and (l), on the Closing Date it shall pay to the Representative, by deduction from the net proceeds of the Offering contemplated herein, a non-accountable expense allowance equal to one percent (1%) of the gross proceeds received by the Company from the sale of the Firm Shares.

(i) Application of Net Proceeds. The Company shall apply the net proceeds from the Offering received by it in a manner consistent with the application thereof described under the caption “Use of Proceeds” in the Registration Statement, the Pricing Prospectus and the Prospectus.

(j) Rule 158. The Company will timely file such reports pursuant to the Exchange Act as are necessary in order to make generally available to its security holders as soon as practicable an earnings statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, Rule 158(a) under Section 11(a) of the Securities Act.

(k) Stabilization. Neither the Company nor, to its knowledge, any of its employees, directors or stockholders (without the consent of the Representative) has taken or shall take, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under Regulation M of the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Public Securities.

(l) Internal Controls. The Company shall maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary in order to permit preparation of financial statements in accordance with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(m) Accountants. The Company shall continue to retain a nationally recognized independent registered public accounting firm that is registered with the Public Company Accounting Oversight Board for a period of at least three (3) years after the date of this Agreement.

(n) FINRA. For a period of 90 days from the later of the Closing Date or the Option Closing Date, the Company shall advise the Representative (who shall make an appropriate filing with FINRA) if it is or becomes aware that (i) any officer or director of the Company, (ii) any beneficial owner of 5% or more of any class of the Company's securities or (iii) any beneficial owner of the Company's unregistered equity securities which were acquired during the 180 days immediately preceding the original filing of the Registration Statement is or becomes an affiliate or associated person of a FINRA member participating in the Offering (as determined in accordance with the rules and regulations of FINRA).

(o) No Fiduciary Duties. The Company acknowledges and agrees that the Underwriters' responsibility to the Company is solely contractual in nature and that none of the Underwriters or their affiliates or any selling agent shall be deemed to be acting in a fiduciary capacity, or otherwise owes any fiduciary duty to the Company or any of its affiliates in connection with the Offering and the other transactions contemplated by this Agreement.

(p) Company Lock-Up Agreements. The Company, on behalf of itself and any successor entity, agrees that, without the prior written consent of the Representative, it will not, for a period of 180 days after the date of this Agreement (the "Lock-Up Period"), (i) 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 shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; (ii) file or cause to be filed any registration statement with the Commission relating to the offering of any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company (other than pursuant to a registration statement on Form S-8 for employee benefit plans); or (iii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of capital stock of the Company, whether any such transaction described in clause (i), (ii) or (iii) above is to be settled by delivery of shares of capital stock of the Company or such other securities, in cash or otherwise. The restrictions contained in this section shall not apply to (i) the Public Securities and the Representative's Securities to be sold hereunder; (ii) the issuance by the Company of shares of Common Stock upon the exercise of an outstanding stock option or warrant or the conversion of a security outstanding on the date hereof and disclosed in the Registration Statement and the Pricing Prospectus, (iii) the grant by the Company of stock options or other stock-based awards, or the issuance of shares of capital stock of the Company under any equity compensation plan of the Company disclosed in the Pricing Prospectus, or (iv) the issuance of securities in connection with mergers, acquisitions, joint ventures, licensing arrangements or any other similar non-capital raising transactions.

(q) Blue Sky Qualifications. The Company shall use its commercially reasonable efforts, in cooperation with the Underwriters, if necessary, to qualify the Public Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representative may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Public Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(r) Reporting Requirements. The Company, during the period when a prospectus relating to the Public Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the Securities Act, will file all documents required to be filed with the Commission pursuant to the Exchange Act within the time periods required by the Exchange Act and Exchange Act Regulations. Additionally, the Company shall report the use of proceeds from the issuance of the Public Securities as may be required under Rule 463 under the Securities Act Regulations.

4. Conditions of Underwriters' Obligations. The obligations of the Underwriters to purchase and pay for the Public Securities, as provided herein, shall be subject to (i) the continuing accuracy of the representations and warranties of the Company as of the date hereof and as of each of the Closing Date and the Option Closing Date, if any; (ii) the accuracy of the statements of officers of the Company made pursuant to the provisions hereof; (iii) the performance by the Company of its obligations hereunder; and (iv) the following conditions:

(a) Regulatory Matters.

(i) Effectiveness of Registration Statement; Rule 430A Information. The Registration Statement has become effective not later than 5:00 p.m., Eastern time, on the date of this Agreement or such later date and time as shall be consented to in writing by the Representative, and, at each of the Closing Date and any Option Closing Date, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto shall have been issued under the Securities Act, no order preventing or suspending the use of any Preliminary Prospectus or the Prospectus shall have been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information. The Prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) (without reliance on Rule 424(b)(8)) or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A.

(ii) FINRA Clearance. On or before the date of this Agreement, the Representative shall have received clearance from FINRA as to the amount of compensation allowable or payable to the Underwriters as described in the Registration Statement.

(iii) Exchange Stock Market Clearance. On the Closing Date, the Firm Shares shall have been approved for listing on the Exchange, subject only to official notice of issuance. On each Option Closing Date (if any), the Option Shares shall have been approved for listing on the Exchange, subject only to official notice of issuance.

(b) Company Counsel Matters.

(i) Closing Date Opinion of U.S. Counsel. On the Closing Date and on each Option Closing Date (if any), the Representative shall have received (i) the favorable opinion of Foley & Lardner LLP, U.S. counsel to the Company, dated the Closing Date or Option Closing Date, as applicable, and addressed to the Representative, and (ii) a written statement providing certain “10b-5” negative assurances, addressed to the Representative and dated the Closing Date and any Option Closing Date (if such date is other than the Closing Date), each in a form reasonably satisfactory to the Representative and Representative Counsel.

(c) Comfort Letters.

(i) Comfort Letter. At the time this Agreement is executed the Representative shall have received a cold comfort letter from Wolf & Company, P.C. containing statements and information of the type customarily included in accountants’ comfort letters with respect to the financial statements and certain financial information contained in the Registration Statement, the Pricing Prospectus and the Prospectus, addressed to the Representative and in form and substance satisfactory in all respects to the Representative and to the Auditor, dated as of the date of this Agreement.

(ii) Bring-down Comfort Letter. At the Closing Date and on each Option Closing Date (if any), the Representative shall have received from Wolf & Company P.C. a letter, dated as of the Closing Date or Option Closing Date, as applicable, to the effect that such Auditor reaffirms the statements made in the letter furnished pursuant to Section 4(c)(i), except that with respect to the initial comfort letter the specified date referred to shall be a date not more than three (3) Business Days prior to the Closing Date.

(d) Officers’ Certificates.

(i) Officers’ Certificate. The Company shall have furnished to the Representative a certificate, dated the Closing Date or Option Closing Date, as applicable, of its President and Chief Executive Officer, and its Chief Financial Officer stating on behalf of the Company and not in an individual capacity that (i) such officers have carefully examined the Registration Statement, the Pricing Prospectus and the Prospectus and, in their opinion, the Registration Statement and each amendment thereto, as of the Applicable Time and as of the Closing Date or Option Closing Date, as applicable, did not include any untrue statement of a material fact and did not omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and the Pricing Prospectus, as of the Applicable Time and as of the Closing Date, or Option Closing Date, as applicable, the Prospectus and each amendment or supplement thereto, as of the respective date thereof and as of the Closing Date or Option Closing Date, as applicable, did not include any untrue statement of a material fact and did not omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances in which they were made, not misleading, (ii) since the effective date of the Registration Statement, no event has occurred which should have been set forth in a supplement or amendment to the Registration Statement, the Pricing Prospectus or the Prospectus, (iii) to their knowledge after reasonable investigation, as of the Closing Date or Option Closing Date, as applicable, the representations and warranties of the Company in this Agreement are true and correct in all material respects (except for those representations and warranties qualified as to materiality, which shall be true and correct in all respects and except for those representations and warranties which refer to facts existing at a specific date, which shall be true and correct as of such date) and the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date and any Option Closing Date (if such date is other than the Closing Date), and (iv) there has not been, subsequent to the date of the most recent audited financial statements included in the Pricing Prospectus, any Material Adverse Change in the financial position or results of operations of the Company, or any change or development that, singularly or in the aggregate, would involve a Material Adverse Change, in or affecting the condition (financial or otherwise), results of operations, business, assets or prospects of the Company, except as set forth in the Prospectus.

(ii) Secretary's Certificate. At each of the Closing Date and any Option Closing Date, the Representative shall have received a certificate of the Company signed by the Secretary of the Company, dated the Closing Date and Option Closing Date (if such date is other than the Closing Date), certifying: (i) that each of the Charter and Bylaws is true and complete, has not been modified and is in full force and effect; (ii) that the resolutions of the Company's Board of Directors relating to the Offering are in full force and effect and have not been modified; (iii) the good standing of the Company; and (iv) as to the incumbency of the officers of the Company. The documents referred to in such certificate shall be attached to such certificate.

(e) No Material Changes. Prior to and on each of the Closing Date and each Option Closing Date: (i) there shall have been no Material Adverse Change or development involving a prospective Material Adverse Change in the condition or the business activities, financial or otherwise, of the Company or any subsidiary or variable interest entity of the Company from the latest dates as of which such condition is set forth in the Registration Statement, the Pricing Prospectus and the Prospectus; (ii) no action, suit or proceeding, at law or in equity, shall have been pending or threatened against the Company or any Insider before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding would reasonably be expected to result in a Material Adverse Change, except as set forth in the Registration Statement, the Pricing Prospectus and the Prospectus; (iii) no stop order shall have been issued under the Securities Act and no proceedings therefor shall have been initiated or threatened by the Commission; and (iv) the Registration Statement, the Pricing Prospectus and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Securities Act and the Securities Act Regulations and shall conform in all material respects to the requirements of the Securities Act and the Securities Act Regulations, and neither the Registration Statement, the Pricing Prospectus nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(f) Delivery of Agreements.

(i) Lock-Up Agreements. On or before the date of this Agreement, the Company shall have delivered to the Representative executed copies of the Lock-Up Agreements from each of the persons listed in Schedule 2 hereto.

(ii) Representative's Warrant Agreement. On the Closing Date, the Company shall have delivered to the Representative executed copies of the Representative's Warrant Agreement.

5. Indemnification.

(a) Indemnification of the Underwriters. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates and each person controlling such Underwriter (within the meaning of Section 15 of the Securities Act), and the directors, officers, agents and employees of each Underwriter, its affiliates and each such controlling person (each Underwriter, and each such entity or person hereafter is referred to as an “Underwriter Indemnified Person”) from and against any losses, claims, damages, judgments, assessments, costs and other liabilities (collectively, the “Liabilities”), and shall reimburse each Underwriter Indemnified Person for all fees and expenses (including the reasonable fees and expenses of counsel for the Underwriter Indemnified Persons, except as otherwise expressly provided in this Agreement) (collectively, the “Expenses”) as they are incurred in connection with such Indemnified Person's enforcement of his or its rights under this Agreement, and agrees to advance payment of such Expenses as they are incurred by an Underwriter Indemnified Person in investigating, preparing, pursuing or defending any actions, whether or not any Indemnified Person is a party thereto, arising out of or based upon any untrue statement or alleged untrue statement of a material fact, except in so far as such statement is made in reliance upon or in conformity with any Underwriter Information, contained in (i) the Registration Statement, the Pricing Disclosure Package, the Preliminary Prospectus, the Prospectus or in any Issuer Free Writing Prospectus (as from time to time each may be amended and supplemented); (ii) any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the Offering, including any “road show” or investor presentations made to investors by the Company (whether in person or electronically); or (iii) any application or other document or written communication (in this Section 5, collectively called “application”) executed by the Company or based upon written information furnished by the Company in any jurisdiction in order to qualify the Public Securities under the securities laws thereof or filed with the Commission, any state securities commission or agency, the Exchange or any other national securities exchange; or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, unless such statement or omission is contained in the Underwriters' Information.

(b) Procedure. Upon receipt by an indemnified person under this section 5 (an “Indemnified Person”) of actual notice of an action against such Indemnified Person with respect to which indemnity may reasonably be expected to be sought under this Agreement, such Indemnified Person shall promptly notify the Company in writing; provided that failure by any Indemnified Person so to notify the Company shall not relieve the Company from any obligation or liability which the Company may have on account of this Section 5 or otherwise to such Indemnified Person, except to the extent the Company is materially prejudiced as a proximate result of such failure. An Indemnified Person shall have the right to require that the Company assume the defense of any such action (including the employment of counsel designated by the Company and reasonably satisfactory to the Representative). Any Indemnified Person shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless: (i) the Company has failed promptly to assume the defense and employ counsel reasonably satisfactory to the Representative for the benefit of the Underwriters and the other Indemnified Persons or (ii) such Indemnified Person shall have been advised that in the opinion of counsel that there is an actual or potential conflict of interest that prevents (or makes it imprudent for) the counsel engaged by the Company for the purpose of representing the Indemnified Person, to represent both such Indemnified Person and any other person represented or proposed to be represented by such counsel. The Company shall not be liable for the fees and expenses of more than one separate counsel (together with local counsel), representing all Indemnified Persons who are parties to such action), which counsel (together with any local counsel) for the Indemnified Persons shall be selected by the Representative, subject to the Company's approval (which shall not be unreasonably withheld). The Company shall not be liable for any settlement of any action effected without its written consent (which shall not be unreasonably withheld). In addition, the Company shall not, without the prior written consent (which shall not be unreasonably withheld) of each Indemnified Person, settle, compromise or consent to the entry of any judgment in or otherwise seek to terminate any pending or threatened action in respect of which advancement, reimbursement, indemnification or contribution may be sought hereunder (whether or not such Indemnified Person is a party thereto) unless such settlement, compromise, consent or termination (i) includes an unconditional release of that Indemnified Person, from all Liabilities arising out of such action for which indemnification or contribution may be sought hereunder and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any Indemnified Person. The advancement, reimbursement, indemnification and contribution obligations of the Company required hereby shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as every Liability and Expense is incurred and is due and payable, and in such amounts as fully satisfy each and every Liability and Expense as it is incurred (and in no event later than 30 days following the date of any invoice therefore).

(c) Indemnification of the Company. Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and persons who control the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all Liabilities, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions made in the Underwriters' Information; provided, however, the total indemnity provided by the Underwriters hereunder in the aggregate shall not exceed the Underwriters' discount provided for in Section 1(a)(i)(B). In case any action shall be brought against the Company or any other person so indemnified based on any Preliminary Prospectus, the Registration Statement, the Pricing Disclosure Package or Prospectus or any amendment or supplement thereto or in any application, and in respect of which indemnity may be sought against any Underwriter, such Underwriter shall have the rights and duties given to the Company, and the Company and each other person so indemnified shall have the rights and duties given to the several Underwriters by the provisions of Section 5(a). The Company agrees promptly to notify the Representative of the commencement of any litigation or proceedings against the Company or any of its officers, directors or any person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, in connection with the issuance and sale of the Public Securities or in connection with the Registration Statement, the Pricing Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus; provided that failure by the Company so to notify the Representative shall not relieve any Underwriter from any obligation or liability which such Underwriter may have on account of this Section 5 or otherwise to the Company, except to the extent such Underwriter is materially prejudiced as a proximate result of such failure.

(d) Contribution. If the indemnification provided for in this Section 5 shall for any reason be unavailable to or insufficient to hold harmless an indemnified party under Section 5(a) or 5(c) in respect of any Liabilities and Expenses referred to therein, then each indemnifying party shall, in lieu of indemnifying such indemnified party, contribute to the amount paid or payable by such indemnified party as a result of such Liabilities and Expenses, (i) in such proportion as shall be appropriate to reflect the relative benefits received by the Company, on the one hand, and each of the Underwriters, on the other hand, from the Offering, or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and the Underwriters, on the other hand, in connection with the matters as to which such Liabilities or Expenses relate, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, with respect to such Offering shall be deemed to be in the same proportion as the total proceeds from the Offering purchased under this Agreement (after deducting fees and commissions paid to the Underwriters) received by the Company bear to the total underwriting discount and commissions actually received by the Underwriters in connection with the Offering, in each case as set forth in the table on the cover page of the Prospectus. The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, on the one hand, or the Underwriters, on the other hand, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement, omission, act or failure to act; provided that the parties hereto agree that the written information furnished to the Company through the Representative by or on behalf of any Underwriter for use in any Preliminary Prospectus, any Registration Statement or the Prospectus, or in any amendment or supplement thereto, consists solely of the Underwriters' Information. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take into account the equitable considerations referred to above in this subsection (d). Notwithstanding the above, no person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the Securities Act shall be entitled to contribution from a party who was not guilty of fraudulent misrepresentation.

(e) Limitation. The Company also agrees that no Indemnified Person shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company for or in connection with advice or services rendered or to be rendered by any Indemnified Person pursuant to this Agreement, the transactions contemplated thereby or any Indemnified Person's actions or inactions in connection with any such advice, services or transactions, except to the extent that a court of competent jurisdiction has made a finding that Liabilities (and related Expenses) of the Company have resulted primarily from such Indemnified Person's gross negligence or willful misconduct in connection with any such advice, actions, inactions or services.

(f) Survival & Third-Party Beneficiaries. The advancement, reimbursement, indemnity and contribution obligations set forth in this Section 5 shall remain in full force and effect regardless of any termination of, or the completion of any Indemnified Person's services under or in connection with, this Agreement. Each Indemnified Person is an intended third-party beneficiary of this Section 5, and has the right to enforce the provisions of Section 5 as if he/she/it was a party to this Agreement.

6. Default by an Underwriter.

(a) Default Not Exceeding 10% of Public Securities. If any Underwriter or Underwriters shall default in its or their obligations to purchase the Firm Shares, and if the number of the Firm Shares with respect to which such default relates does not exceed in the aggregate 10% of the number of Firm Shares that all Underwriters have agreed to purchase hereunder, then such Firm Shares to which the default relates shall be purchased by the non-defaulting Underwriters in proportion to their respective commitments hereunder.

(b) Default Exceeding 10% of Public Securities. In the event that the default addressed in Section (a)(a) relates to more than 10% of the Firm Shares, the Representative may in its discretion arrange for itself or for another party or parties to purchase such Firm Shares to which such default relates on the terms contained herein. If, within one Business Day after such default relating to more than 10% of the Firm Shares, the Representative does not arrange for the purchase of such Firm Shares, then the Company shall be entitled to a further period of one Business Day within which to procure another party or parties satisfactory to the Representative to purchase said Firm Shares on such terms. In the event that neither the Representative nor the Company arrange for the purchase of the Firm Shares to which a default relates as provided in this Section (a), this Agreement will automatically be terminated by the Representative or the Company without liability on the part of the Company (except as provided in Sections 3(h) and 5 hereof) or the several Underwriters (except as provided in Section 5 hereof); and provided, further, that nothing herein shall relieve a defaulting Underwriter of its liability, if any, to the other Underwriters and to the Company for damages occasioned by its default hereunder.

(c) Postponement of Closing Date. In the event that the Firm Shares to which the default relates are to be purchased by the non-defaulting Underwriters, or are to be purchased by another party or parties as aforesaid, the Representative or the Company shall have the right to postpone the Closing Date for a reasonable period, but not in any event exceeding five (5) Business Days, in order to effect whatever changes may thereby be made necessary in the Registration Statement, the Pricing Prospectus or the Prospectus or in any other documents and arrangements, and the Company agrees to file promptly any amendment to the Registration Statement, the Pricing Prospectus or the Prospectus that in the opinion of counsel for the Underwriter may thereby be made necessary. The term "Underwriter" as used in this Agreement shall include any party substituted under this Section (a) with like effect as if it had originally been a party to this Agreement with respect to such Securities.

7. Additional Covenants.

(a) Prohibition on Press Releases and Public Announcements. The Company shall not issue press releases or engage in any other publicity, without the Representative's prior written consent (such consent not to be unreasonably withheld), for a period ending at 5:00 p.m., Eastern time, on the first Business Day following the forty-fifth (45th) day after the Closing Date, other than normal and customary releases issued in the ordinary course of the Company's business.

(b) Right to Participation. The Company shall grant to the Representative the right of first negotiation to co-manage the Company's next public underwriting of debt or equity securities, excluding (i) shares issued under any compensation or stock option plan approved by the stockholders of the Company, (ii) shares issued in payment of the consideration for an acquisition or as part of strategic partnerships and transactions and (iii) conventional banking arrangements and commercial debt financing of the Company or any subsidiary or successor of the Company, with Representative receiving the right to underwrite or place a number of the securities to be sold therein having an aggregate purchase price therein equal to a minimum of the aggregate purchase price of the Firm Shares, until twelve months after completion of the Offering. If Representative fails to accept in writing, under the same terms, any such proposal for such public or private sale within seven days after receipt of a written notice from the Company containing such proposal, then Representative will have no claim or right with respect to any such sale contained in any such notice. If, thereafter, such proposal is modified in any material respect, the Company will adopt the same procedure as with respect to the original proposed public or private sale, and Representative shall have the right of first negotiation with respect to such revised proposal in accordance with the terms of this Section 7(b).

8. Effective Date of this Agreement and Termination Thereof.

(a) Effective Date. This Agreement shall become effective when both the Company and the Representative have executed the same and delivered counterparts of such signatures to the other party.

(b) Termination. The Representative shall have the right to terminate this Agreement at any time prior to any Closing Date, (i) if any domestic or international event or act or occurrence has materially disrupted, or in Representative's opinion will in the immediate future materially disrupt, general securities markets in the United States; or (ii) if trading on the NASDAQ Stock Market LLC shall have been suspended or materially limited, or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required by FINRA or by order of the Commission or any other government authority having jurisdiction; or (iii) if the United States shall have become involved in a new war or an increase in major hostilities; or (iv) if a banking moratorium has been declared by a New York State or federal authority; or (v) if a moratorium on foreign exchange trading has been declared which materially adversely impacts the United States securities markets; or (vi) if the Company shall have sustained a material loss by fire, flood, accident, hurricane, earthquake, theft, sabotage or other calamity or malicious act which, whether or not such loss shall have been insured, will, in Representative opinion, make it inadvisable to proceed with the delivery of the Firm Shares; or (vii) if the Company is in material breach of any of its representations, warranties or covenants hereunder; or (viii) if the Representative shall have become aware after the date hereof of such a Material Adverse Change in the conditions of the Company, or such adverse material change in general market conditions as in the Representative's judgment would make it impracticable to proceed with the offering, sale and/or delivery of the Public Securities or to enforce contracts made by the Underwriters for the sale of the Public Securities. Section 5 of this Agreement shall survive any termination of this Agreement.

(c) Expenses. Notwithstanding anything to the contrary in this Agreement, except in the case of a default by the Underwriters pursuant to Section (6)(b), in the event that this Agreement shall not be carried out for any reason whatsoever, within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to the Underwriters their actual and accountable out-of-pocket expenses related to the transactions contemplated herein then due and payable and upon demand the Company shall pay the full amount thereof to the Representative on behalf of the Underwriters (less any amounts previously advanced to the Representative), including without limitation the full amount of a credit towards the Underwriters' legal fees and expenses in the amount of \$75,000, as set forth above with such legal fees. Notwithstanding the foregoing, any advance received by the Representative will be reimbursed to the Company to the extent not actually incurred in compliance with FINRA Rule 5110(f)(2)(C).

(d) Indemnification. Notwithstanding any contrary provision contained in this Agreement, any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Section 5 shall remain in full force and effect and shall not be in any way affected by, such election or termination or failure to carry out the terms of this Agreement or any part hereof.

(e) Representations, Warranties, Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company or (ii) delivery of and payment for the Public Securities.

9. Miscellaneous.

(a) Notices. All communications hereunder, except as herein otherwise specifically provided, shall be in writing and shall be mailed (registered or certified mail, return receipt requested), or personally delivered and shall be deemed given when so delivered or if mailed, two (2) days after such mailing.

If to the Representative:

WallachBeth Capital, LLC
Harborside Financial Center Plaza 5
185 Hudson Street, Suite 1410
Jersey City, NJ 07311

with copies to:

Carmel, Milazzo & DiChiara
55 West 39th Street, 18th Floor Penthouse
New York, New York 10018
Attention: Peter DiChiara

If to the Company:

SeqLL Inc.
317 New Boston Street, Suite 210
Woburn, Massachusetts 01801
Attention: Chief Executive Officer

with copies to:

Foley & Lardner LLP
One Independent Drive, Suite 1300
Jacksonville, Florida 32202
Attention: Michael B. Kirwan

(b) Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Agreement.

(c) Amendment. This Agreement may only be amended by a written instrument executed by each of the parties hereto.

(d) Entire Agreement. This Agreement (together with the other agreements and documents being delivered pursuant to or in connection with this Agreement) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof and thereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof. This Agreement shall replace and supersede the Engagement Letter, including, without limitation, any terms which survive termination thereof pursuant to Section 9 thereof.

(e) Binding Effect. This Agreement shall inure solely to the benefit of and shall be binding upon the Representative, the Underwriters, each Indemnified Person referred to in Section 5, the Company and the controlling persons, directors and officers referred to in Section 5 hereof, and their respective successors, legal representatives, heirs and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Agreement or any provisions herein contained. The term "successors and assigns" shall not include a purchaser, in its capacity as such, of securities from any of the Underwriters.

(f) Governing Law; Consent to Jurisdiction; Trial by Jury. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of New York, without giving effect to conflict of laws principles thereof. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Agreement shall be brought and enforced in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any such process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 9(a) hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company agrees that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys' fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

(g) Execution in Counterparts. This Agreement may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together shall constitute one and the same agreement, and shall become effective when one or more counterparts has been signed by each of the parties hereto and delivered to each of the other parties hereto. Delivery of a signed counterpart of this Agreement by email/pdf transmission shall constitute valid and sufficient delivery thereof.

(h) Waiver, etc. The failure of any of the parties hereto to at any time enforce any of the provisions of this Agreement shall not be deemed or construed to be a waiver of any such provision, nor to in any way effect the validity of this Agreement or any provision hereof or the right of any of the parties hereto to thereafter enforce each and every provision of this Agreement. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Agreement shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

[Signature Page Follows]

If the foregoing correctly sets forth the understanding between the Underwriters and the Company, please so indicate in the space provided below.

Very truly yours,

SEQLL INC.

By: _____

Name:

Title:

Confirmed as of the date first written above mentioned, on behalf of itself and as Representative of the several Underwriters named on Schedule 1 hereto:

WALLACHBETH CAPITAL, LLC

By: _____

Name: Daniel Tapia

Title: Chief Compliance Officer

On behalf of each of the Underwriters

[SIGNATURE PAGE]

UNDERWRITING AGREEMENT

SCHEDULE 1

Underwriter	Total Number of Shares to be Purchased	Number of Shares to be Purchased if the Over-Allotment Option is Fully Exercised
Wallach Beth Capital, LLC		
Total		

SCHEDULE 2

List of Lock-Up Parties

SCHEDULE 3

Finder's Fees

EXHIBIT A

Form of Representative's Warrant Agreement

THE REGISTERED HOLDER OF THIS PURCHASE WARRANT BY ITS ACCEPTANCE HEREOF, AGREES THAT IT WILL NOT SELL, TRANSFER OR ASSIGN THIS PURCHASE WARRANT EXCEPT AS HEREIN PROVIDED AND THE REGISTERED HOLDER OF THIS PURCHASE WARRANT AGREES THAT IT WILL NOT SELL, TRANSFER, ASSIGN, PLEDGE OR HYPOTHECATE THIS PURCHASE WARRANT FOR A PERIOD OF ONE HUNDRED EIGHTY DAYS FOLLOWING THE EFFECTIVE DATE (DEFINED BELOW) TO ANYONE OTHER THAN (I) WALLACHBETH CAPITAL, LLC OR AN UNDERWRITER OR A SELECTED DEALER IN CONNECTION WITH THE OFFERING, OR (II) A BONA FIDE OFFICER OR PARTNER OF WALLACHBETH CAPITAL, LLC OR OF ANY SUCH UNDERWRITER OR SELECTED DEALER.

THIS PURCHASE WARRANT IS NOT EXERCISABLE PRIOR TO NOVEMBER [●], 2020. VOID AFTER 5:00 P.M., EASTERN TIME, [●], 2024.

COMMON SHARE PURCHASE WARRANT

For the Purchase of [●] Shares of Common Stock
of
SeqLL Inc.

1. Purchase Warrant. THIS CERTIFIES THAT, in consideration of funds duly paid by or on behalf of WallachBeth Capital, LLC or its assigns (“**Holder**”), as registered owner of this Purchase Warrant, to SeqLL Inc., Delaware corporation (the “**Company**”), Holder is entitled, at any time or from time to time from [●], 2020 (the “**Commencement Date**”), and at or before 5:00 p.m., Eastern time, [●], 2024 (the “**Expiration Date**”), but not thereafter, to subscribe for, purchase and receive, in whole or in part, up to [●] shares (the “**Shares**”) of common stock of the Company, par value \$0.00001 per share, subject to adjustment as provided in Section 6 hereof. If the Expiration Date is a day on which banking institutions are authorized by law to close, then this Purchase Warrant may be exercised on the next succeeding day which is not such a day in accordance with the terms herein. During the period ending on the Expiration Date, the Company agrees not to take any action that would terminate this Purchase Warrant except as otherwise provided herein or with the Holder’s consent. This Purchase Warrant is initially exercisable at \$[●] per Share; provided, however, that upon the occurrence of any of the events specified in Section 6 hereof, the rights granted by this Purchase Warrant, including the exercise price per Share and the number of Shares to be received upon such exercise, shall be adjusted as therein specified. The term “**Exercise Price**” shall mean the initial exercise price or the adjusted exercise price, depending on the context. This Purchase Warrant is being issued pursuant to that certain Underwriting Agreement, dated [●], 2019 (the “**Agreement**”), between the Company and, on behalf of the Underwriters named on Schedule 1 thereto, WallachBeth Capital, LLC (“**WallachBeth**”). The Company’s offering contemplated by the Agreement is referred to herein as the “**Offering**.”

2. Exercise.

2.1 Exercise Form. In order to exercise this Purchase Warrant, the exercise form attached hereto must be duly executed and completed and delivered to the Company, together with this Purchase Warrant and payment of the Exercise Price for the Shares being purchased payable in cash by wire transfer of immediately available funds to an account designated by the Company or by certified check or official bank check. If the subscription rights represented hereby shall not be exercised at or before 5:00 p.m., Eastern time, on the Expiration Date, this Purchase Warrant shall become and be void without further force or effect, and all rights represented hereby shall cease and expire.

2.2 Cashless Exercise. In lieu of exercising this Purchase Warrant by payment of cash or check payable to the order of the Company pursuant to Section 2.1 above, Holder may elect to receive the number of Shares equal to the value of this Purchase Warrant (or the portion thereof being exercised), by surrender of this Purchase Warrant to the Company, together with the exercise form attached hereto, in which event the Company will issue to Holder Shares in accordance with the following formula:

$$X = \frac{Y*(A-B)}{A}$$

Where,

- X = The number of Shares to be issued to Holder;
- Y = The number of Shares for which the Purchase Warrant is being exercised;
- A = The fair market value of one Share; and
- B = The Exercise Price.

For purposes of this Section 2.2, the fair market value of a Share is defined as follows:

- (i) if the Company's common stock is traded on a national securities exchange, the fair value shall be deemed to be the closing price on such exchange on the trading day immediately preceding the date on which Holder elects to exercise this Purchase Warrant, which shall be set forth in the applicable notice of exercise;
- (ii) if the Company's common stock is traded on any tier of the OTC Markets or any successor over-the-counter market, the fair value shall be deemed to be the closing bid price on the over-the-counter market on the trading day immediately preceding date on which Holder elects to exercise this Purchase Warrant, which shall be set forth in the applicable notice of exercise; or
- (iii) if there is no active trading market, the fair value shall be the fair market value as determined in good faith by the Company's Board of Directors.

2.3 Legend. Each certificate for the Shares purchased under this Purchase Warrant shall bear a legend as follows unless such Shares have been registered under the Securities Act of 1933, as amended (the "**Act**"):

"The securities represented by this certificate have not been registered under the Securities Act of 1933, as amended (the "**Act**"), or applicable state law. Neither the securities nor any interest therein may be offered for sale, sold or otherwise transferred except pursuant to an effective registration statement under the Act, or pursuant to an exemption from registration under the Act and applicable state law which, in the opinion of counsel to the Company, is available."

3. Transfer.

3.1 General Restrictions. The registered Holder of this Purchase Warrant agrees by his, her or its acceptance hereof, that such Holder will not: (a) sell, transfer, assign, pledge or hypothecate this Purchase Warrant for a period of 180 days following the commencement of sales in the public offering referenced in the Underwriting Agreement (defined below) (the commencement of sales in the public offering is referred to as the "**Effective Date**") to anyone other than: (i) WallachBeth or an underwriter or a selected dealer participating in the Offering, or (ii) a bona fide officer or partner of WallachBeth or of any such underwriter or selected dealer, in each case in accordance with FINRA Conduct Rule 5110(g)(1), or (b) cause this Purchase Warrant or the securities issuable hereunder to be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of this Purchase Warrant or the securities hereunder, except as provided for in FINRA Rule 5110(g)(2). After 180 days after the Effective Date, transfers to others may be made subject to compliance with or exemptions from applicable securities laws. In order to make any permitted assignment, the Holder must deliver to the Company the assignment form attached hereto duly executed and completed, together with the Purchase Warrant and payment of all transfer taxes, if any, payable in connection therewith. The Company shall within five (5) Business Days upon receipt of the completed assignment form and payment of all transfer taxes, if any, transfer this Purchase Warrant on the books of the Company and shall execute and deliver a new Purchase Warrant or Purchase Warrants of like tenor to the appropriate assignee(s) expressly evidencing the right to purchase the aggregate number of Shares purchasable hereunder or such portion of such number as shall be contemplated by any such assignment. The term "Business Day" means any day other than a Saturday, a Sunday or a legal holiday or a day on which banking institutions are authorized or obligated by law to close in New York, New York.

3.2 Restrictions Imposed by the Act. The Shares evidenced by this Purchase Warrant shall not be transferred unless and until: (i) the Company has received the opinion of counsel for the Holder that the securities may be transferred pursuant to an exemption from registration under the Act and applicable state securities laws, the availability of which is established to the reasonable satisfaction of the Company, or (ii) a registration statement or a post-effective amendment to the Registration Statement relating to the offer and sale of the Shares has been filed by the Company and declared effective by the U.S. Securities and Exchange Commission (the “**Commission**”) and compliance with applicable state securities law has been established. The Company acknowledges that this Purchase Warrant and the Shares issuable upon exercise of this Purchase Warrant have been registered pursuant to the Registration Statement (as defined in the Underwriting Agreement).

4. Registration Rights.

4.1 Grant of Right. The Holder shall have the right one demand registration right and unlimited “piggyback” registration rights to include the Shares underlying the Purchase Warrants (collectively, the “**Registrable Securities**”) as part of any other registration of securities filed by the Company (other than in connection with a transaction contemplated by Rule 145(a) promulgated under the Act or pursuant to Form S-8 or any equivalent form); provided, however, that if, solely in connection with any primary underwritten public offering for the account of the Company, the managing underwriter(s) thereof shall, in its reasonable discretion, impose a limitation on the number of shares of common stock which may be included in the Registration Statement because, in such underwriter(s)’ judgment, marketing or other factors dictate such limitation is necessary to facilitate public distribution, then the Company shall be obligated to include in such Registration Statement only such limited portion of the Registrable Securities with respect to which the Holder requested inclusion hereunder as the underwriter shall reasonably permit. Any exclusion of Registrable Securities shall be made pro rata among the Holders seeking to include Registrable Securities in proportion to the number of Registrable Securities sought to be included by such Holders; provided, however, that the Company shall not exclude any Registrable Securities unless the Company has first excluded all outstanding securities, the holders of which are not entitled to inclusion of such securities in such Registration Statement or are not entitled to pro rata inclusion with the Registrable Securities. The demand registration right shall terminate five years from the date of effectiveness or commencement of sales of the public offering.

4.2 Terms. The Company shall bear all fees and expenses attendant to registering the Registrable Securities pursuant to this Section 4 hereof, but the Holders shall pay any and all underwriting commissions and the expenses of any legal counsel selected by the Holders to represent them in connection with the sale of the Registrable Securities. In the event of such a proposed registration, the Company shall furnish the then Holders of outstanding Registrable Securities with not less than 10 days written notice prior to the proposed date of filing of such registration statement. Such notice to the Holders shall continue to be given for each registration statement filed by the Company during the term of this Purchase Warrant. The holders of the Registrable Securities shall exercise the “piggy-back” rights provided for herein by giving written notice within 10 days of the receipt of the Company’s notice of its intention to file a registration statement. Except as otherwise provided in this Purchase Warrant, there shall be no limit on the number of times the Holder may request registration under this section; provided, however, that such “piggy-back” registration rights shall terminate on the fifth anniversary of the Effective Date in accordance with FINRA Rule 5110(f)(2)(G)(v).

4.3 Exercise of Purchase Warrants. Nothing contained in this Purchase Warrant shall be construed as requiring the Holder(s) to exercise their Purchase Warrants prior to or after the initial filing of any registration statement or the effectiveness thereof.

4.4 Documents Delivered to Holders. The Company shall deliver promptly to each Holder participating in the offering requesting the correspondence and memoranda described below and to the managing underwriter, if any, copies of all correspondence between the Commission and the Company, its counsel or auditors and all memoranda relating to discussions with the Commission or its staff with respect to the registration statement and permit each Holder and underwriter to do such investigation, upon reasonable advance notice, with respect to information contained in or omitted from the registration statement as it deems reasonably necessary to comply with applicable securities laws or rules of FINRA. Such investigation shall include access to books, records and properties and opportunities to discuss the business of the Company with its officers and independent auditors, all to such reasonable extent and at such reasonable times, during normal business hours, as any such Holder shall reasonably request.

4.5 Underwriting Agreement. If the Company shall enter into an underwriting agreement, pursuant to which Registrable Securities of a Holder are being registered, such Holders shall not be required to make any representations or warranties to or agreements with the Company or the underwriters except as they may relate to such Holders, their Shares and their intended methods of distribution.

4.6 Documents to be Delivered by Holder(s). Each of the Holder(s) participating in any of the foregoing offerings shall furnish to the Company a completed and executed questionnaire provided by the Company requesting information customarily sought of selling security holders.

4.7 Damages. Should the Company fail to comply with the provisions of this Section 4, the Holder(s) shall, in addition to any other legal or other relief available to the Holder(s), be entitled to seek specific performance or other equitable (including injunctive) relief against the threatened breach of such provisions or the continuation of any such breach, without the necessity of proving actual damages and without the necessity of posting bond or other security.

5. New Purchase Warrants to be Issued.

5.1 Partial Exercise or Transfer. Subject to the restrictions in Section 3 hereof, this Purchase Warrant may be exercised or assigned in whole or in part. In the event of the exercise or assignment hereof in part only, upon surrender of this Purchase Warrant for cancellation, together with the duly executed exercise or assignment form and funds sufficient to pay any Exercise Price and/or transfer tax if exercised pursuant to Section 2.1 hereto, the Company shall cause to be delivered to the Holder without charge a new Purchase Warrant of like tenor to this Purchase Warrant in the name of the Holder evidencing the right of the Holder to purchase the number of Shares purchasable hereunder as to which this Purchase Warrant has not been exercised or assigned.

5.2 Lost Certificate. Upon receipt by the Company of evidence satisfactory to it of the loss, theft, destruction or mutilation of this Purchase Warrant and of reasonably satisfactory indemnification or the posting of a bond, the Company shall execute and deliver a new Purchase Warrant of like tenor and date. Any such new Purchase Warrant executed and delivered as a result of such loss, theft, mutilation or destruction shall constitute a substitute contractual obligation on the part of the Company.

6. Adjustments.

6.1 Adjustments to Exercise Price and Number of Securities. The Exercise Price and the number of Shares underlying the Purchase Warrant shall be subject to adjustment from time to time as hereinafter set forth:

6.1.1 Share Dividends; Split Ups. If, after the date hereof, and subject to the provisions of Section 6.3 below, the number of outstanding Shares is increased by a share dividend payable in Shares or by a split up of Shares or other similar event, then, on the effective day thereof, the number of Shares purchasable hereunder shall be increased in proportion to such increase in outstanding Shares, and the Exercise Price shall be proportionately decreased.

6.1.2 Aggregation of Shares. If, after the date hereof, and subject to the provisions of Section 6.3 below, the number of outstanding Shares is decreased by a consolidation, combination or reclassification of Shares or other similar event, then, on the effective date thereof, the number of Shares purchasable hereunder shall be decreased in proportion to such decrease in outstanding Shares, and the Exercise Price shall be proportionately increased.

6.1.3 Replacement of Securities upon Reorganization, etc. In case of any reclassification or reorganization of the outstanding Shares other than a change covered by Section 6.1.1 or 6.1.2 hereof or that solely affects the par value of such Shares, or in the case of any share reconstruction or merger or consolidation of the Company with or into another corporation (other than a consolidation or share reconstruction or merger in which the Company is the continuing corporation and that does not result in any reclassification or reorganization of the outstanding Shares), or in the case of any sale or conveyance to another corporation or entity of the property of the Company as an entirety or substantially as an entirety in connection with which the Company is dissolved, the Holder of this Purchase Warrant shall have the right thereafter (until the expiration of the right of exercise of this Purchase Warrant) to receive upon the exercise hereof, for the same aggregate Exercise Price payable hereunder immediately prior to such event, the kind and amount of shares or other securities or property (including cash) receivable upon such reclassification, reorganization, share reconstruction or merger, or consolidation, or upon a dissolution following any such sale or transfer, by a Holder of the number of Shares of the Company obtainable upon exercise of this Purchase Warrant immediately prior to such event; and if any reclassification also results in a change in Shares covered by Section 6.1.1 or 6.1.2, then such adjustment shall be made pursuant to Sections 6.1.1, 6.1.2 and this Section 6.1.3. The provisions of this Section 6.1.3 shall similarly apply to successive reclassifications, reorganizations, share reconstructions or mergers, or consolidations, sales or other transfers.

6.1.4 Changes in Form of Purchase Warrant. This form of Purchase Warrant need not be changed because of any change pursuant to this Section 6.1, and Purchase Warrants issued after such change may state the same Exercise Price and the same number of Shares as are stated in the Purchase Warrants initially issued pursuant to this Agreement. The acceptance by any Holder of the issuance of new Purchase Warrants reflecting a required or permissive change shall not be deemed to waive any rights to an adjustment occurring after the Commencement Date or the computation thereof.

6.2 Substitute Purchase Warrant. In case of any consolidation of the Company with, or share reconstruction or merger of the Company with or into, another corporation (other than a consolidation or share reconstruction or merger which does not result in any reclassification or change of the outstanding Shares), the corporation formed by such consolidation or share reconstruction or merger shall execute and deliver to the Holder a supplemental Purchase Warrant providing that the holder of each Purchase Warrant then outstanding or to be outstanding shall have the right thereafter (until the stated expiration of such Purchase Warrant) to receive, upon exercise of such Purchase Warrant, the kind and amount of shares and other securities and property receivable upon such consolidation or share reconstruction or merger, by a holder of the number of Shares of the Company for which such Purchase Warrant might have been exercised immediately prior to such consolidation, share reconstruction or merger, sale or transfer. Such supplemental Purchase Warrant shall provide for adjustments which shall be identical to the adjustments provided for in this Section 6. The above provision of this Section shall similarly apply to successive consolidations or share reconstructions or mergers.

6.3 Elimination of Fractional Interests. The Company shall not be required to issue certificates representing fractions of Shares upon the exercise of the Purchase Warrant, nor shall it be required to issue scrip or pay cash in lieu of any fractional interests, it being the intent of the parties that all fractional interests shall be eliminated by rounding any fraction up or down, as the case may be, to the nearest whole number of Shares or other securities, properties or rights.

7. Reservation and Listing. The Company shall at all times reserve and keep available out of its authorized Shares, solely for the purpose of issuance upon exercise of the Purchase Warrants, such number of Shares or other securities, properties or rights as shall be issuable upon the exercise thereof. The Company covenants and agrees that, upon exercise of the Purchase Warrants and payment of the Exercise Price therefor, in accordance with the terms hereby, all Shares and other securities issuable upon such exercise shall be duly and validly issued, fully paid and non-assessable and not subject to preemptive rights of any shareholder. As long as the Purchase Warrants shall be outstanding, the Company shall use its commercially reasonable efforts to cause all Shares issuable upon exercise of the Purchase Warrants to be listed (subject to official notice of issuance) on a national securities exchange or quoted on any tier of the OTC Markets or any successor trading market on which the Shares issued to the public in the Offering may then be listed and/or quoted.

8. Certain Notice Requirements.

8.1 Holder's Right to Receive Notice. Nothing herein shall be construed as conferring upon the Holders the right to vote or consent or to receive notice as a shareholder for the election of directors or any other matter, or as having any rights whatsoever as a shareholder of the Company. If, however, at any time prior to the expiration of the Purchase Warrants and their exercise, any of the events described in Section 8.2 shall occur, then, in one or more of said events, the Company shall give written notice of such event at least 10 days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the shareholders entitled to such dividend, distribution, conversion or exchange of securities or subscription rights, or entitled to vote on such proposed dissolution, liquidation, winding up or sale. Such notice shall specify such record date or the date of the closing of the transfer books, as the case may be. Notwithstanding the foregoing, the Company shall deliver to each Holder a copy of each notice given to the other shareholders of the Company in connection with the events described in Section 8.2 below at the same time and in the same manner that such notice is given to the shareholders.

8.2 Events Requiring Notice. The Company shall be required to give the notice described in this Section 8 upon one or more of the following events: (i) if the Company shall take a record of the holders of its Shares for the purpose of entitling them to receive a dividend or distribution payable otherwise than in cash, or a cash dividend or distribution payable otherwise than out of retained earnings, as indicated by the accounting treatment of such dividend or distribution on the books of the Company, (ii) the Company shall offer to all the holders of its Shares any additional shares of capital stock of the Company or securities convertible into or exchangeable for shares of capital stock of the Company, or any option, right or warrant to subscribe therefor, or (iii) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation or share reconstruction or merger) or a sale of all or substantially all of its property, assets and business shall be proposed.

8.3 Notice of Change in Exercise Price. The Company shall, promptly after an event requiring a change in the Exercise Price pursuant to Section 6 hereof, send notice to the Holders of such event and change ("**Price Notice**"). The Price Notice shall describe the event causing the change and the method of calculating same and shall be certified as being true and accurate by the Company's Chief Financial Officer.

8.4 Transmittal of Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via e-mail attachment at the email address set forth below at or prior to 5:30 p.m. (New York City time) on a Business Day, (b) the next Business Day after the date of transmission, if such notice or communication is delivered via e-mail attachment at the e-mail address as set forth below on a day that is not a Business Day or later than 5:30 p.m. (New York City time) on any Business Day, (c) the second (2nd) Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given.

If to the Holder:

WallachBeth Capital, LLC
Harborside Financial Center Plaza 5
185 Hudson Street, Suite 1410
Jersey City, NJ 07311

If to the Company:

SeqLL Inc.
317 New Boston Street, Suite 210
Woburn, Massachusetts 01801
Attention: Chief Executive Officer

9. Miscellaneous.

9.1 Amendments. The Company and the Holder may from time to time supplement or amend this Purchase Warrant. All modifications or amendments shall require the written consent of and be signed by the party against whom enforcement of the modification or amendment is sought.

9.2 Headings. The headings contained herein are for the sole purpose of convenience of reference, and shall not in any way limit or affect the meaning or interpretation of any of the terms or provisions of this Purchase Warrant.

9.3. Entire Agreement. This Purchase Warrant (together with the other agreements and documents being delivered pursuant to or in connection with this Purchase Warrant) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings of the parties, oral and written, with respect to the subject matter hereof.

9.4 Binding Effect. This Purchase Warrant shall inure solely to the benefit of and shall be binding upon, the Holder and the Company and their permitted assignees, respective successors, legal representative and assigns, and no other person shall have or be construed to have any legal or equitable right, remedy or claim under or in respect of or by virtue of this Purchase Warrant or any provisions herein contained.

9.5 Governing Law; Submission to Jurisdiction; Trial by Jury. This Purchase Warrant shall be governed by and construed and enforced in accordance with the laws of the State of New York, without giving effect to conflict of laws principles thereof. The Company hereby agrees that any action, proceeding or claim against it arising out of, or relating in any way to this Purchase Warrant shall be brought and enforced in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, and irrevocably submits to such jurisdiction, which jurisdiction shall be exclusive. The Company hereby waives any objection to such exclusive jurisdiction and that such courts represent an inconvenient forum. Any process or summons to be served upon the Company may be served by transmitting a copy thereof by registered or certified mail, return receipt requested, postage prepaid, addressed to it at the address set forth in Section 8 hereof. Such mailing shall be deemed personal service and shall be legal and binding upon the Company in any action, proceeding or claim. The Company and the Holder agree that the prevailing party(ies) in any such action shall be entitled to recover from the other party(ies) all of its reasonable attorneys' fees and expenses relating to such action or proceeding and/or incurred in connection with the preparation therefor. The Company and the Holder hereby irrevocably waive, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

9.6 Waiver, etc. The failure of the Company or the Holder to at any time enforce any of the provisions of this Purchase Warrant shall not be deemed or construed to be a waiver of any such provision, nor to in any way affect the validity of this Purchase Warrant or any provision hereof or the right of the Company or any Holder to thereafter enforce each and every provision of this Purchase Warrant. No waiver of any breach, non-compliance or non-fulfillment of any of the provisions of this Purchase Warrant shall be effective unless set forth in a written instrument executed by the party or parties against whom or which enforcement of such waiver is sought; and no waiver of any such breach, non-compliance or non-fulfillment shall be construed or deemed to be a waiver of any other or subsequent breach, non-compliance or non-fulfillment.

9.7 Exchange Agreement. As a condition of the Holder's receipt and acceptance of this Purchase Warrant, Holder agrees that, at any time prior to the complete exercise of this Purchase Warrant by Holder, if the Company and WallachBeth enter into an agreement ("**Exchange Agreement**") pursuant to which they agree that all outstanding Purchase Warrants will be exchanged for securities or cash or a combination of both, then Holder shall agree to such exchange and become a party to the Exchange Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Purchase Warrant to be signed by its duly authorized officer as of the [●] day of [●], 2019.

SeqLL Inc.

By: _____
Name:
Title:

[Form to be used to exercise Purchase Warrant]

Date: _____, 20__

The undersigned hereby elects irrevocably to exercise the Purchase Warrant for _____ shares of common stock, par value \$0.00001 per share (the "Shares"), of SeqLL Inc., a Delaware corporation (the "Company"), and hereby makes payment of \$____ (at the rate of \$____ per Share) in payment of the Exercise Price pursuant thereto. Please issue the Shares as to which this Purchase Warrant is exercised in accordance with the instructions given below and, if applicable, a new Purchase Warrant representing the number of Shares for which this Purchase Warrant has not been exercised.

or

The undersigned hereby elects irrevocably to convert its right to purchase ____ Shares of the Company under the Purchase Warrant for _____ Shares, as determined in accordance with the following formula:

$$X = \frac{Y*(A-B)}{A}$$

Where,

- X = The number of Shares to be issued to Holder;
- Y = The number of Shares for which the Purchase Warrant is being exercised;
- A = The fair market value of one Share which is equal to \$____; and
- B = The Exercise Price which is equal to \$____ per share

The undersigned agrees and acknowledges that the calculation set forth above is subject to confirmation by the Company and any disagreement with respect to the calculation shall be resolved by the Company in its sole discretion.

Please issue the Shares as to which this Purchase Warrant is exercised in accordance with the instructions given below and, if applicable, a new Purchase Warrant representing the number of Shares for which this Purchase Warrant has not been converted.

Signature _____

Signature Guaranteed _____

INSTRUCTIONS FOR REGISTRATION OF SECURITIES

Name: _____
(Print in Block Letters)

Address: _____

NOTICE: The signature to this form must correspond with the name as written upon the face of the Purchase Warrant without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank, other than a savings bank, or by a trust company or by a firm having membership on a registered national securities exchange.

ASSIGNMENT

(To be executed by the registered Holder to effect a transfer of the within Purchase Warrant):

FOR VALUE RECEIVED, _____ does hereby sell, assign and transfer unto the right to purchase shares of common stock, par value \$0.00001 per share, of SeqLL Inc., a Delaware corporation (the “**Company**”), evidenced by the Purchase Warrant and does hereby authorize the Company to transfer such right on the books of the Company.

Dated: _____, 20__

Signature _____

Signature Guaranteed _____

NOTICE: The signature to this form must correspond with the name as written upon the face of the within Purchase Warrant without alteration or enlargement or any change whatsoever, and must be guaranteed by a bank, other than a savings bank, or by a trust company or by a firm having membership on a registered national securities exchange.

EXHIBIT B

Form of Lock-Up Agreement

Lock-Up Agreement

___, 2019

WallachBeth Capital, LLC
Harborside Financial Center Plaza 5
185 Hudson Street, Suite 1410
Jersey City, NJ 07311

Ladies and Gentlemen:

The undersigned understands that you, as representative (the “**Representative**”), propose to enter into an Underwriting Agreement (the “**Underwriting Agreement**”) with SeqLL Inc., a Delaware corporation (the “**Company**”), providing for the public offering (the “**Public Offering**”) of shares of common stock, par value \$0.00001 per share, of the Company (the “**Shares**”).

To induce the Representative to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of the Representative, the undersigned will not, during the period commencing on the date hereof and ending 180 days after the date of the Underwriting Agreement (the “**Lock-Up Period**”), (1) offer, pledge, sell, contract to sell, grant, lend, or otherwise transfer or dispose of, directly or indirectly, any Shares or any securities convertible into or exercisable or exchangeable for Shares, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the “**Lock-Up Securities**”); (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Lock-Up Securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Lock-Up Securities, in cash or otherwise; (3) make any demand for or exercise any right with respect to the registration of any Lock-Up Securities; or (4) publicly disclose the intention to make any offer, sale, pledge or disposition, or to enter into any transaction, swap, hedge or other arrangement relating to any Lock-Up Securities. Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer Lock-Up Securities without the prior written consent of the Representative in connection with (a) transactions relating to Lock-Up Securities acquired in open market transactions after the completion of the Public Offering; provided that no filing under Section 16(a) of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), shall be required or shall be voluntarily made in connection with subsequent sales of Lock-Up Securities acquired in such open market transactions; (b) transfers of Lock-Up Securities as a *bona fide* gift, by will or intestacy or to a family member or trust for the benefit of the undersigned or a family member (for purposes of this lock-up agreement, “family member” means any relationship by blood, marriage or adoption, not more remote than first cousin); (c) transfers of Lock-Up Securities to a charity or educational institution; (d) if the undersigned, directly or indirectly, controls a corporation, partnership, limited liability company or other business entity, any transfers of Lock-Up Securities to any shareholder, partner or member of, or owner of similar equity interests in, the undersigned, as the case may be, (e) if required by the terms of a qualified domestic relations order; provided that in the case of any transfer pursuant to the foregoing clauses (b), (c) or (d), (i) any such transfer shall not involve a disposition for value, (ii) each transferee shall sign and deliver to the Representative a lock-up agreement substantially in the form of this lock-up agreement and (iii) no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company’s transfer agent and registrar against the transfer of the undersigned’s Lock-Up Securities except in compliance with this lock-up agreement.

The Representative agrees that, if the undersigned is an executive officer or director of the Company, at least three (3) business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of Lock-Up Securities, the Representative will notify the Company of the impending release or waiver; and the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two (2) business days before the effective date of the release or waiver. Any release or waiver granted by the Representative hereunder to any such officer or director shall only be effective two (2) business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer of Lock-Up Securities not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this lock-up agreement to the extent and for the duration that such terms remain in effect at the time of such transfer.

No provision in this agreement shall be deemed to restrict or prohibit the exercise, exchange or conversion by the undersigned of any securities exercisable or exchangeable for or convertible into Shares, as applicable; provided that the undersigned does not transfer the Shares acquired on such exercise, exchange or conversion during the Lock-Up Period, unless otherwise permitted pursuant to the terms of this lock-up agreement. In addition, no provision herein shall be deemed to restrict or prohibit the entry into or modification of a so-called "10b5-1" plan at any time (other than the entry into or modification of such a plan in such a manner as to cause the sale of any Lock-Up Securities within the Lock-Up Period).

The undersigned understands that the Company and the Representative are relying upon this lock-up agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this lock-up agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

The undersigned understands that, if the Underwriting Agreement is not executed by May 31, 2019 or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Shares to be sold thereunder, then this lock-up agreement shall be void and of no further force or effect.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation between the Company and the Representative.

Very truly yours,

(Name - Please Print)

(Signature)

(Name of Signatory, in the case of entities - Please Print)

(Title of Signatory, in the case of entities - Please Print)

Address: _____

**AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
SEQLL INC.**

SeqLL Inc. (the "Corporation"), 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"), hereby certifies that:

FIRST. The name of this Corporation is SeqLL Inc.

SECOND. The Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of Delaware on April 3, 2014. A first Amended and Restated Certificate of Incorporation was filed on April 14, 2014. A second Amended and Restated Certificate of Incorporation was filed on February 18, 2016. The Certificate of Incorporation of the Corporation as heretofore amended is hereby amended and restated pursuant to Sections 228, 242 and 245 of the General Corporation Law. All amendments to the Certificate of Incorporation reflected herein (this "Restated Certificate") have been duly adopted by the Board of Directors and stockholders of the Corporation in accordance with the provisions of such Sections. As required by Section 228 of the General Corporation Law, the Corporation has given written notice of the amendments reflected herein to all stockholders who did not consent in writing to these amendments.

THIRD. The Certificate of Incorporation of the Corporation shall be amended and restated to read in full as follows:

ARTICLE I

The name of this corporation is SeqLL Inc.

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is 2711 Centerville Road, Suite 400, 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 purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV

A. **Classes of Stock and Authorized Shares.**

The Corporation is authorized to issue two classes of stock to be designated, respectively, Common Stock, par value \$0.00001 per share (the "Common Stock"), and Preferred Stock, par value \$0.00001 per share (the "Preferred Stock"). The total number of shares which the Corporation is authorized to issue is One Hundred million (100,000,000) shares, of which Eighty Million (80,000,000) shares shall be Common Stock, and Twenty Million (20,000,000) shares shall be Preferred Stock.

B. **Rights, Preferences and Restrictions of Preferred Stock.** The Board of Directors of the corporation is hereby expressly authorized, by resolution or resolutions thereof, to provide, out of the unissued shares of Preferred Stock, for one or more series of Preferred Stock and, with respect to each such series, to fix the number of shares constituting such series and the designation of such series, the voting powers, if any, of the shares of such series, and the preferences and relative, participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series. The powers, preferences and relative, participating, optional and other special rights of each series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. Subject to Section A of this Article IV, the Board is also expressly authorized to increase or decrease the number of shares of any series of Preferred Stock subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. Unless otherwise expressly provided in the certificate of designations in respect of any series of Preferred Stock, in case the number of shares of such series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series.

C. **Rights of Common Stock.** The relative powers, rights, qualifications, limitations and restrictions granted to or imposed on the shares of the Common Stock are as follows:

1. **General.** The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors upon any issuance of the Preferred Stock of any series.

2. **Voting Rights.** The holders of the Common Stock shall have voting rights at all meetings of stockholders, each such holder being entitled to one vote for each share thereof held by such holder; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Restated Certificate 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 pursuant to this Restated Certificate or the General Corporation Law. 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 the affirmative vote of the holders of a majority of the voting power of the capital stock of the Corporation entitled to vote thereon, voting as a single class, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

3. **Dividends.** Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and subject to any preferential dividend or other rights of any then outstanding Preferred Stock and to the requirements of applicable law.

4. **Liquidation.** Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential or other rights of any then outstanding Preferred Stock.

ARTICLE V

In furtherance and not in limitation of the powers conferred upon it by the General Corporation Law, and subject to the terms of any series of Preferred Stock, the Board of Directors is expressly authorized and empowered to adopt, amend or repeal the Bylaws of the Corporation. The stockholders may not adopt, amend, alter or repeal the Bylaws of the Corporation, or adopt any provision inconsistent therewith, unless such action is approved, in addition to any other vote required by this Restated Certificate, by the affirmative vote of the holders of at least 66 2/3% in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon. Notwithstanding any other provisions of law, this Restated Certificate or the Bylaws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least 66 2/3% in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article V.

ARTICLE VI

A. **Authority of Board.** The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors. In addition to the powers and authority expressly conferred by statute or by this Restated Certificate or the Bylaws of the Corporation, the Board of Directors is hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Corporation.

B. **Board Size.** Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, the total number of authorized directors constituting the Board of Directors shall be fixed from time to time exclusively by the Board of Directors pursuant to a resolution adopted by a majority of the Board of Directors.

C. **Classified Board Structure.** From and after the Effective Time (defined below), the directors, other than any who may be elected by the holders of any series of Preferred Stock under specified circumstances, shall be divided into three (3) classes hereby designated Class I, Class II and Class III. The Board of Directors may assign members of the Board of Directors already in office to such classes at the time such classification becomes effective. The term of office of the initial Class I directors shall expire at the first annual meeting of the stockholders following the effectiveness of this Restated Certificate (the "Effective Time"), the term of office of the initial Class II directors shall expire at the second annual meeting of the stockholders following the Effective Time, and the term of office of the initial Class III directors shall expire at the third annual meeting of the stockholders following the Effective Time. At each annual meeting of stockholders, commencing with the first annual meeting of stockholders following the Effective Time, each of the successors elected to replace the directors of a Class whose term shall have expired at such annual meeting shall be elected to hold office for a three-year term and until the third annual meeting next succeeding his or her election and until his or her respective successor shall have been duly elected and qualified. Notwithstanding the foregoing provisions of this Article VI, each director shall serve until his or her successor is duly elected and qualified or until his or her death, resignation, or removal.

D. **Removal; Vacancies.** Any director may be removed from office by the stockholders of the Corporation only for cause by the affirmative vote of the holders of at least 66 2/3% of the outstanding voting power of the stockholders. Vacancies occurring on the Board of Directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of the Board of Directors, although less than a quorum, or by a sole remaining director, at any meeting of the Board of Directors. A person elected 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 be duly elected and qualified.

ARTICLE VII

A. **Special Meetings.** Special meetings of the stockholders may be called only by (i) the Board of Directors pursuant to a resolution adopted by a majority of the Board of Directors; (ii) the chairman of the Board of Directors; or (iii) the chief executive officer or president of the Corporation.

B. **No Stockholder Action by Written Consent.** Subject to the rights of the holders of any series of Preferred Stock, any action required or permitted to be taken by the stockholders of the Corporation must be effected at a duly called annual or special meeting of stockholders of the Corporation and may not be effected by any consent in writing by such stockholders.

C. **Forum Selection.** 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 the following types of actions or proceedings under Delaware statutory law or Delaware common law: (1) any derivative action or proceeding brought on behalf of the Corporation; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of the Corporation's directors, officers, employees or agents to the Corporation or the Corporation's stockholders; (3) any action asserting a claim against the Corporation arising pursuant to provisions of the Delaware General Corporation Law or the Corporation's amended and restated certificate of incorporation or amended and restated bylaws; or (4) any action asserting a claim governed by the internal affairs doctrine, except for, as to each of (1) through (4) 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 VII 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 VII (including each portion of any sentence of this Article VII 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. This provision shall not be deemed to waive the Corporation's compliance obligations with any federal securities laws or the rules and regulations thereunder.

ARTICLE VIII

A. The Corporation shall indemnify (and advance expenses to) its directors, officers, employees and agents to the full extent permitted by the General Corporation Law, as amended from time to time.

B. To the fullest extent permitted by law, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision, nor the adoption of any provision of the Restated Certificate inconsistent with this Article VIII, shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal. If the General Corporation Law is amended to permit further elimination or limitation of 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.

ARTICLE IX

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation. Notwithstanding any other provision of this Restated Certificate or the Bylaws of the corporation and in addition to any affirmative vote of the holders of any particular class of stock of the corporation required by applicable law or by this Restated Certificate, or the Bylaws of the corporation, the affirmative vote of the holders of at least 66 2/3% of the voting power of the shares of the then outstanding voting stock of the corporation, voting together as a single class, shall be required to amend, repeal, or adopt any provisions of this Restated Certificate.

[No Further Text. Signature Page Follows.]

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been signed on behalf of the Corporation by its duly authorized officer effective this __ day of _____, 2019.

SEQLL INC.

Name: _____
Chief Executive Officer



The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations.

TEN COM	- as tenants in common	UNIF GIFT MIN ACT.....Custodian.....
TEN ENT	- as tenants by the entireties	(Cust) (Minor)
JT TEN	- as joint tenants with the right of survivorship and not as tenants in common	Act..... (State)

Additional abbreviations may also be used though not in the above list.

For value received, _____ hereby sell, assign and transfer unto
PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE:

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

_____ shares
of the capital stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

_____, Attorney
to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _____

X _____
THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THIS CERTIFICATE. THE SIGNATURE(S) MUST BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions).

SIGNATURE GUARANTEED:

TRANSFER FEE WILL APPLY



ATTORNEYS AT LAW

ONE INDEPENDENT DRIVE, SUITE 1300
 JACKSONVILLE, FLORIDA 32202-5017
 904.359.2000 TEL
 904.359.8700 FAX
 www.foley.com

May 21, 2019

SeqLL Inc.
 317 New Boston Street - Suite 210
 Woburn, Massachusetts 01801

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to SeqLL Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of the Company's Registration Statement on Form S-1, File No. 333-230985 (as amended, and including any subsequent registration statement on Form S-1 filed pursuant to Rule 462(b), the "Registration Statement"), under the Securities Act of 1933, as amended (the "Act"), relating to the registration of the offer, issuance and sale by the Company of 1,552,500 shares of common stock, par value \$0.00001 per share, which includes 202,500 shares to cover over-allotments, if any, (the "Shares"). The Shares are to be sold by the Company pursuant to an underwriting agreement among the Company and the Underwriters named therein (the "Underwriting Agreement"), the form of which is filed herewith as Exhibit 1.1 to the Registration Statement.

In so acting, we have examined originals or copies (certified or otherwise identified to our satisfaction) of (i) the form of Amended and Restated Certificate of Incorporation of the Company to be filed with the Secretary of State of the State of Delaware prior to the consummation of the initial public offering contemplated by the Registration Statement, filed as Exhibit 3.3 to the Registration Statement; (ii) the form of Amended and Restated Bylaws of the Company to be effective prior to the consummation of the initial public offering contemplated by the Registration Statement, filed as Exhibit 3.4 to the Registration Statement; (iii) the Registration Statement; (iv) the prospectus contained within the Registration Statement; (v) the form of the Underwriting Agreement and (vi) such corporate records, agreements, documents and other instruments, and such certificates or comparable documents of public officials and of officers and representatives of the Company, and have made inquiries of such officers and representatives, as we have deemed relevant and necessary as a basis for the opinion hereinafter set forth.

In such examination, we have assumed that the Amended and Restated Certificate of Incorporation that will be filed with the Secretary of State of the State of Delaware will be substantially identical to the form of Amended and Restated Certificate of Incorporation of the Company filed as Exhibit 3.3 to the Registration Statement, the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, conformed or photostatic copies, and the authenticity of the originals of such latter documents. As to all questions of fact material to this opinion that have not been independently established, we have relied upon certificates or comparable documents of officers and representatives of the Company.

BOSTON
 BRUSSELS
 CHICAGO
 DETROIT

JACKSONVILLE
 LOS ANGELES
 MADISON
 MIAMI

MILWAUKEE
 NEW YORK
 ORLANDO
 SACRAMENTO

SAN DIEGO
 SAN DIEGO/DEL MAR
 SAN FRANCISCO
 SHANGHAI

SILICON VALLEY
 TALLAHASSEE
 TAMPA
 TOKYO
 WASHINGTON, D.C.



SeqLL Inc.
May 21, 2019
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Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that the Shares, when issued and sold as contemplated in the Registration Statement, and upon payment and delivery in accordance with the Underwriting Agreement, will be validly issued, fully paid and non-assessable.

The opinion expressed herein is limited to the General Corporation Law of the State of Delaware (including reported judicial decisions interpreting the General Corporation Law of the State of Delaware) and we express no opinion as to the effect on the matters covered by this letter of the laws of any other jurisdiction.

We hereby consent to the filing of this letter as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus which is a part of the Registration Statement. In giving such consents, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the Rules and Regulations of the Commission promulgated thereunder.

Sincerely,

/s/ FOLEY & LARDNER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the use in this Amendment No. 1 to Registration Statement (No. 333-230985) on Form S-1 of SeqLL Inc. of our report dated April 22, 2019, relating to the consolidated financial statements of SeqLL Inc., appearing in the Prospectus, which is part of this Registration Statement.

We also consent to the reference to our firm under the heading “Experts” in such Prospectus.

/s/ Wolf & Company, P.C.

Wolf & Company, P.C.

Boston, Massachusetts

May 21, 2019
