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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-38319

QUANTERIX CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**20-8957988**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
113 Hartwell Avenue, Lexington, MA	**02421**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(617) 301-9400**

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.001 par value per share	The Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Exchange Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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. (Check one):

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☒ [Do not check if a smaller reporting company]	Smaller reporting company ☐ Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The registrant was not a public company as of the last business day of its most recently completed second fiscal quarter and, therefore, cannot calculate the aggregate market value of its voting and non-voting common equity held by non-affiliates as of such date.

As of March 1, 2018, the registrant had 21,937,510 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2018 Annual Meeting of Stockholders, which the registrant intends to file with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days after the end of the registrant's fiscal year ended December 31, 2017, are incorporated by reference into Part III of this Annual Report on Form 10-K.

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Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this Annual Report on Form 10-K are forward-looking statements. In some cases, you can identify forward-looking statements by words such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would," or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the implementation of our business model and strategic plans for our business, products and services;
- the size of the life science research, diagnostics, and health screening markets addressable by our Simoa technology;
- the size and market opportunity for our Simoa technology in the fields of neurology, oncology, cardiology, infectious disease and inflammation;
- the commercialization and adoption of our existing products and services and the success of our new product offerings, including Quanterix SR-X and the detection of nucleic acids;
- our ability to develop additional assays, including multiplexed assays;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and our needs for additional financing;
- the ability of our Simoa technology's sensitivity to improve existing diagnostics and to enable the development of new diagnostic tests and tools;
- the potential of our Simoa technology in the field of companion diagnostics and its adoption by healthcare professionals;
- the impact of our Simoa technology on proteomic research;
- the relevance of proteins versus nucleic acids in understanding the continuum between health and disease;
- the usefulness of the data generated by our Simoa technology in the life science research, diagnostic and precision health screening fields; and
- our financial performance.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in "Part I, Item 1A, Risk Factors" and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update

publicly any forward-looking statements for any reason after the date of this Annual Report on Form 10-K to conform these statements to new information, actual results or to changes in our expectations, except as required by law.

You should read this Annual Report on Form 10-K and the documents that we reference herein and have filed with the Securities and Exchange Commission, or SEC, as exhibits to this Annual Report on Form 10-K with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.

This Annual Report on Form 10-K includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. This Annual Report on Form 10-K also contains estimates and other statistical data from a custom market research report by an independent third-party research firm, which was commissioned by us and was issued in June 2017, referred to herein as the Third-Party Research Report. Such data involves a number of assumptions and limitations and contains projections and estimates of the future performance of the markets in which we operate and intend to operate that are subject to a high degree of uncertainty. We caution you not to give undue weight to such projections, assumptions and estimates.

Unless the context otherwise requires, the terms "Quanterix," the "Company," "we," "us" and "our" in this Annual Report on Form 10-K refer to Quanterix Corporation. "Quanterix," "Simoa," "Simoa HD-1," "SR-X," "HD-1 Analyzer" and our logo are our trademarks. All other service marks, trademarks and trade names appearing in this Annual Report on Form 10-K are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

PART I

Item 1. BUSINESS

Overview

We are a life sciences company that has developed a next generation, ultra-sensitive digital immunoassay platform that advances precision health for life sciences research and diagnostics. Our platform enables customers to reliably detect protein biomarkers in extremely low concentrations in blood, serum and other fluids that, in many cases, are undetectable using conventional, analog immunoassay technologies. It also allows researchers to define and validate the function of novel protein biomarkers that are only present in very low concentrations and have been discovered using technologies such as mass spectrometry. These capabilities provide our customers with insight into the role of protein biomarkers in human health that has not been possible with other existing technologies and enable researchers to unlock unique insights into the continuum between health and disease. We believe this greater insight will enable the development of novel therapies and diagnostics and facilitate a paradigm shift in healthcare from an emphasis on treatment to a focus on earlier detection, monitoring, prognosis and, ultimately, prevention. We are currently focusing our platform on protein detection, which we believe is an area of significant unmet need and where we have significant competitive advantages. In addition to enabling new applications and insights in protein analysis, we are also developing our Simoa technology to detect nucleic acids in biological samples.

Our platform is based on our proprietary digital **si**ngle **mo**lecule **a**rray, or Simoa, detection technology, which is the most sensitive commercially available protein detection technology. Simoa significantly advances ELISA technology, which has been the industry standard for protein detection for over forty years. Proteins are complex molecules that are required for the structure, function and regulation of the body's tissues and organs, and are the functional units that carry out specific tasks in every cell. The human body contains approximately 20,000 genes, each of which can produce multiple proteins. It is estimated that these 20,000 genes can produce over 100,000 different proteins, approximately 10,500 of which are known to be secreted in blood. Accordingly, while research on nucleic acids provides valuable information about the role of genes in health and disease, proteins are more prevalent and, we believe, more relevant to a precise understanding of the nuanced continuum between health and disease. Protein measurement goes beyond genetic predisposition, reflecting the impact of a range of influences on health, including environmental factors and lifestyle, providing deeper and more relevant insight into what is happening in a person's body in real time.

Researchers and clinicians rely extensively on protein biomarkers for use as research and clinical tools. However, normal physiological levels of many proteins are not detectable using conventional, analog immunoassay technologies, and many of these technologies can only detect proteins once they have reached levels that reflect more advanced disease or injury. For many other low abundance proteins, these technologies cannot detect proteins even at disease- or injury-elevated levels. We believe that Simoa's sensitivity offers a new way to monitor healthy individuals and detect proteins associated with nascent disease or injury early in the disease cascade, which holds the key to intervention before disease or injury has advanced to the point where more significant clinical signs and symptoms have appeared.

Our Simoa platform has achieved significant scientific validation and commercial adoption. Simoa has been cited by published research in more than 215 articles in peer-reviewed publications covering over 165 biomarkers in areas of high unmet medical need and research interest such as neurology, oncology, cardiology, infectious disease and inflammation. Our growing customer base is comprised of over 200 customers across our end markets, and includes 17 of the 20 largest biopharmaceutical companies.

On January 30, 2018, we acquired Aushon BioSystems, Inc., or Aushon. We believe that this acquisition provides us technologies and expertise to help further expand our instrument and biomarker menu. Additionally, we expect that Aushon's CLIA-certified laboratory will help accelerate our entry into pharmaceutical services.

Our Market Opportunities

Our Simoa technology has applications across the life science research, diagnostics and precision health screening markets. Our initial target market has been the life science research market. While we have received revenue from upfront and milestone payments related to collaborations with diagnostic companies, neither we nor any of our diagnostic partners have sold Simoa products or services in the diagnostics or precision health screening markets. As our customers continue to gain experience with our proprietary Simoa technology, we believe the opportunity to access markets beyond research will be significant. According to estimates in the Third-Party Research Report, we believe the future aggregate market opportunity for us and others using our Simoa technology has the potential to expand to approximately $38 billion, approximately $30 billion of which would be addressable by Simoa upon receipt of the necessary regulatory approvals to market our products in areas other than life science research, which we have not yet begun the process to obtain.

Life Science Research

Our initial target market is the large and growing life science research market. We believe Simoa is well-positioned to capture a significant share of this market because of its superior sensitivity, automated workflow capabilities, multiplexing and its ability to work with a broader range of sample types. By substantially lowering the limit of detection of protein biomarkers, we believe that Simoa is penetrating the existing market for protein analysis and holds potential to significantly grow the life science research market as researchers expand their research into the diseases associated with the thousands of proteins that were previously undetectable. Simoa also enables earlier detection of the proteins that are currently detectable by other technologies only after they have reached levels that reflect more advanced disease or injury. As an indication of the market's acceptance of our Simoa platform, biopharmaceutical researchers are also integrating our platform into drug development protocols to more efficiently and effectively develop drugs. In addition to enabling new applications and insights in protein analysis, our Simoa technology can be used to detect nucleic acids, which expands our market opportunity. We believe that Simoa has the potential to ultimately provide the same sensitivity as polymerase chain reaction, or PCR, which is the most commonly used technology for nucleic acid detection, without the distortion and bias issues associated with amplification used in PCR.

According to estimates in the Third-Party Research Report, we believe that the total life science research market addressable by Simoa, including both proteomics and genomics research, is $3 billion per year and has the potential to reach $8 billion per year.

Diagnostics

The diagnostic market represents a significant commercial opportunity for Simoa as well. We believe existing diagnostics can be improved by Simoa's sensitivity to enable earlier detection of diseases and injuries, and that new diagnostics may be developed using protein biomarkers that are not detectable using conventional, analog immunoassay technologies but are detectable using Simoa. We also believe that the ultra-sensitive protein detection provided by Simoa can enable the development of a new category of non-invasive diagnostic tests and tools based on blood, serum, saliva and other fluids that have the potential to replace current more invasive, expensive and inconvenient diagnostic methods, including spinal tap, diagnostic imaging and biopsy. In order to accelerate the use of our technology to develop applications in the diagnostic market, we have entered into a collaboration agreement with bioMérieux, a leading diagnostic company.

Simoa also has significant potential in the emerging field of companion diagnostics. Drug developers can use Simoa to stratify patients into categories, enabling selection of those patients for whom a drug is expected to be most effective and safe. Not only can Simoa be used to develop companion diagnostics to stratify patients in clinical trials and for treatment, but Simoa's sensitivity also

enables the development of companion diagnostics based on protein biomarkers that can regularly monitor whether an approved drug is having the desired biological effect, enabling doctors to quickly and efficiently adjust the course of treatment as appropriate.

Precision Health Screening

Simoa's ability to detect and quantify normal physiological levels of proteins in low abundance that are undetectable using conventional, analog immunoassay technologies may enable our technology to be used to monitor protein biomarker levels of seemingly healthy, asymptomatic people, and potentially to signal and provide earlier detection of the onset of disease. We believe there is the potential for a number of neurological, cardiovascular, oncologic and other protein biomarkers associated with disease to be measured with a simple blood draw on a regular, ongoing basis as part of a patient's routine health screening, and for those results to be compared periodically with baseline measurements to predict or detect the early onset of disease, prior to the appearance of symptoms.

According to estimates in the Third-Party Research Report, we believe that the total diagnostic and precision health screening markets addressable by us and others using Simoa have the potential to reach an aggregate of $30 billion per year, which would be addressable upon receipt of the necessary regulatory approvals to market our products in areas other than life science research, which we have not yet begun the process to obtain.

Products sold by us or collaborators in the diagnostics and precision health screening markets will be subject to regulation by the FDA or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. To date, neither we nor any of our diagnostic partners have received or applied for regulatory approvals for Simoa products. See "Risk Factors—Risks Related to Governmental Regulation and Diagnostic Product Reimbursement" and "—Government Regulation" for a more detailed discussion regarding the regulatory approvals that may be required.

Our Products and Services

Our proprietary Simoa technology is based on traditional enzyme-linked immunosorbent assay, or ELISA, technology, which has been the most widely used method of detection of proteins for over 40 years. Given our target customers' familiarity with the core ELISA technology, we believe this offers us a significant competitive advantage. Simoa differs, however, from conventional ELISA in its ability to trap single molecules in tiny microwells, 40 trillionths of a milliliter, that are 2.5 billion times smaller than traditional ELISA wells, allowing for an analysis and digital readout of each individual molecule, which is not possible with conventional ELISA technology. This ability is the key to Simoa's unprecedented sensitivity.

We commercially launched our Simoa HD-1 Analyzer in January 2014. The HD-1 Analyzer is the most sensitive protein detection platform commercially available, and is currently capable of analyzing up to six biomarkers per test, with anticipated expansion of biomarker capability per test in 2018. Assays run on the HD-1 Analyzer are also fully automated. We believe that the increased multiplexing capability and the full automation of the HD-1 Analyzer provides us with an additional significant competitive advantage with biopharmaceutical customers. We have currently developed more than 80 Simoa digital biomarker assays. The Simoa platform also allows ease and flexibility in assay design, enabling our customers to develop their own in-house assays, called "homebrew" assays. We intend to continue to increase the number of Simoa digital biomarker assays.

We continually seek to expand our product offerings to meet the needs of our customers. To that end, we have developed a new instrument, the Quanterix SR-X, which we commercially launched in December 2017. The Quanterix SR-X utilizes the same core Simoa technology and assay kits as the HD-1 Analyzer in a compact benchtop form with a lower price point, more flexible assay preparation,

and a wider range of applications, including direct detection of nucleic acids. The Quanterix SR-X supports detection capability of up to six biomarkers per test, with anticipated expansion of biomarker capability per test in 2018.

We also provide contract research services for customers through our Accelerator Laboratory. The Accelerator Laboratory provides customers with access to Simoa's technology, and supports multiple projects and services, including sample testing, homebrew assay development and custom assay development. To date, we have completed over 350 projects for more than 150 customers from all over the world using our Simoa platform. In addition to being an important source of revenue, we have also found the Accelerator Laboratory to be a significant catalyst for placing additional instruments, as over 36 customers for whom we have provided contract research services have subsequently purchased an instrument from us. In addition, with our acquisition of Aushon in January 2018, we acquired Aushon's CLIA-certified lab. We have integrated this lab into our Accelerator Laboratory, and intend to move Simoa instruments into this CLIA-certified lab. We believe the ability to offer services from a CLIA-certified lab will help accelerate our entry into pharmaceutical services.

We sell our instruments, consumables and services to the life science, pharmaceutical and diagnostics industries through a direct sales force and support organizations in North America and Europe, and through distributors or sales agents in other select markets. We have an extensive base of customers in world class academic and governmental research institutions, as well as pharmaceutical, biotechnology and contract research companies, using our technology to gather information to better understand human health.

Our Competitive Strengths

We believe that our competitive strengths include the following:

- ***Proprietary ultra-sensitive digital immunoassay Simoa technology platform, enabling researchers and clinicians to obtain information from less invasive procedures in smaller sample sizes.*** Simoa is the most sensitive commercially available protein detection technology, and can detect and quantify proteins of clinical interest that are undetectable using conventional, analog immunoassay technologies. This sensitivity allows researchers to measure critical protein biomarkers at earlier stages in the progression of a disease or injury, which we believe will enable the development of novel therapies and diagnostics and facilitate a paradigm shift in healthcare from an emphasis on treatment to a focus on earlier detection, monitoring, prognosis and, ultimately, prevention. The sensitivity of our Simoa technology allows researchers to gather biomarker information from smaller samples that can be collected less invasively than samples required by other assay technologies.

- ***Technology platform that leverages and improves upon industry standard ELISA technology.*** Simoa uses the basic principles of conventional bead-based ELISA. However, unlike ELISA, which runs the enzyme-substrate reactions on all molecules in one well, Simoa reactions are run on individual molecules in tiny microwells that are 2.5 billion times smaller than traditional ELISA wells. Adding digital capability to this industry standard platform has resulted in expanded capabilities and improved performance. Given our target customers' familiarity with the core ELISA technology, Simoa is easily integrated with existing customer workflows including data analysis.

- ***Leader in large and growing market for detecting proteins in low abundance.*** Simoa is the most sensitive commercially available protein detection technology. We believe our growing market acceptance is establishing Simoa as the reference platform for detecting proteins in low abundance across sample types in our end markets.

- ***Deep and expanding scientific validation.*** Our Simoa technology has been cited in more than 215 articles in peer-reviewed publications, including *JAMA Neurology* and *Nature*, covering over 165 biomarkers, and is becoming a vital tool in cutting edge life sciences research. Our company has established relationships with key opinion leaders, and our growing base of over 200 customers includes some of the world's leading academic and government research institutions as well as 17 of the 20 largest pharmaceutical and biotechnology companies.

- ***Leading position in market solidified by robust customization capabilities, assay design flexibility and automation of our HD-1 Analyzer.*** Our technical capabilities and expertise allow our customers to design high-quality, customized assays utilizing our Simoa platform. The needs of our customers vary widely, and the flexibility of the Simoa detection technology allows us to provide innovative, low cost solutions for customers in multiple markets across various applications. In addition, the Simoa HD-1 Analyzer provides fully automated analysis from sample introduction to analytical results. Furthermore, our proprietary array approach to ELISA digitization enables rapid digital data acquisition and assay results. This automation and speed provides customers high research and development productivity through greater throughput and lab efficiency.

- ***Highly attractive business model that leverages growing installed base of instruments.*** As we continue to grow our installed base, optimize workflows and expand our assay menu, we expect to increase our revenues derived from consumables. The integration of our technology in our customers' projects also provides ongoing sales of assays and consumables, resulting in a growing revenue stream.

- ***Our highly experienced senior management team.*** We are led by a dedicated and highly experienced senior management team with significant industry experience and proven ability to develop novel solutions. Each of the members of our senior management has more than 20 years of relevant experience.

Our Strategy

Our goal is to enable new research into protein and nucleic acids to allow greater insight into their role in human health in ways that have not been possible with any other current research and diagnostic technology. We believe this greater insight will facilitate a paradigm shift in healthcare from an emphasis on treatment to a focus on earlier detection, monitoring, prognosis and, ultimately, prevention.

Our strategy to achieve this includes:

- ***Focus on the highly attractive, expanding market for protein detection and analysis.*** Our focus on the detection of protein biomarkers is driven by a growing understanding of the essential role and impact of proteins on human health. While genomic research provides valuable information about the role of genes in health and disease, proteins are both more prevalent than nucleic acids and, we believe, more relevant to a precise understanding of the nuanced continuum between health and disease. Protein measurement goes beyond genetic predisposition, indicating the impact of a range of influences on health, including environmental factors and lifestyle, providing deeper and more relevant insight into what is happening in a person's body in real time. Our technology provides a unique bridge between understanding the human genotype and phenotype, which we believe addresses a large unmet need in life science research, translational medicine and drug development.

- ***Continue to drive adoption of the Simoa platform in the life science research, diagnostics and precision health screening markets.*** Simoa has the potential to significantly expand the life science research market because of its unrivaled sensitivity, in particular by enabling researchers to perform studies on protein biomarkers that they were previously unable to perform. We believe Simoa

has the capability to enable the development of a new category of non-invasive diagnostic tests and tools based on blood, serum, saliva and other fluids that could replace current invasive, expensive and inconvenient diagnostic methods, including spinal tap, diagnostic imaging and biopsy. In the precision health screening market, we believe that Simoa can be used to monitor protein biomarker levels of seemingly healthy, asymptomatic people, and potentially to signal and provide earlier detection and monitoring of the onset of disease.

- ***Leverage the Simoa "ecosystem" to grow our customer base and further penetrate our existing customer base.*** In an effort to enhance the productivity of our instrument base, we have launched an extensive customer outreach program that we call Catalyzing Customer Engagement, or CCE. Through CCE, we actively engage customers to optimize their workflow and better understand our instruments' and products' capabilities, resulting in increased utilization of our installed instrument base.

- ***Utilize the flexibility of the Simoa platform to expand into complementary markets, including nucleic acid detection.*** We plan to utilize the flexibility of the Simoa platform to expand our product offering to include other testing capabilities, including detection of nucleic acids. We believe that our Simoa technology has the potential to provide the same sensitivity as PCR-based assays in detecting nucleic acids without the issues associated with amplification. The ability to integrate nucleic acid and protein testing capabilities into a full service instrument would hold significant value to our customers.

- ***Leverage the data generated by Simoa to drive adoption of our technology.*** Technology being employed in the healthcare industry has become increasingly sophisticated, creating the need to aggregate and digitize the significant amount of data being created in order to better achieve the goals of higher quality and more efficient care. Simoa generates digitized data for highly relevant biomarkers that can provide a nuanced view into the continuum of health and disease. We plan to use the data generated by the Simoa technology to improve and create additional assays, with the goal of enabling more precise research today and contributing to precision health in the future.

- ***Grow into new markets organically with our customers and through strategic collaborations.*** Our customers have access to a large breadth of diverse markets, spanning research and clinical settings. As these customers continue to gain experience with our proprietary Simoa technology and further appreciate its potential, we believe moving into diagnostics and ultimately precision health is a natural extension of some of the work that our customers are doing today in the research market. For example, Simoa's unprecedented sensitivity has the potential to uncover research insights that could identify novel biomarkers, which could help stratify patients in clinical trials potentially leading to a companion diagnostic, and ultimately a precision health test that could monitor and identify early disease. This progression with our customers will help us move into new markets organically in a cost effective manner, while also retaining significant upside. Additionally, we currently have partnerships in place with leading diagnostics companies and plan to continue evaluating strategic collaborations that could help us access these new markets.

- ***Grow through strategic acquisitions.*** We intend to strategically acquire businesses and technologies to expand our operations and strengthen our market position. For example, in January 2018, we acquired Aushon Biosystems. This will continue to be an important part of our strategy to increase scale. We intend to pursue acquisitions to expand product offerings, strengthen domestic or international distribution, add technologies, and/or provide access to complementary or strategic growth areas.

Industry Background

We intend to pursue the application of our Simoa technology to the life science research, diagnostics and precision health screening markets. Our initial commercial strategy targets the large and growing life science research market and we believe that the diagnostic market and the precision health screening market represents a significant future commercial opportunities for Simoa. According to estimates in the Third-Party Research Report, we believe the aggregate market opportunity for us or others using Simoa has the potential to expand to $38 billion as researchers and healthcare practitioners develop new applications for our products that span the continuum from research through diagnosis and precision health.

Proteins are versatile macromolecules and serve critical functions in nearly all biological processes. They are complex molecules that organisms require for the structure, function and regulation of the body's tissues and organs. For example, proteins provide immune protection, generate movement, transmit nerve impulses and control cell growth and differentiation. Understanding an organism's proteome, the complete set of proteins and their expression levels, can provide a powerful and unique window into its health, a window that other types of research, such as genomics, cannot provide.

The human body contains approximately 20,000 genes. One of the core functions of genes, which are comprised of DNA, is to regulate protein production—which ones are produced, the volume of each, and for how long—influenced by both biological and environmental factors. These 20,000 genes help govern the expression of over 100,000 proteins, approximately 10,500 of which are known to be secreted in blood, and fewer than 1,300 of which can be consistently detected in healthy individuals using conventional immunoassay technologies. Accordingly, the study of much of the proteome has not been practical given the limited level of sensitivity of existing technologies. To date, we have developed assays that address approximately 80 of the proteins secreted in blood. We estimate that the current sensitivity of our Simoa technology has the potential to detect and measure up to one-third of the approximately 9,200 proteins secreted in blood that are not consistently detectable using conventional immunoassay technologies.

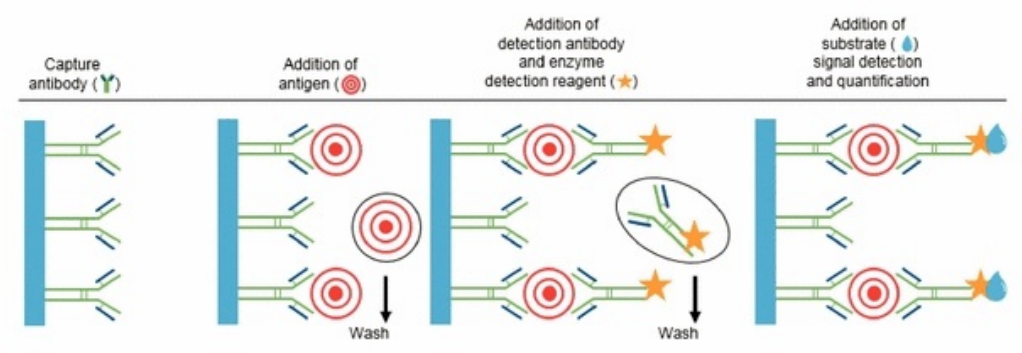
While genomic research provides valuable information about the role of genes in health and disease, proteins are both more prevalent than nucleic acids and, we believe, more relevant to understand precisely the nuanced continuum between health and disease. Genes may indicate the risk of developing a certain disease later in life, but they are not able to account for the impact of environmental factors and lifestyle, such as diet and exercise, or provide insight into what is happening in a patient's body in real time. For example, identical twins have the same genotype, but may develop different diseases over the course of their lifetime, largely due to environmental factors.

Much like the sequencing of the human genome with the Human Genome Project and the development of both PCR and next generation sequencing technologies to detect nucleic acids, both of which accelerated biomedical genomic research, we believe the ability to study more of the proteome enabled by our more sensitive protein detection technology will have a profound impact on proteomic research. With our ultra-sensitive Simoa detection technology, researchers can assess the symptoms of disease or injury and compare them to the presence and levels of relevant proteins that are not detectable using conventional technologies, leading to a better understanding of how proteins individually and/or collectively impact and influence important biological processes and the health and well-being of individuals. We believe this research into understanding the individual characteristics and functioning of proteins will be central to earlier detection, monitoring, prognosis and, ultimately, prevention, by providing researchers with the ability to assess the impact of particular proteins on the progress of disease and injury from the time of early onset of symptoms.

Existing Technologies and Their Limitations

Protein Analysis

The enzyme-linked immunosorbent assay, or ELISA, has been the most widely used method of sensitive detection of proteins for over 40 years. In simple terms, in ELISA, an unknown amount of antigen (e.g., protein, peptide, antibody, hormone) is affixed to a solid surface, usually a polystyrene multiwell plate, either directly, or indirectly through use of a conjugated secondary or "capture" antibody (sandwich ELISA). A specific "detection" antibody is applied over the surface to bind to the antigen. This detection antibody is linked to an enzyme, and in the final step, a substance called an enzyme substrate is added, and the enzyme converts to colored or fluorescent product molecules, which are detected by a plate reader. Sandwich ELISA is depicted in the graphic below:



Aside from ELISA, there are other technologies available for protein analysis today, such as Western blotting, mass spectrometry, chromatography, surface plasmon resonance, Raman-enhanced signal detection, immune-PCR, and biobarcode assay. However, the proteins detectable by these conventional, analog immunoassay technologies represent a mere fraction of what is estimated to be approximately 10,500 secreted proteins in circulation in human blood. While a number of techniques have been used to attempt to increase sensitivity of detection, we believe all of these approaches have limitations, including:

- dilution of colored or fluorescent product molecules due to large volume of liquid in traditional-sized wells, limiting sensitivity;
- narrow dynamic range (i.e., the range of concentration of proteins being detected), that may require sample dilution, diluting molecules and increasing sample volume requiring additional enzymes to reach detection limit;
- low detection limit of readers restrict sensitivity and ability to detect low abundance proteins, particularly when proteins are at normal physiological levels; and
- limited success in increasing sensitivity of detection due to procedural complexity and length.

Genomic Analysis

Over the past few decades, scientists have developed a variety of genomic analysis methods to measure an increasing number of genomic biomarkers aimed at more effectively detecting diseases. The most widely used method for genetic testing is PCR, which involves amplifying, or generating billions of copies of, the DNA sequence in question and then detecting the DNA with the use of fluorescent dyes. PCR is used to amplify the nucleic acid through the use of enzymes and repeated heating and cooling cycles, with fluorescent dyes incorporated during each amplification cycle. The expression of the nucleic acid is then inferred based on the number of amplification cycles required for the target to become

detectable. PCR is sometimes referred to as an analog technology because the number of cycles of amplification, rather than a direct measure, is used to infer the level of gene expression. The wide availability of PCR chemistry makes it a popular approach for measuring the expression of nucleic acids, but the use of enzymes in numerous cycles of amplification can introduce distortion and bias into the data, potentially compromising the reliability of results, particularly at low concentrations.

Due to the complexity, susceptibility to contamination and significant costs related to PCR and other existing technologies, the genomic testing market generally remains limited to reference laboratories, research facilities and laboratories associated with large hospitals. A typical molecular diagnostics laboratory in a hospital or research laboratory setting is a dedicated facility that employs highly skilled technologists and is supervised by a technician with a Ph.D. or M.D./Ph.D. To guard against contamination, which is a common result of target amplification, a typical laboratory will require at least three separate rooms, or isolation areas, to perform PCR-based assay methods for genomic testing.

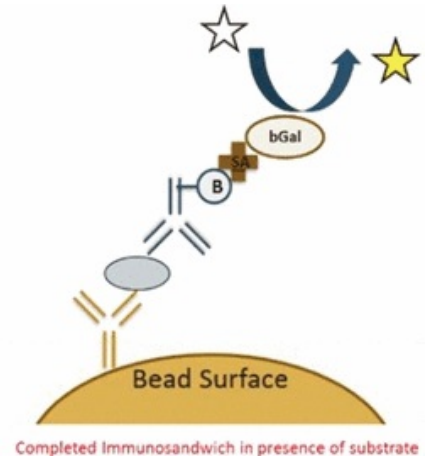
Our Simoa Digital Technology

Our Simoa technology significantly advances conventional sandwich ELISA technology and is capable of unprecedented protein detection sensitivity. Simoa digital immunoassays utilize the basic principles of conventional bead-based sandwich ELISA and require two antibodies: one for capture, which is applied to the beads, and one for detection. Unlike ELISA, which runs the enzyme-substrate reaction on all molecules in one well, Simoa reactions are run on individual molecules in tiny microwells, 40 trillionths of a milliliter that are 2.5 billion times smaller than traditional ELISA wells. Traditional ELISA analog measurements increase in intensity only as the concentration of a sample increases. Simoa digital technology measurements, however, are independent of sample concentration intensity and rely on a binary signal/no signal readout, enabling detection sensitivity that was not previously possible.

Our Simoa platform is highly flexible, designed to enable practical high-sensitivity protein analysis for academic researchers looking at novel proteins all the way through to high throughput analysis performed by large biopharmaceutical organizations. The following chart describes the steps through which our Simoa technology detects proteins:

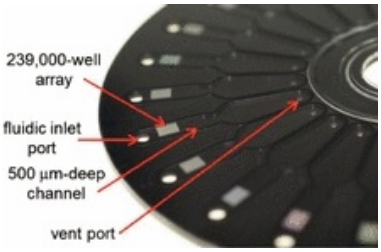
Simoa Analytic Process

Sample Preparation of ELISA Sandwich



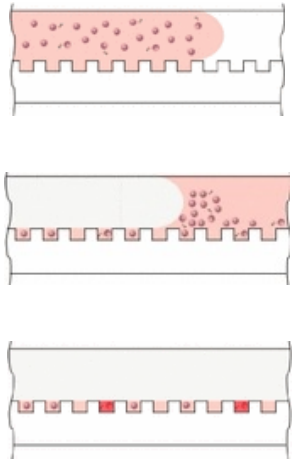
Simoa uses beads coated with capture antibodies that bind specifically to the protein being measured. After an enzyme-linked detection antibody binds to the protein, the enzyme substrate is added (as depicted by the white star in the graphic on the left). The enzyme associated with the enzyme-linked detection antibody then reacts with the enzyme substrate causing the enzyme substrate to become fluorescent (as depicted by the change in color of the star in the graphic).

Injection of Bead/Substrate Solution into Simoa Disk



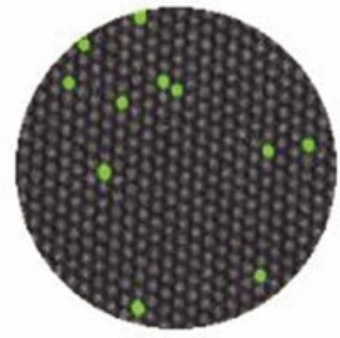
This mixture of beads and enzyme substrate is then injected into our proprietary Simoa disk, which contains 24 arrays of microwells arranged radially. Each 3 × 4 millimeter array contains approximately 239,000 microwells, each of which is large enough to accommodate only a single bead.

Bead/Substrate Solution Settles and Wells are Sealed



The bead/substrate solution is drawn across the array and the beads settle by gravity onto the surface of the array, and a fraction of them fall into the microwells. The remainder lie on the surface, and oil is introduced into the channel to displace the substrate solution and excess beads, and, most importantly, to seal the wells.

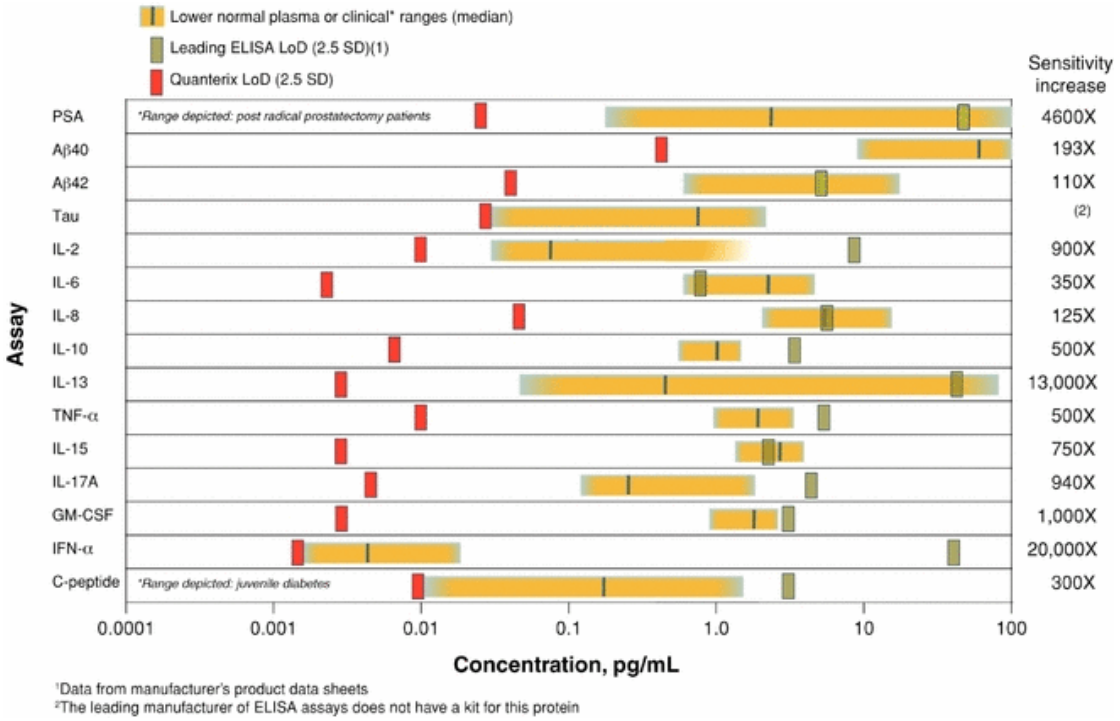
Simoa Readout



The entire array is then imaged using ultrasensitive digital imaging, and the sealed wells that contain beads associated with captured and enzyme labeled protein molecules are identified.

Our Simoa technology offers unprecedented protein detection sensitivity and enables detection of low abundance and previously undetectable biomarkers. The following chart shows examples of the levels of detection, or LoD, of certain Simoa assays and commercially available ELISA assay compared to the median lower normal plasma or clinical ranges of various protein biomarkers. As shown below, the LoD for most of the assays from a leading manufacturer of commercial ELISA assays is above the median lower normal plasma or clinical ranges, making these biomarkers undetectable at normal physiological levels with these assays.

LoD Comparison



Each of the increments in the horizontal axis in the table above represents a 10-fold increase in sensitivity. Using the protein IL-2 as an example from the graphic above, the LoD for the leading commercially available IL-2 assay is approximately 9 pg/mL, whereas the LoD for our Simoa assay is approximately 0.01 pg/mL, representing a 900-fold increase in sensitivity.

Multiplexing Capability

The ability to multiplex, or simultaneously measure multiple proteins (or other biomarkers) in a single assay, can be important to researchers to maximize the biological information from a sample, and to develop more specific diagnostic tests. Importantly, Simoa multiplexing maintains single plex precision, while competitive platforms lose sensitivity when multiplexing is used. Multiplexing is achieved with our Simoa technology by using beads labeled with different fluorescent dyes specific to the biomarker being analyzed. After the assay is run, the array of microwells is imaged across the wavelengths of the different labeled beads. The results are measured for each protein captured by each of the different beads.

We have demonstrated the ability to identify and differentiate up to 35 different bead subpopulations on the Simoa HD-1 Analyzer, which is a prerequisite to our ability to develop an assay with the capacity to detect an equivalent number of proteins in a single sample.

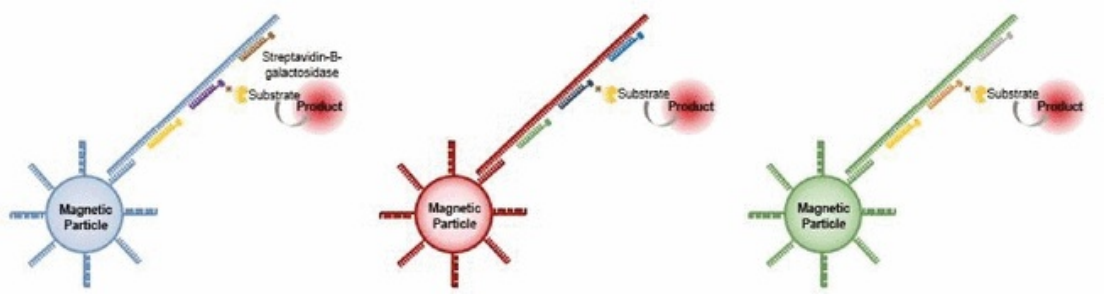
In 2017, we commercially launched a Simoa neurology 4-plex assay (Nf-L, tau, GFAP and UCH-L1) for the study of traumatic brain injury and other neurodegenerative conditions. Simoa is the only technology with the sensitivity to detect all four of these markers in blood, whereas other assay technologies require cerebrospinal fluid, or CSF, to detect all four of these markers due to sensitivity limitations. This is a significant advantage in terms of ease of use, patient comfort, speed and cost-effectiveness.

Nucleic Acid Testing

Our initial focus has been on the use of Simoa to detect protein biomarkers. However, we are also developing our Simoa technology to detect nucleic acids in biological samples. While methods for measuring nucleic acid molecules have advanced substantially, currently available techniques still have drawbacks. For example, polymerase chain reaction, or PCR, is a sensitive method that is widely used for measuring gene expression. However, PCR carries the potential for data distortion and bias from the repeated addition of enzymes, and heating and cooling cycles needed to amplify a copy of the nucleic acid being measured. In nucleic acid analysis, we believe that Simoa has the potential to provide the same sensitivity as traditional PCR-based assays with the following benefits:

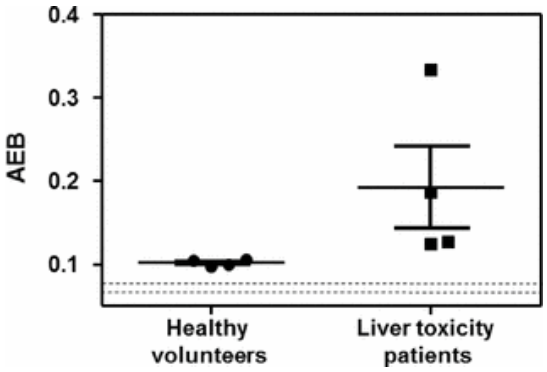
- no need for amplification of the targeted nucleic acid, which can result in amplification distortion and bias;
- reduced cross-contamination because of direct detection of single molecules vs. the detection of a large number of copies of the nucleic acid; and
- the ability to detect some samples without requiring purification of the nucleic acid, such as in environmental water.

For detection of nucleic acids with Simoa, instead of coating the beads with capture antibodies as is done for detecting proteins, the beads are coated with nucleic acid capture probes. Samples with the target nucleic acid molecules are then added and are captured by the beads. Nucleic acid detection probes (instead of detection antibodies) are then added and attach to the target nucleic acid molecules which are then labeled using an enzyme substrate that is detected and counted using the Simoa disk and instrument. This assay is pictured below:



Simoa has been used to detect short sequences of RNA, known as microRNA, that are important in a number of biological systems, and are widely used in innovative therapeutic and gene editing technologies. The assay was used to detect microRNA-122, or miR-122, a marker of liver toxicity, from

the serum of patients who had overdosed with acetaminophen. As shown in the graph below, these patients had elevated miR-122 levels compared to healthy controls.



This approach suggests potential for applications for measuring drug-induced liver injury for both safety testing of drugs in development and for monitoring of approved drugs. In March 2018, we began offering miR-122 testing for liver toxicity through our Accelerator Laboratory.

Our Market Opportunities

Our commercial strategy is to pursue the application of our Simoa technology to the life science research, diagnostics and precision health screening markets.

Life Science Research

Our initial target market is the large and growing life science research market, including both proteomics and genomics research. We believe Simoa is well-positioned to capture a significant share of this market because of its superior sensitivity, automated workflow capabilities, multiplexing and its ability to work with a broader range of sample types.

Proteomics, the study of the proteins produced by the body, is important to understanding disease, and researchers study proteins to understand the biological basis for disease and how to improve diagnosis and treatment. The proteins detectable by conventional, analog immunoassay technologies represent a mere fraction of the proteins that can be detected by Simoa, and we believe that Simoa can inspire a new level of research into these previously undetectable proteins and their role in disease. While it is estimated that there are approximately 10,500 secreted proteins in circulation in human blood, fewer than 1,300 of them can be detected in healthy individuals using conventional immunoassay technologies. In addition, many of the proteins which can be detected by other technologies are only detectable after they have reached levels that reflect more advanced disease or injury. By substantially lowering the limit of detection of protein biomarkers, Simoa holds significant potential to expand research into the diseases associated with the thousands of proteins that were previously undetectable, as well as into earlier detection of the proteins currently detectable by other technologies only after they have reached levels that reflect more advanced disease or injury. Simoa provides researchers the ability to see the nuanced continuum of health to disease more efficiently and effectively than any other technology commercially available today, offering the potential for the first time to better understand the onset of disease cascades and catalyzing a new era of medical and life science research, drug discovery and disease prevention.

As an indication of the market's acceptance of our Simoa platform, researchers at pharmaceutical and biotechnology companies are integrating our platform into drug development protocols to more efficiently and effectively develop drugs. Using Simoa's unprecedented sensitivity to measure previously undetectable levels of target biomarkers prior to and following administration of a drug, drug

developers can non-invasively and objectively determine whether a drug candidate is having a desired impact on the target biomarker. We estimate that our Simoa technology has been utilized in over 500 clinical trials to date.

In addition, researchers can also use Simoa to monitor a drug candidate's unwanted effect on "off-target" biomarkers and predict side effects, addressing the significant issue of drug toxicity, which is the fourth leading cause of death in the United States.

According to estimates in the Third-Party Research Report, we believe that the total life science research market addressable by Simoa, including both proteomics and genomics research, is $3 billion per year and has the potential to reach $8 billion per year.

Diagnostics

The diagnostic market represents a significant future commercial opportunity for Simoa as well. We believe existing biomarker diagnostics can be improved by Simoa's sensitivity to enable earlier detection of diseases and injuries, and that new diagnostics may be developed using protein biomarkers that are not detectable using conventional, analog immunoassay technologies but are detectable using Simoa. We also believe that the ultra-sensitive protein detection provided by Simoa can enable the development of a new category of non-invasive diagnostic tests and tools based on blood, serum and other fluids that have the potential to replace current more invasive, expensive and inconvenient diagnostic methods, including spinal tap, diagnostic imaging and biopsy.

For example, researchers have conducted studies using Simoa that indicate that neurological biomarkers, including tau and Nf-L, may someday be able to replace diagnostic imaging to diagnose traumatic brain injury, or TBI. Our Simoa assays for tau and Nf-L are 3,500-fold and 840-fold more sensitive, respectively, than the leading assay platforms, and are the only assays that can reliably detect these critical protein biomarkers in blood. Almost 90% of patients who visit U.S. hospital emergency rooms and receive a computerized tomography, or CT, scan show no structural brain injury. In addition, CT scans have approximately 100 times more radiation than a chest x-ray, and are suspected of causing cancer in up to 29,000 people per year, underscoring the need for development of a safe and accurate blood-based diagnostic test for TBI, which we believe may be enabled by our Simoa technology.

Simoa also has significant potential in the emerging field of companion diagnostics. A companion diagnostic test is a biomarker test that is specifically linked to a therapeutic drug that can help predict how a patient will respond to the drug. Drug developers can use companion diagnostics to stratify patients and select only those patients to study for whom a drug is expected to be most effective and safe. Companion diagnostics have demonstrated the ability to both improve the probability of approval and accelerate approval of new drugs. Not only can Simoa be used to develop companion diagnostics to stratify patients in clinical trials and for treatment, but Simoa's sensitivity also enables the development of companion diagnostics based on protein biomarkers that can actively and regularly monitor whether an approved drug is having the desired biological effect. This can quickly and efficiently enable doctors to adjust the course of treatment as appropriate by increasing or decreasing dosages or even switching therapies.

There has been significant interest from third parties to use our technology to develop applications for the diagnostic market, which has resulted in collaborations with leading diagnostic companies, such as bioMérieux. In addition, we have had discussions with lab service companies that are interested in using our technology to develop laboratory developed tests that may be more sensitive than currently available commercial tests.

Precision Health Screening

We believe that Simoa's ability to detect and quantify normal physiological levels of low abundance proteins that are undetectable using conventional, analog immunoassay technologies will enable our technology to be used to monitor protein biomarker levels of seemingly healthy, asymptomatic people, and potentially to signal and provide earlier detection of the onset of disease. This may facilitate a paradigm shift in healthcare, from an emphasis on treatment to a focus on earlier detection, monitoring, prognosis and, ultimately, prevention, enabling a "precision health" revolution.

We believe there is the potential for a number of neurological, cardiovascular, oncologic and other protein biomarkers associated with disease to be measured with a simple blood draw on a regular, ongoing basis as part of a patient's routine health screening, and for those results to be compared periodically with baseline measurements to predict or detect the early onset of disease, prior to the appearance of symptoms.

According to estimates in the Third-Party Research Report, we believe that the total diagnostic and precision health screening markets addressable by us and others using Simoa have the potential to reach an aggregate of $30 billion per year upon receipt of the necessary regulatory approvals, which we have not yet begun the process to obtain.

Our Key Focus Areas

We have focused the application of our Simoa technology on areas of high growth and high unmet need and where existing platforms have significant shortcomings that our technology addresses. In particular, we have focused on the following areas: neurology, oncology, cardiology, infectious disease and inflammation.

Neurology

We believe that the ability of our Simoa technology to detect neurological biomarkers in blood at ultra-low levels, which have traditionally only been detectable in cerebrospinal fluid, or CSF, has the potential to rapidly advance neurology research and drug development, and transform the way brain injuries and diseases are diagnosed and treated. To our knowledge, the brain is the only organ in the body for which there is not currently a blood-based diagnostic test. The challenge with developing blood-based tests for the brain is that the blood-brain barrier, which is formed by endothelial cells lining the cerebral microvasculature, is very tight and severely restricts the movement of proteins and other substances between these endothelial cells and into blood circulation. Accordingly, diagnosis of brain disease and injury has traditionally required either an MRI scan of the brain or a spinal tap to collect CSF, both of which are costly and highly invasive for the patient. The sensitivity of the Simoa platform has enabled researchers to discover that extremely small amounts of critical neural biomarkers diffuse through the blood-brain barrier, and are released into the blood during injury and in connection with many neurodegenerative brain diseases. However, the concentrations of these neural biomarkers in the blood are so low that they are undetectable by conventional, analog immunoassay technologies.

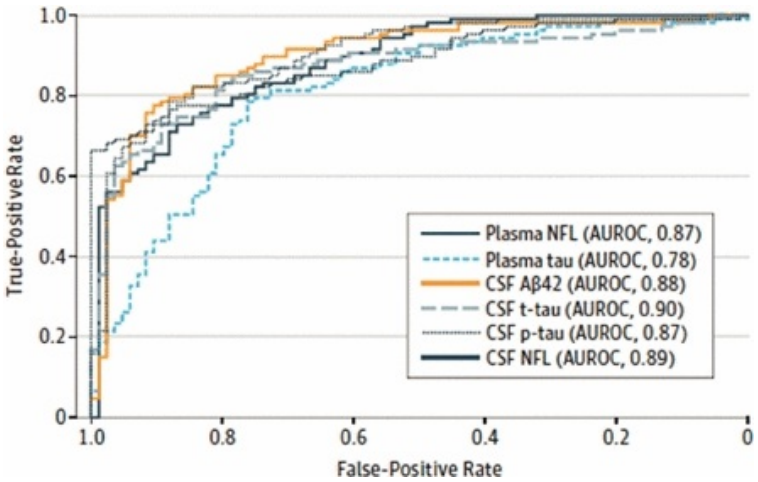
As one example, we have developed ultra-sensitive protein assays for the neural biomarkers Aβ42 and tau that are approximately 2,000 to 3,500-fold more sensitive, respectively, than benchmark commercial assays. Our protein assays are the only currently available assays on the market capable of precise measurement of these neural biomarkers in blood in diseased and healthy individuals.

To date, there have been over 100 scientific publications on approximately 52 neural biomarkers using our Simoa technology, and we believe that ultra-sensitive digital detection of neural related biomarkers in the blood is becoming an essential research and development tool for an increasing range of neurological disorders, including CTE, Alzheimer's disease, dementia, Parkinson's disease,

multiple sclerosis and TBI. The goal of this research is to eventually develop accurate diagnostic tools, predictive health screens and, ultimately, more effective treatments.

In 2017, researchers using Simoa technology published a paper in *JAMA Neurology* demonstrating that a simple blood test for ther neurological biomarker Nf-L exhibited the same level of diagnostic accuracy for diagnosing Alzheimer's disease as currently established CSF biomarkers. The study was a major study of almost 600 patients from the Alzheimer's Disease Neuroimaging Initiative. The graph below depicts the diagnostic accuracy of plasma Simoa Nf-L measurements compared with traditional CSF biomarkers. The diagnostic accuracy of the plasma Simoa Nf-L results approached 90%, in line with the CSF biomarkers on the same patients.

Diagnostic Accuracy



In addition, Simoa plasma Nf-L values were associated with cognitive deficits and neuroimaging hallmarks of Alzheimer's disease at baseline and during follow-up. High plasma Nf-L correlated with poor cognition and Alzheimer's disease -related brain atrophy and with brain hypometabolism (lower neural energy). These data suggest a simple Simoa blood test for Nf-L may have clinical utility as a noninvasive biomarker in Alzheimer's disease.

Traumatic brain injuries, or TBIs, lead to approximately five million individuals visiting emergency rooms per year in the United States alone, often with broad and inconclusive diagnosis. Current methods of TBI diagnosis involve CT scans that fail to diagnose approximately 90% of mild TBI. Simoa has demonstrated the sensitivity to identify relevant neurological biomarkers, such as Nf-L, tau, GFAP and UCHL-1, to more adequately address diagnosis of TBIs and overall brain health.

Leading researchers in neurology have used Simoa to study biomarkers in the blood of athletes after concussion in many high-impact sports. Our platform measures critical neural biomarkers in blood that correlate repeated head trauma from both concussions and subconcussive events with poor patient outcomes, including the potential development of Chronic Traumatic Encephalopathy, or CTE, which currently can be diagnosed after death via a brain autopsy. A recent publication by an National Institute of Health researcher indicates that measuring tau in the blood with Simoa may help identify concussed individuals requiring additional rest before they can safely return to play. Eventually, we believe it may be possible to develop a mobile screen enabling clinicians to quickly and accurately determine whether it is safe for concussed athletes to return to play.

In 2017, we commercially launched a Simoa neurology 4-plex assay (Nf-L, tau, GFAP and UCH-L1) for the study of traumatic brain injury and other neurodegenerative conditions. Whereas other assay technologies require cerebrospinal fluid, or CSF, to detect all four of these markers, due to its sensitivity, Simoa is the only assay that can detect all of these biomarkers directly from blood samples. This is a significant advantage in terms of ease of use, patient comfort, speed and cost-effectiveness.

In 2016, Fast Company named Quanterix one of the "World's Most Innovative Companies" for our work in concussion detection. We also were awarded two competitive grants from the NFL-GE Head Health Challenge to advance this work in the detection and quantification of mild TBI.

We estimate that the total addressable market for Simoa for neurology has the potential to reach $6 billion across research, diagnostic and precision health screening indications.

Oncology

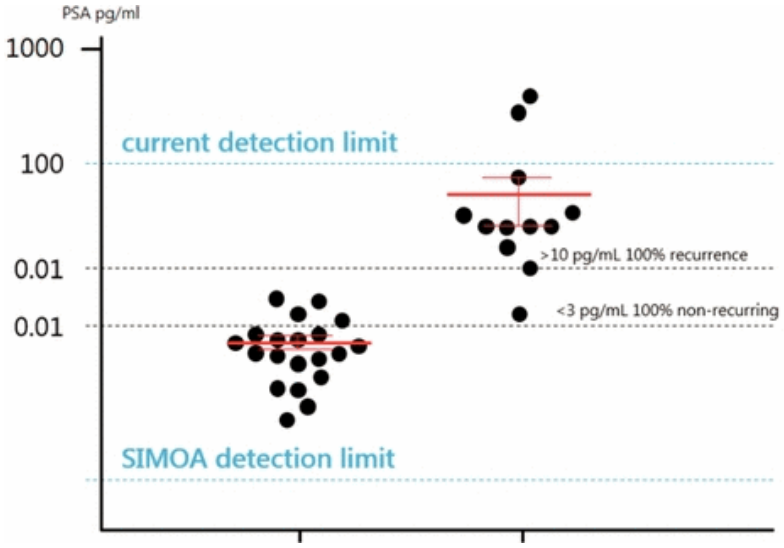
Our ultra-sensitive Simoa technology has the potential to detect increased levels of oncology biomarkers during the very early stages in disease development. Biomarkers can be useful tools for diagnostics, prognostics and predictive cancer detection. However, many traditional assay technologies can only detect these biomarkers after the disease has progressed and the patient has become symptomatic. Simoa's highly sensitive detection capability may result in earlier detection, better monitoring and treatment and improved prognoses for patients. Additionally, Simoa has shown early promise as an alternative to more invasive diagnostic procedures. To date, there have been 17 scientific publications on approximately 40 cancer biomarkers using our Simoa technology.

Simoa was used in a recent unpublished scientific study that we understand indicates it may be possible to eventually replace routine mammograms with a very sensitive, more accurate, low cost, non-invasive blood test. In this retrospective study, researchers found that Simoa resulted in significantly fewer false positives and false negatives than mammography. Inaccurate mammography results in unnecessary stress, additional health care costs from follow up diagnostic mammograms, unnecessary biopsies and increased lifetime exposure to radiation. Researchers are also developing ultrasensitive assays for lung and pancreatic cancer biomarkers using Simoa, potentially replacing the need for imaging and biopsy. We believe our Simoa technology has the potential to lead to rapid, cost effective, accurate blood-based health screens, further enabling the liquid biopsy market, which is estimated to grow to almost $3 billion by 2026.

Cancer immunotherapy is a promising new area that is significantly affecting cancer remission rates. One challenge of immunotherapy approaches is that the elicited immune responses are not always predictable and can vary from person to person and protocol to protocol. There exists a significant need to develop biomarker tools to monitor these drugs and their effects. Serum protein biomarkers have the potential to be used in the field of immuno-oncology to stratify patients, predict response, predict recurrence, reveal mechanism of action and predict side effects. One technical challenge to using these biomarkers has been the development of immunoassays with sufficient sensitivity to measure immune modulates directly in serum. We have developed a set of 38 ultrasensitive immune modulation assays (cytokines and chemokines) that can be used to directly monitor the immune response. In particular key immune regulatory cells (T-regs, dendritic cells, macrophages) secrete very low amounts of the protein Interferon gamma (IFN-gamma) and these levels cannot be detected in serum using conventional, analog immunoassay technology, however they can be tracked with our Simoa IFN-gamma assay. Additionally, we have developed an ultra-sensitive assay for PD-L1 which is one of the major immuno-oncology targeted antigens. Several studies have shown that our ultrasensitive assays can be valuable tools for monitoring immuno-oncology drugs and protocols.

We also believe residual cancer cell detection post-surgery or treatment may significantly improve outcomes for a variety of cancer types, by helping identify and segment patients at a greater risk of

reoccurrence post-surgery due to residual cancer. We have developed an ultra-sensitive biomarker assay for Prostate Specific Antigen, or PSA, that is over 1,000-fold more sensitive than benchmark commercial PSA assays. This assay is the only currently available technology that can detect levels of PSA in blood samples of prostate cancer patients shortly following radical prostatectomy, and we and researchers from Johns Hopkins and NYU conducted a pilot study on the utility of this assay to predict recurrence of prostate cancer after this procedure. In this study, the blood of prostate cancer patients taken three to six months following a radical prostatectomy at least five years earlier was analyzed with Simoa. The majority of samples had PSA levels below the detectable limits of traditional PSA assays. Our Simoa technology, however, was able to detect and quantify PSA levels in all samples. As shown in the following graph, the study demonstrated that the PSA assay using our Simoa technology has the potential to be highly predictive of prostate cancer recurrence over a five-year period. This has the potential to be a powerful prognostic tool, and allowing adjuvant radiation treatment to be targeted only to the men who actually would benefit.



We estimate that the total addressable market for Simoa for oncology has the potential to reach $25 billion across research, diagnostic and precision health screening indications.

Cardiology

Heart disease and related cardiovascular ailments remain the leading cause of death in the United States, contributing to nearly 1 in 4 deaths in the United States, according to the CDC. A significant need remains for early prediction of heart attacks and other cardiac events. Simoa's highly sensitive digital measurement capabilities have the potential to be used to predict early cardiac disease.

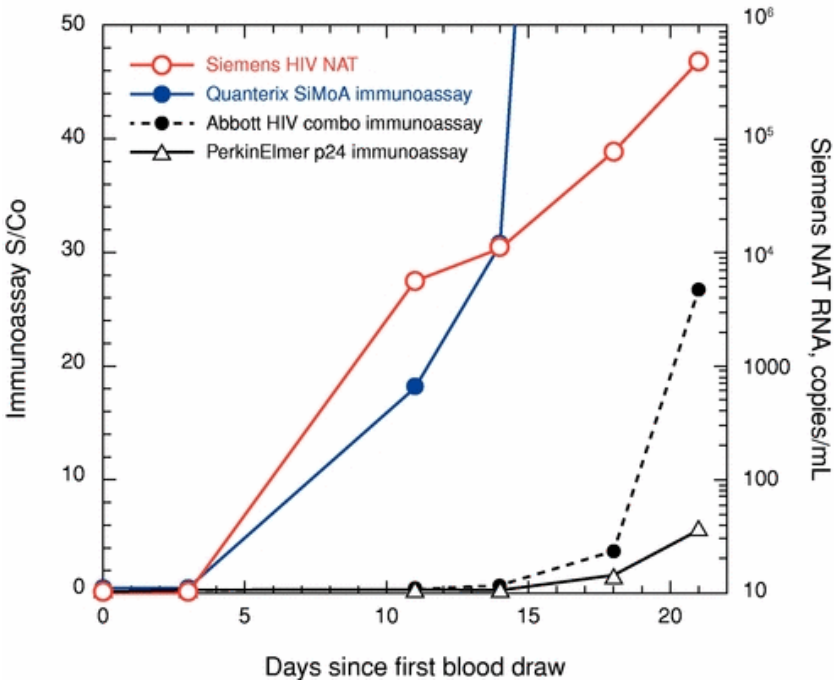
To date, there have been six scientific publications on approximately 11 cardiology biomarkers using our Simoa technology.

Infectious Disease

The ability to detect infectious disease biomarkers before the onset of an immune response, where a virus is most contagious and multiplying rapidly, is critical for controlling the spread of disease. We believe that our Simoa technology can have a significant impact in reducing the spread of infectious diseases by making early stage detection more specific and widely available.

Today, early detection of infectious disease is conducted using nucleic acid testing to detect the nucleic acid of the viral or bacterial organism because the levels of infectious disease specific antigens are too low in the early stage of disease to be detected by traditional immunoassay technology. However, the sensitivity of our single molecule detection capabilities enables the detection of extremely low levels of infectious disease specific antigens with sensitivity that rivals the use of nucleic acid testing in this application, without the potential biases inherent in amplification technologies, such as PCR.

We have developed a simple Simoa assay with more than 4,000-fold greater sensitivity than benchmark commercial protein assays capable of detecting the HIV-specific antigen, p24. This Simoa p24 sensitivity matches the sensitivity of more expensive and complex nucleic acid testing methods. The following graph shows a comparison that we conducted in 2011 of the Simoa p24 assay with a commercially available nucleic acid testing method, as well as two commercially available p24 immunoassay methods for early detection of HIV infection. The Simoa p24 assay detects infection as early as the nucleic acid testing method (11 days from initial blood draw), and a full week before the earliest signs of infection by the conventional p24 immunoassay methods. This early detection of acute HIV infection can be critical for controlling the spread of HIV, as HIV is ten times more infectious in the acute phase.



In addition, we believe the detection of a specific protein is more relevant to the determination of the pathogenic effect than detection of the organism itself because someone may carry a pathogenic organism with no pathogenic effect. Researchers have demonstrated that Simoa can detect *Clostridium difficile* (*C. diff*) toxins A and B with sensitivities similar to the PCR detection of the *C. diff* organism itself. Because the *C. diff* organism does not always produce toxins, PCR methods that detect the *C. diff* organism suffer from very high false positive rates, which may result in incorrect diagnoses and the overuse of antibiotics. We believe that using Simoa to detect the toxins rather than the organism has the potential to provide a higher level of sensitivity and specificity, greatly reducing false positives.

We will continue to develop Simoa assays for pathogenic antigens that are competitive in sensitivity to PCR but more specific to the pathogenicity of the offending organism. We believe that these Simoa

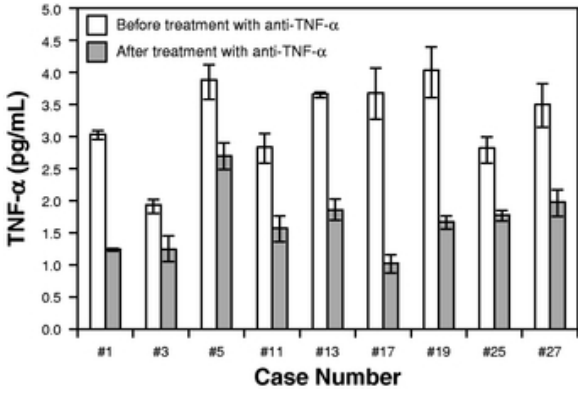
assays could also be invaluable tools for the development of anti-infective drugs and treatment monitoring of anti-viral and anti-bacterial drugs.

To date, there have been 27 scientific publications on approximately 13 infectious disease biomarkers using our Simoa technology.

Inflammation

Inflammation underlies the response of the body to injury in a variety of diseases. Simoa assays can measure inflammatory and anti-inflammatory molecules in serum and plasma with unprecedented sensitivity. This has the potential to enable new discoveries into the role of inflammation in the biology of health and disease. Our Simoa technology measures low levels of inflammatory proteins, including cytokines and chemokines, that characterize a range of inflammatory diseases, including Crohn's disease, asthma, rheumatoid arthritis and neuro-inflammation. We believe the sensitivity of Simoa can provide a clearer picture of the underlying state of the immune response and disease progression.

Our Simoa technology also has the potential to be used by companies developing anti-inflammatory drugs to quantify the effect a drug has on a particular inflammatory cytokine and to monitor therapeutic efficacy. For example, we conducted a study in conjunction with the Mayo Clinic using our Simoa technology on patients with clinically active Crohn's disease undergoing anti-TNF-α therapy with Remicade, Humira or Enbrel. As shown in the graph below, researchers were able to detect and quantify the TNF-α levels of the patients before and after treatment. These levels were all below the limit of detection, or LoD, of traditional immunoassays.

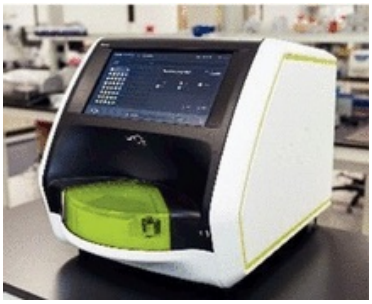


We believe that a better understanding of the inflammatory response will be critical to future opportunities for wellness screening and disease response monitoring. Anti-inflammatory drugs are expensive and can have serious side effects, such as increased risk of infection. By monitoring biomarkers indicative of response, clinicians may be able to adjust dose to reduce side effects or increase efficacy.

To date, there have been 25 scientific publications on approximately 47 inflammatory biomarkers using our Simoa technology.

Our Products and Services

Our Quanterix commercial portfolio includes instruments, assay kits and other consumables, and contract research services offered through our Accelerator Laboratory, as follows:

Product	Key attributes
Simoa HD-1 Analyzer	• commercially launched in January 2014 • most sensitive immunoassay platform on market • fully automated, floor-standing instrument • wide dynamic range • multiplexing capability with small sample volume • up to 400 samples per eight-hour shift • homebrew capabilities
	
Quanterix SR-X	• commercial launch in December 2017 • reader only, benchtop instrument with lower price point • same sensitivity, dynamic range and homebrew capabilities as HD-1 • multiplexing capability: Quanterix SR-X currently has up to have 6-plex capability with anticipated expansion of biomarker capability per test in 2018 • sample prep and assay protocol flexibility
	
Assays and other consumables	• over 85 assays developed for neurology, oncology, cardiology, infectious diseases and inflammation research • homebrew kits containing beads and reagents required for customers to custom build assays • proprietary Simoa disk with 24 arrays, each containing approximately 239,000 microwells
	

Product	Key attributes
Services	• contract research services provided through our Accelerator Laboratory • over 350 projects completed to date • extended warranty and service contracts • CLIA-certified lab available

Instruments and Consumables

Simoa HD-1 Analyzer

We commercially launched the Simoa HD-1 Analyzer in January 2014. The HD-1 Analyzer is the most sensitive protein detection platform commercially available, and is currently capable of analyzing up to six biomarkers per test, with anticipated expansion of biomarker capability per test in 2018. Assays for the HD-1 Analyzer are fully automated (i.e. sample in to result out), and results for up to 66 samples are available in approximately one hour. We believe that this automation provides us an additional significant competitive advantage with pharmaceutical and biotechnology customers. Samples can be input into the instrument via 96-well microtiter plates or sample tubes where the system can multiplex and process tests in a variety of assay protocol configurations. Simoa digital immunoassays utilize the basic principles of conventional bead-based sandwich ELISA and require two antibodies: one for capture onto the beads, and one for detection (antigen 'sandwich').

Specialized software controls the Simoa instrumentation, analyzes the digital images produced, and provides customers with detailed analysis of their samples, such as the concentration of multiple biological molecules. The Simoa HD-1 Analyzer software automates the processes for running the instrument and analyzing data from the user-defined protocols. Proprietary image analysis software is embedded in the system, which converts the raw images into signals for each biological molecule being analyzed within a sample. Data reduction software automatically converts those signals to concentrations for the different biological molecules.

Quanterix SR-X

We commercially launched the Quanterix SR-X in the fourth quarter of 2017 and installed five instruments in December 2017. The Quanterix SR-X utilizes the same core Simoa technology and assay kits as the HD-1 Analyzer in a compact benchtop form with a lower price point designed to address the needs of researchers who value the ultra-sensitive detection capabilities enabled by Simoa.

In contrast to the fully automated workflow of the HD-1 Analyzer, the assay incubation and washing steps for the Quanterix SR-X are performed outside of the instruments using conventional liquid handling methods. The offline sample prep provides additional flexibility to enable researchers to apply Simoa detection in an expanded range of applications including direct detection of nucleic acids. The Quanterix SR-X system automates the steps loading Simoa beads onto Simoa disks with subsequent imaging, detection and data reduction. Processing time for imaging a 96 well plate is approximately 2.5 hours.

The Quanterix SR-X system currently supports detection capability of up to six biomarkers per test with anticipated expansion of biomarker capability per test in 2018.

Assays and Consumables

Recurring revenue is derived through the sale of consumables used to run assays on our instruments, and from our growing menu of Simoa digital biomarker assays, with more than 85 assays developed to date. In addition to these assays we have developed, the Simoa platform allows ease and flexibility in assay design, enabling our customers to develop their own proprietary in-house assays, called homebrew assays, using our Homebrew Assay Development Kit. Our kits include all components required to run tests, such as beads, capture and detector reagents, enzyme reagents and enzyme substrate. Our consumables portfolio also includes our proprietary Simoa disks that are unique to our systems, as well as cuvettes, and disposable tips. Our goal is to continue to add to our assay kits to extend our application base.

We have staffed our assay development and manufacturing teams to do the upfront work of antibody sourcing, assay development and optimization, sample testing and validation, transfer to manufacturing and final documentation. We outsource some of our assay development activities to other antibody and/or assay development providers and expect to continue to do so to achieve our aggressive menu expansion goals.

Services

Our Accelerator Laboratory provides customers a contract research option. Researchers, academics and principal investigators can work with our scientists to test specimens with existing Simoa assays, or prototype, develop and optimize new assays. The Accelerator Laboratory supports multiple projects and services, including:

- *Sample testing.* Utilizing commercially available Simoa kits, we have run large studies for customers with thousands of specimens and small experiments with just a few samples. The sample protocol can be tailored precisely to the customer's needs and even large studies can be run quickly. We have extensive experience testing many different sample types where biomarkers may be present at very low levels.

- *Homebrew assay development.* Utilizing proprietary or commercially available reagents in combination with the Quanterix Homebrew Assay Development Kit, we can rapidly develop a prototype assay exhibiting improved sensitivity compared to ELISA. The Accelerator Laboratory can also be used to screen reagents to identify the optimal assay format or expand prototype efforts for further assay optimization or validation to ultimately deliver the highest level of performance.

- *Custom development.* After identifying the optimal assay and conditions, the Accelerator Laboratory can be used to generate qualified bulk reagents or custom assay kits, providing customer access to validated kits for assays not yet commercially available on the Simoa platform.

To date, we have completed over 350 projects for over 150 customers from all over the world using our Simoa platform. In addition to being an important source of revenue, we have also found the Accelerator Laboratory to be a significant catalyst for placing additional instruments, as over 36 customers for whom we have provided contract research services have subsequently purchased an instrument from us.

In addition, with our acquisition of Aushon in January 2018, we acquired Aushon's CLIA-certified lab. We have integrated this lab into our Accelerator Laboratory, and intend to move Simoa instruments into this CLIA-certified lab. We believe the ability offer services from a CLIA-certified lab will help accelerate our entry into pharmaceutical services.

We also generate revenues through extended-warranty and service contracts for our installed base of instruments.

Research and Development

We continually seek to improve our platform and technology to enable more sensitive detection and measurement of biological molecules. This evaluation includes examining new assay formats and instrumentation improvements and upgrades to increase the performance of our Simoa assays and instruments. We are particularly focused on expanding our assay menu to extend the scope of applications for our platform and grow our customer base. Our assay menu expansion is driven by a number of factors, including input from key opinion leaders, customer feedback, homebrew projects, Accelerator Laboratory projects, new publications on biomarkers of industry interest, and feedback from our sales and marketing team. We also intend to continue to develop and market new instruments with different and/or improved capabilities in order to further broaden our market reach.

Sales and Marketing

We distribute our instruments and reagents via direct field sales and support organizations located in North America and Europe and through a combination of our own sales force and third-party distributors in additional major markets such as Australia, China, India, Japan, South Korea, Lebanon, Singapore and Taiwan. Our domestic and international sales force informs our current and potential customers of current product offerings, new product and new assay introductions, and technological advances in Simoa systems, workflows, and notable research being performed by our customers or ourselves. As our primary point of contact in the marketplace, our sales force focuses on delivering a consistent marketing message and high level of customer service, while also attempting to help us better understand evolving market and customer needs.

As of March 1, 2018, we had approximately 43 people employed in sales, sales support and marketing, including 19 technical field application scientists. This staff is primarily located in North America and Europe. We intend to significantly expand our sales, support, and marketing efforts in the future by expanding our direct footprint in Europe as well as developing a comprehensive distribution and support network in China where significant new market opportunities exist. Additionally, we believe that there is significant opportunity in other Asia-Pacific region countries such as South Korea and Australia as well as in South America. We plan to expand into these regions via initial penetration with distributors and then subsequent support with Quanterix-employed sales and support personnel.

Our sales and marketing efforts are targeted at key opinion leaders, laboratory directors and principal investigators at leading biotechnology and pharmaceutical companies and governmental research institutions.

In addition to our selling activities, we align with key opinion leaders at leading institutions and clinical research laboratories to help increase scientific and commercial awareness of our technology, demonstrate its benefits relative to existing technologies and accelerate its adoption. We also seek to increase awareness of our products through participation at trade shows, academic conferences, online webinars and dedicated scientific events attended by prominent users and prospective customers.

To develop a thought leadership position in the precision health arena, we were a Platinum Sponsor of the inaugural Powering Precision Health Summit, or PPHS, in Cambridge, Massachusetts in September 2016 and of the second annual PPHS in Cambridge in October 2017. At PPHS in 2016, there were 22 cutting edge scientific talks covering neurology, cardiology, oncology and inflammation. There were over 200 registered attendees, including senior scientists, patient advocates, investors, and potential partners. At PPHS in 2017, there were 37 scientific talks and over 425 registered attendees.

Our systems are relatively new to the life science marketplace and require a capital investment by our customers. The sales process typically involves numerous interactions and demonstrations with multiple people within an organization. Some potential customers conduct in-depth evaluations of the system including running experiments in the Accelerator Laboratory and comparing results from competing systems. In addition, in most countries, sales to academic or governmental institutions require participation in a tender process involving preparation of extensive documentation and a lengthy review process. As a result of these factors and the budget cycles of our customers, our sales cycle, the time from initial contact with a customer to our receipt of a purchase order, can often be six to 12 months, or longer.

Manufacturing and Supply

Our manufacturing strategy has two components: to outsource instrument development and manufacturing with industry leaders, and to internally develop and assay kits in our own facility.

Systems

HD-1/Quanterix SR-X

The Simoa HD-1 Analyzer is manufactured by STRATEC Biomedical AG, based in Birkenfeld, Germany, and is manufactured and shipped from their Birkenfeld and Beringen, Switzerland facilities. See "—Key Agreements—Development Agreement and Supply Agreement with STRATEC" for a description of this agreement. Simoa HD-1 Analyzers are shipped by STRATEC to our global customers' locations. Installation of, and training on, our products is provided by our employees in the markets where we conduct direct sales, and by distributors in those markets where we operate with distributors. The Quanterix SR-X is manufactured by Paramit Corporation, based in Morgan Hill, California, and is shipped to global customers by Paramit.

We believe this manufacturing strategy is efficient and conserves capital. However, in the event it becomes necessary to utilize a different contract manufacturer for either the Simoa HD-1 Analyzer or the Quanterix SR-X, we would experience additional costs, delays and difficulties in doing so, and our business would be harmed.

Consumables

Simoa Consumables

We assemble our assay kits in our Lexington, Massachusetts facility. Our reagents are sourced from a limited number of suppliers, including certain single-source suppliers. Reagents include all components required to run an enzyme based immunoassay, such as beads, capture and detector reagents, enzyme reagents and enzyme substrate. Although we believe that alternatives would be available, it would take time to identify and validate replacement reagents for our assay kits, which could negatively affect our ability to supply assay kits on a timely basis.

Simoa disks are supplied through a single source supplier pursuant to a long-term supply agreement with STRATEC Consumables, a subsidiary of STRATEC Biomedical. This agreement provides for a sufficient notification period to allow for supply continuity and the identification and tech transfer to a new supplier in the event either party wishes to terminate the relationship. Our cuvettes are single sourced through STRATEC Biomedical, and the disposable tips used in our assays are commercially available.

Key Agreements

License Agreement with bioMérieux SA

In November 2012, we entered into a Joint Development and License Agreement, or JDLA, with bioMérieux SA. Under the terms of the JDLA, we granted bioMérieux an exclusive, royalty-bearing license to manufacture and sell instruments and assays using our Simoa technology for in vitro diagnostics used in clinical lab applications, food quality control testing, in vitro diagnostics and pharmaceutical quality control testing, and a co-exclusive, royalty-bearing license in certain other fields. Under the JDLA, bioMérieux was required to purchase instruments from us subject to certain minimum purchase requirements. We received a $10 million upfront payment and we were eligible to receive developmental and regulatory milestone payments, royalties on the sale of assays by bioMérieux and payments for the manufacture and delivery of instruments based on a contractual rate subject to future adjustments.

On December 22, 2016, we entered into an Amended and Restated License Agreement with bioMérieux, or the BMX Agreement, which modified the JDLA resulting in the termination of the ongoing joint development efforts between the parties and clarified and amended prospective rights and obligations of both parties. Under the BMX Agreement, bioMérieux retains an exclusive license to our Simoa technology for in vitro diagnostics used in clinical lab applications, food quality control testing, and pharmaceutical quality control testing, each as defined in the agreement, subject to a right we have retained to make and sell the current version of our HD-1 instrument for use in clinical lab applications, either directly or through a partner (but not both), if an affiliate of ours is manufacturing and selling in vitro diagnostics tests, or solely through a partner (subject to restrictions as to the particular parties with which we could elect to partner and the assays that can be developed) in the event we do not have an affiliate manufacturing and selling in vitro diagnostics tests. For sales by a partner, we would be required to pay to bioMérieux a mid-double-digit percentage of royalties received based on sales of assays by the partner. bioMérieux also retains a co-exclusive license to our Simoa technology for certain in vitro diagnostics, including point-of-care testing and laboratory developed testing. We retained rights to research use only applications and to nucleic acid assay applications. We also granted bioMérieux a non-exclusive, royalty-free license to the source and object code of our Level 1 Data Reduction, or L1DR, software including rights to updates and upgrades in the future. The L1DR software is our proprietary image processing algorithms that convert images of microscopic beads associated with biomarker molecules in microwells. bioMérieux's minimum purchasing requirements were eliminated and it is permitted to independently develop and manufacture certain instruments.

bioMérieux has a three-year option to acquire distribution rights to the HD-1 instrument in the exclusive and co-exclusive fields. If the option to acquire distribution rights to the HD-1 is exercised, the BMX Agreement provides that we and bioMérieux shall negotiate, in good faith, a distribution agreement which will include a specified lump sum payment. If bioMérieux does not exercise this right prior to December 22, 2019, all rights and licenses granted to bioMérieux with respect to the HD-1 instrument (other than the license to the L1DR software) will terminate.

bioMérieux also has a period of not more than three years from the date of the BMX Agreement to evaluate its interest in developing a new, smaller in vitro diagnostic instrument using the Simoa technology for use in clinical lab applications, food quality control testing, and pharmaceutical quality control testing. If bioMérieux does not elect to pursue development of a new instrument within the three year period ending December 22, 2019, all rights and licenses granted to bioMérieux for instruments other than the HD-1 instrument will terminate. If bioMérieux does elect to pursue development of a new instrument, they will have a set number of years to obtain a CE mark for such instrument and a set period of time thereafter to obtain FDA approval. Subject to a cure period, if these regulatory milestones are not met, the BMX Agreement will terminate (subject to the continuing

right of bioMérieux to distribute the HD-1 instrument if it had previously exercised its option and negotiated a distribution agreement).

We have been advised by bioMérieux that its current objective is to identify and develop an assay menu supporting the commercial launch of a new, benchtop in-vitro diagnostic instrument using the Simoa technology for use in clinical lab applications, food quality control testing, and pharmaceutical quality control testing. This will require identifying assays that support the commercial launch of such an instrument and developing or adapting technology to facilitate a benchtop platform. Pursuant to the exclusive license to the Simoa technology granted in the BMX Agreement, bioMérieux has the sole right to determine whether or not to develop such an instrument for use in clinical lab applications, food quality control testing, and pharmaceutical quality control testing, and we can not assure you that bioMérieux will decide to do so. If they were to do so, we would be restricted from selling a benchtop instrument for use in clinical lab applications, food quality control testing, and pharmaceutical quality control testing, but not for use in any other applications.

On execution of the BMX Agreement, we received an upfront payment of $2 million. We are also eligible to receive royalties on net sales of assays sold by bioMérieux in the mid to high single digits, and to receive low double digit royalties on sales of instruments by bioMérieux based on manufacturing cost. The future developmental and regulatory milestone payments under the JDLA were not achieved as the parties agreed to no longer pursue joint development, subject to the right for bioMérieux to develop its own instrument using the Simoa technology with a different form and size than our HD-1 instrument, prior to the achievement of these milestones. Accordingly, these milestones were no longer applicable and were removed in the BMX Agreement and are no longer eligible to be earned. The BMX Agreement has an indefinite term, but can be terminated by bioMérieux for any reason with six months notice to us. In addition, either party may terminate the agreement upon 60 days notice in the event of an uncured material breach by the other party.

Development Agreement and Supply Agreement with STRATEC

In August 2011, we entered into a Strategic Development Services and Equity Participation Agreement, or the Development Agreement, with STRATEC Biomedical Systems AG, pursuant to which STRATEC undertook the development of the Simoa HD-1 instrument for manufacture and sale to us or a partner whom we designate. Under the Development Agreement, we were required to pay a fee and issue to STRATEC warrants to purchase 2,000,000 shares of our Series A-3 Preferred Stock at an exercise price of $0.001 per share, all of which have been exercised as of December 31, 2017. These fees and warrants were subject to a milestone based payment schedule. The Development Agreement was amended in November 2016. The Amendment reduced our obligation to satisfy a minimum purchase commitment under the Supply and Manufacturing Agreement described below. Additionally, the parties agreed on additional development services for an additional fee, which is payable when the additional development is completed. This fee includes the final milestone payment that was associated with the final milestone due under the terms of the Development Agreement. The services are expected to be completed during the year ending December 31, 2018.

The Development Agreement may be terminated on the insolvency of a party, for an uncured material breach, or, by us, on a change of control of our company (subject to certain obligations to compensate STRATEC on such termination) or if we and STRATEC are unable to agree on pricing of the instrument, within certain parameters.

In September 2011, we also entered into a Supply and Manufacturing Agreement with STRATEC, or the Supply Agreement, pursuant to which STRATEC agreed to supply HD-1 instruments to us, and we agreed to procure those instruments exclusively from STRATEC, subject to STRATEC's ability to supply the instruments. We are responsible for obtaining any regulatory approval necessary to sell the instruments. We agreed to purchase a certain number of instruments in the seven years following the

acceptance of the first validation instrument. The Supply Agreement was amended in November 2016 to reduce the number of instruments we are committed to procure from STRATEC. The instrument price stipulated in the Supply Agreement was established based on certain specified assumptions and is subject to certain adjustments.

The Supply Agreement is terminable by either party on 12 months' notice to the other party, provided that neither party may terminate the Supply Agreement prior to the later of the seven year anniversary of the acceptance of the first prototype instrument and the purchase of the minimum number of instruments which we committed to procure. The Supply Agreement may also be terminated on the insolvency of a party or the uncured material breach of a party, or, by us, on a change of control of our company (subject to certain obligations to compensate STRATEC on such termination). On termination by us for STRATEC's insolvency or uncured material breach or termination by STRATEC for convenience, we are granted a nonexclusive royalty free license of STRATEC intellectual property to manufacture the instruments. In certain of these circumstances, we could be obligated to issue warrants to purchase common stock.

Paramit Manufacturing Services Agreement

In November 2016, we entered into a Manufacturing Services Agreement, or the Paramit Agreement, with Paramit Corporation, or Paramit. Under the terms of the Paramit Agreement, we engaged Paramit to produce and test our Quanterix SR-X instrument on an as-ordered basis. We also engaged Paramit to supply spare parts. Paramit has no obligation to manufacture our instrument without a purchase order and no obligation to maintain inventory in excess of any open purchase orders or materials in excess of the amount Paramit reasonably determines will be consumed within 90 days or within the lead time of manufacturing our instrument, whichever is greater. We have an obligation to purchase any material or instruments deemed in excess pursuant to the Paramit Agreement. The price is determined according to a mutually agreed-upon pricing formula. The parties agreed to review the pricing methodology yearly or upon a material change in cost.

The Paramit Agreement has an initial three-year term with automatic one year extensions. It is terminable by either party for convenience with nine months' written notice to the other party given at least nine months prior to the end of the then-current term. The agreement may also be terminated by us with three months' notice to Paramit upon the occurrence of (i) a failure of Paramit to obtain any necessary governmental licenses, registrations or approvals required to manufacture our instrument or (ii) an assignment by Paramit of its rights or obligations under the agreement without our consent. The Paramit Agreement is terminable by Paramit with 30 days' notice to us in the event of a material breach after written notice and a 60-day opportunity to cure the breach.

Competition

We compete with both established and development-stage life science companies that design, manufacture and market instruments for protein detection, nucleic acid detection and additional applications. For example, companies such as Bio-Techne, Luminex Corporation, MesoScale Diagnostics, Singulex, Gyros Corporation, Nanostring Technologies, Inc., and others, have products for protein detection that compete in certain segments of the market in which we sell our products. As we or our partners expand the applications for our products to include diagnostics and precision health screening, we expect to compete with companies such as Siemens, Abbott, Roche, Ortho Clinical Diagnostics and Thermo Fisher Scientific. In addition, a number of other companies and academic groups are in the process of developing novel technologies for the life science research, diagnostic and precision health screening markets. Many of the companies with which we compete have substantially greater resources than we have.

The life science instrumentation industry is highly competitive and expected to grow more competitive with the increasing knowledge gained from ongoing research and development. We believe the principal competitive factors in our target markets include:

- sensitivity;
- cost of instruments and consumables;
- assay menu;
- reputation among customers and key opinion leaders;
- innovation in product offerings;
- accuracy and reproducibility of results; and
- customer support infrastructure.

We believe that we are well positioned with respect to these competitive factors and expect to enhance our position through ongoing global expansion, innovative new product introductions and ongoing collaborations and partnerships with key opinion leaders.

Intellectual Property

Our core technology, directed to general methods and devices for single molecule detection, originated at Tufts University, in the laboratory of Professor David Walt, who is the founder of Quanterix and a current member of our Board of Directors. Prof. Walt and his students pioneered the single molecule array technology, including technologies that enabled the detection of single enzyme labels in arrays of microwells, thereby facilitating the ultra-sensitive detection of proteins, nucleic acids, and cells. We have exclusively licensed from Tufts the relevant patent filings related to these technologies. (See "—License Agreement with Tufts University" below). In addition to licensed patents, we have developed our own portfolio of issued patents and patent applications directed to commercial products and technologies for potential development. We believe our proprietary platform is a core strength of our business and our strategy includes the continued development of our patent portfolio.

Our patent strategy is multilayered, providing coverage of aspects of the core technology as well as specific uses and applications, some of which are reflected in our current products and some of which are not. The first layer is based on protecting the fundamental methods for detecting single molecules independent of the specific analyte to be detected. The second layer covers embodiments of the core technology directed to the detection of specific analytes. The third layer protects novel instrumentation, consumables, and manufacturing processes used in applying the invention to certain commercial products or future product opportunities. The fourth layer is concerned with specific uses of the core technology (e.g., biomarkers and diagnostics). Our patent strategy is both offensive and defensive in nature; seeking to protect not only technology we currently practice but also alternative, related embodiments.

Simoa and Related Technology

As of March 1, 2018, we had exclusively licensed 17 patents and one patent application from Tufts. These patents and patent applications include eight issued U.S. patents and one pending U.S patent application, three granted European patents, three granted Japanese patents, two granted Canadian patents and one granted Australian patent.

A first patent family licensed from Tufts is directed to methods for detecting single molecules. This patent family includes five granted U.S. patents, one pending U.S. patent application, three granted European patents, three granted Japanese patents, two granted Canadian patents and one granted

Australian patent. The standard patent expiration date for U.S. patents in this family is February 16, 2027, and for the non-U.S. patents is February 20, 2027 or August 30, 2027.

A second patent family licensed from Tufts is directed to methods for detecting the presence of target analytes in multiple samples. This patent family includes one granted U.S. patent. The standard patent expiration date for the U.S. patent in this family is August 22, 2025.

A third patent family licensed from Tufts is directed to methods for analyzing analytes using a sensor system with cross-reactive elements. This patent family includes one granted U.S. patent. The standard patent expiration date for the U.S. patent in this family is March 14, 2021.

A fourth patent family licensed from Tufts is directed to electro-optical systems including an array and a plurality of electrodes. This patent family includes one granted U.S. patent. The standard patent expiration date for the U.S. patent in this family is February 14, 2023.

As of March 1, 2018, we owned ten issued U.S. patents and ten pending U.S. patent applications, three granted European patents and three pending European patent applications, five granted Japanese patents and one pending Japanese patent applications, three granted Chinese patents and three pending Chinese patent applications, two granted Canadian patents and one pending Canadian patent application, and two registered Hong Kong patent applications.

A first patent family owned by us is directed to methods for determining a measure of the concentration of analyte molecules or particles in a fluid sample, and in particular to methods for analyte capture on beads, including multiplexing. This patent family includes three granted U.S. patents and one pending U.S. patent application, two granted European patent (nationalized in eight countries) and one pending European application, two granted Japanese patents, one granted Chinese patent and one pending Chinese patent application, and one granted Canadian patent. The standard patent expiration date for the U.S. patents in this family is March 24, 2030, and for the non-U.S. patents is March 1, 2031.

A second patent family owned by us is directed to methods and systems for determining a measure of the concentration of analyte molecules or particles in a fluid sample, and in particular to methods or systems for determining concentration based on either counting or measured intensity (extending the dynamic range). This patent family includes four granted U.S. patents and one pending U.S. patent application, one granted European patent (nationalized in seven countries), two granted Japanese patents, one granted Chinese patent, and one granted Canadian patent. The standard patent expiration date for the U.S. patents in this family is March 24, 2030, and for the non-U.S. patents is March 1, 2031.

A third patent family owned by us is directed to methods for determining a measure of the concentration of analyte molecules or particles in a fluid sample, and in particular to methods for analyte capture on beads with or without dissociation. This patent family includes two granted U.S. patents. The standard patent expiration date for the U.S. patents in this family is September 28, 2028.

A fourth patent family owned by us is directed to methods for determining a measure of the concentration of analyte molecules or particles in a fluid sample, and in particular to methods for determining concentration using multiple binding ligands for the same analyte molecule. This patent family includes one granted U.S. patent. The standard patent expiration date for the U.S. patent in this family is March 24, 2030.

A fifth patent family owned by us is directed to instruments and consumables. This patent family includes one granted Japanese patent and one pending Japanese patent application, one pending Chinese patent application, two registered Hong Kong patent applications and one pending patent application in each of the United States, Europe, and Canada. The standard patent expiration date for

any U.S. patents that may issue from this family is February 25, 2031, and for any non-U.S. patents is January 27, 2032.

A sixth patent family owned by us is directed to methods and materials for covalently associating a molecular species with a surface. This patent family includes one pending U.S. patent application. The standard patent expiration date for any U.S. patents that may issue from this family is May 9, 2034.

A seventh patent family owned by us is directed to methods for improving the accuracy of capture based assays. This patent family includes one pending U.S. patent application. The standard patent expiration date for any U.S. patents that may issue from this family is January 13, 2036.

An eighth patent family owned by us is directed to methods and systems for reducing and/or preventing signal decay. This patent family includes one pending U.S. provisional patent application. If we pursue protection by filing any non-provisional applications, the standard patent expiration date for any patents that may issue from this family will be in 2038.

We own or co-own six patent families directed to the measurement of particular types of analytes, including prostate specific antigen (PSA), β-amyloid peptide, tau protein, toxin B of *C. difficile*, and DNA or RNA molecules. Any patents that may issue from these patent applications would have standard expiration dates between 2032 and 2038.

We have licensed additional patents and patent applications from third parties.

In addition to pursuing patents on our technology, we have taken steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors.

With the acquisition of Aushon, we acquired their patent portfolio. As of March 1, 2018, the acquired patent portfolio includes at least seven issued U.S. patents and six pending U.S. patent applications, one granted Australian patent, two granted Canadian patents and two pending Canadian patent application, five granted European patents and three pending European patent applications, three granted Japanese patents and one pending Japanese patent application, one pending Korean patent application, and one registered Hong Kong patent application.

License Agreement with Tufts University

In June 2007, as amended in April 2013 and August 2017, we entered into a license agreement with Tufts University, or Tufts, pursuant to which we obtained an exclusive, worldwide license to research, develop, commercialize, use, make, or have made, import or have imported, distribute or have distributed, offer or have offered, and sell or have sold products and services covered by patent rights to the Simoa technology owned by Tufts, as well as a non-exclusive license to related know-how. The rights licensed to us are for all fields of use and are sublicensable for a fee.

Under the terms of the agreement, as amended, we paid a one-time, non-refundable upfront fee and issued Tufts shares of our common stock. In addition, in connection with the April 2013 amendment, we issued Tufts shares of our Series C-1 Preferred Stock. We are required to pay Tufts low single-digit royalties on all net sales of products and services as well as a portion of any sublicensing revenues. We are also obligated to pay annual maintenance fees, which are fully creditable against any royalty payments made by us, and a milestone payment upon any sublicense by us. We were also required to reimburse Tufts for all patent prosecution cost incurred prior to the agreement and for all future patent prosecution costs.

The term of the license agreement will continue on a country-by-country basis so long as there is a valid claim of a licensed patent in such country. Tufts may terminate the agreement or convert to a non-exclusive license in the event (1) we fail to pay any undisputed amount when required and fail to

cure such non-payment within 60 days after receipt of notice from Tufts, (2) we are in breach of any material provision of the agreement and fail to remedy such breach within 60 days after receipt of notice from Tufts, (3) we do not demonstrate diligent efforts to develop a product incorporating the licensed technology, (4) we are found on five separate audits to have underpaid pursuant to the terms of the agreement, (5) we cease to carry on the business related to the licensed technology either directly or indirectly, or (6) we are adjudged insolvent, make an assignment for the benefit of creditors or have a petition in bankruptcy filed for or against us that is not removed within 60 days. We may terminate the agreement at any time upon at least 60 days' written notice. Upon termination of the agreement, all rights revert to Tufts.

Government Regulation

Our products are currently intended for research use only, or RUO, applications, although our customers may use our products to develop their own products that are subject to regulation by the FDA. Although most products intended for RUO are not currently subject to clearance or approval by the FDA, RUO products fall under the FDA's jurisdiction if they are used for clinical rather than research purposes. Consequently, our products are labeled "For Research Use Only."

On November 25, 2013, the FDA issued Final Guidance for Industry and Food and Drug Administration Staff on "Distribution of In Vitro Diagnostic Products Labeled for Research Use Only or Investigational Use Only," or, the RUO/IUO Guidance. The purpose of an FDA guidance document is to provide the FDA's current thinking on when IVD products are properly labeled for RUO or for IUO, but as with all FDA guidance documents, this guidance does not establish legally enforceable responsibilities and should be viewed as recommendations unless specific regulatory or statutory requirements are cited. The RUO/IUO Guidance explains that the FDA will review the totality of the circumstances when evaluating whether equipment and testing components are properly labeled as RUO. Merely including a labeling statement that a product is intended for research use only will not necessarily exempt the device from the FDA's 510(k) clearance, premarket approval, or other requirements, if the circumstances surrounding the distribution of the product indicate that the manufacturer intends its product to be used for clinical diagnostic use. These circumstances may include written or verbal marketing claims or links to articles regarding a product's performance in clinical applications, a manufacturer's provision of technical support for clinical validation or clinical applications, or solicitation of business from clinical laboratories, all of which could be considered evidence of intended uses that conflict with RUO labeling. Although the RUO/IUO Guidance is a statement of the FDA's thinking with respect to certain RUOs and IUOs in 2013 and was not intended as a compliance requirement, we believe that our labeling and promotion of our products is consistent with the RUO/IUO Guidance because we have not promoted our products for clinical use in humans. When we develop products for clinical use, we will do so in accordance with FDA requirements at that time.

When our products are marketed for clinical diagnostic use, our products will be regulated by the FDA as medical devices. The FDA defines a medical device in part as an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article which is intended for the diagnosis of disease or other conditions or in the cure, mitigation, treatment, or prevention of disease in man. This means that the FDA will regulate the development, testing, manufacturing, marketing, post-market surveillance, distribution, advertising and labeling of our clinical products and we will be required to register as a medical device manufacturer and list our marketed products.

The FDA classifies medical devices into one of three classes on the basis of the intended use of the device, the risk associated with the use of the device for that indication, as determined by the FDA, and on the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices, which have the lowest level of risk associated with them, are subject to

general controls. Class II devices are subject to general controls and special controls, including performance standards. Class III devices, which have the highest level of risk associated with them, are subject to general controls and premarket approval. Most Class I devices and some Class II devices are exempt from a requirement that the manufacturer submit a premarket notification, or 510(k), and receive clearance from the FDA which is otherwise a premarketing requirement for a Class II device. Class III devices may not be commercialized until a premarket approval application, or PMA, is submitted to and approved by the FDA.

510(k) Clearance Pathway

To obtain 510(k) clearance, a sponsor must submit to the FDA a premarket notification demonstrating that the device is substantially equivalent, or SE, to a device legally marketed in the U.S. for which a PMA was not required. The FDA is supposed to make a SE determination within 90 days of FDA's receipt of the 510(k), but it often takes longer if the FDA requests additional information. Most 510(k)s do not require supporting data from clinical trials, but the FDA may request such data.

Premarket Approval Pathway

A PMA must be submitted if a new device cannot be cleared through the 510(k) process. The PMA process is generally more complex, costly and time consuming than the 510(k) process. A PMA must be supported by extensive data including, but not limited to, technical, preclinical, clinical trials, manufacturing and labeling to demonstrate to the FDA's satisfaction the safety and effectiveness of the device for its intended use. After a PMA is sufficiently complete, the FDA will accept the application for filing and begin an in-depth review of the submitted information. By statute, the FDA has 180 days to review the accepted application, although, review of the application generally can take between one and three years. During this review period, the FDA may request additional information or clarification of information already provided. Also during the review period, an advisory panel of experts from outside the FDA may be convened to review and evaluate the application and provide recommendations to the FDA as to the approvability of the device. In addition, the FDA will conduct a preapproval inspection of the manufacturing facility to ensure compliance with its quality system regulations, or QSRs. New premarket approval applications or premarket approval application supplements are also required for product modifications that affect the safety and efficacy of the device.

Clinical Trials

Clinical trials are usually required to support a PMA and are sometimes required for a 510(k). In the U.S., if the device is determined to present a "significant risk," the manufacturer may not begin a clinical trial until it submits an investigational device exemption application, or IDE, and obtains approval of the IDE from the FDA. These clinical trials are also subject to the review, approval and oversight of an institutional review board, or IRB, at each clinical trial site. The clinical trials must be conducted in accordance with the FDA's IDE regulations and good clinical practices. A clinical trial may be suspended by FDA, the sponsor or an IRB at its institution at any time for various reasons, including a belief that the risks to the study participants outweigh the benefits of participation in the trial. Even if a clinical trial is completed, the results may not demonstrate the safety and efficacy of a device to the satisfaction of the FDA, or may be equivocal or otherwise not be sufficient to obtain approval of a device.

After a medical device is placed on the market, numerous regulatory requirements apply. These include among other things:

compliance with QSRs, which require manufacturers to follow stringent design, testing, control, documentation, record maintenance, including maintenance of complaint and related investigation files, and other quality assurance controls during the manufacturing process;

- reporting of device malfunctions, serious injuries or deaths;
- registration of the establishments where the devices are produced;
- labeling regulations, which prohibit the promotion of products for uncleared or unapproved uses; and
- medical device reporting obligations, which require that manufacturers investigate and report to the FDA adverse events, including deaths, or serious injuries that may have been or were caused by a medical device and malfunctions in the device that would likely cause or contribute to a death or serious injury if it were to recur.

Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include sanctions, including but not limited to, warning letters; fines, injunctions, and civil penalties; recall or seizure of the device; operating restrictions, partial suspension or total shutdown of production; refusal to grant 510(k) clearance or PMA approvals of new devices; withdrawal of 510(k) clearance or PMA approvals; and civil or criminal prosecution. To ensure compliance with regulatory requirements, medical device manufacturers are subject to market surveillance and periodic, pre-scheduled and unannounced inspections by the FDA.

Clinical Laboratory Improvement Amendments of 1988 and State Regulation

In January 2018, we acquired Aushon Biosystems, Inc., which owns and operates a CLIA certified laboratory. The Clinical Laboratory Improvement Amendments of 1988 (CLIA) are federal regulatory standards that apply to all clinical laboratory testing performed on humans in the United States (with the exception of clinical trials and basic research). A clinical laboratory is defined by CLIA as any facility that performs laboratory testing on specimens obtained from humans for the purpose of providing information for health assessment and for the diagnosis, prevention, or treatment of disease."). CLIA requires such laboratories to be certified by the federal government and mandates compliance with various operational, personnel, facilities administration, quality and proficiency testing requirements intended to ensure that testing services are accurate, reliable and timely. CLIA certification also is a prerequisite to be eligible to bill state and federal health care programs, as well as many private insurers, for laboratory testing services.

In addition, CLIA requires certified laboratories to enroll in an approved proficiency testing program if performing testing in any category for which proficiency testing is required. If a laboratory fails to achieve a passing score on a proficiency test, then it loses its right to perform testing.

As a condition of CLIA certification, laboratories are subject to survey and inspection every other year, in addition to being subject to additional random inspections. The biennial survey is conducted by the Centers for Medicare & Medicaid Services ("CMS"), a CMS agent (typically a state agency), or, a CMS-approved accreditation organization.

In addition, some states require that any laboratory be licensed by the appropriate state agency in the state in which it operates. Laboratories must also hold state licenses or permits, as applicable, from various states including, but not limited to, California, Florida, New York, Pennsylvania, Rhode Island and Maryland, to the extent that they accept specimens from one or more of these states, each of which requires out-of-state laboratories to obtain licensure.

If a laboratory is out of compliance with state laws or regulations governing licensed laboratories or with CLIA, it may be subject to enforcement actions that may include suspension, limitation or revocation of the license or CLIA certificate, assessment of financial penalties or fines, or imprisonment. Loss of a laboratory's CLIA certificate or state license may also result in the inability to receive payments from state and federal health care programs as well as private third party payors.

If, in the future, we utilize Aushon to perform clinical diagnostic testing, we would also become subject to the Health Insurance Portability and Accountability Act of 1996, or HIPAA, as well as additional federal and state laws that impose a variety of fraud and abuse prohibitions on healthcare providers, including clinical laboratories.

Europe/Rest of World Government Regulation

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in non-U.S. countries prior to the commencement of clinical trials or marketing of our product for clinical diagnostic use in those countries. The regulations in other jurisdictions vary from those in the U.S. and may be easier or more difficult to satisfy and are subject to change. For example, the European Union, or EU, recently published new regulations that will result in greater regulation of medical devices and IVDs. The IVD Regulation is significantly different from the IVD Directive that it replaces in that it will ensure that the new requirements apply uniformly and on the same schedule across the member states, include a risk-based classification system and increase the requirements for conformity assessment. The conformity assessment process results in the receipt of a CE designation which has been sufficient to begin marketing many types of IVDs. That process will become more difficult and costly to complete.

Other Governmental Regulation

We are subject to laws and regulations related to the protection of the environment, the health and safety of employees and the handling, transportation and disposal of medical specimens, infectious and hazardous waste and radioactive materials. For example, the U.S. Occupational Safety and Health Administration, or OSHA, has established extensive requirements relating specifically to workplace safety for healthcare employers in the U.S. This includes requirements to develop and implement multi-faceted programs to protect workers from exposure to blood-borne pathogens, including preventing or minimizing any exposure through needle stick injuries. For purposes of transportation, some biological materials and laboratory supplies are classified as hazardous materials and are subject to regulation by one or more of the following agencies: the U.S. Department of Transportation, the U.S. Public Health Service, the United States Postal Service and the International Air Transport Association. We generally use third-party vendors to dispose of regulated medical waste, hazardous waste and radioactive materials that we may use during our research.

Employees

As of December 31, 2017, we had 126 employees, of which 43 work in sales, sales support and marketing, 43 work in engineering and research and development, 23 work in manufacturing and operations and 17 work in general and administrative. As of December 31, 2017, of our 126 employees, 116 were located in the United States and 10 were employed outside the United States. None of our employees is represented by a labor union or is subject to a collective bargaining agreement.

Corporate Information

We were incorporated under the laws of the State of Delaware in April 2007 under the name "Digital Genomics, Inc." In August 2007, we changed our name to "Quanterix Corporation." Our principal executive offices are located at 113 Hartwell Avenue, Lexington, MA 02421, and our telephone number is (617) 301-9400.

Information Available on the Internet

Our Internet website address is *www.quanterix.com*. The information contained on, or that can be accessed through, our website is not a part of or incorporated by reference in this Annual Report on Form 10-K. We have included our website address in this Annual Report on Form 10-K solely as an inactive textual reference. We make available free of charge through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amdended, or the Exchange Act. We make these reports available through the "Investors—Financial Information—SEC Filings" section of our website as soon as reasonably practicable after we electronically file such reports with, or furnish such reports to, the Securities and Exchange Commission, or SEC. We also make available, free of charge on our website, the reports filed with the SEC by our executive officers, directors and 10% stockholders pursuant to Section 16 under the Exchange Act as soon as reasonably practicable after copies of those filings are provided to us by those persons. You can find, copy and inspect information we file at the SEC's public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. You can review our electronically filed reports and other information that we file with the SEC on the SEC's website at *http://www.sec.gov*.

Item 1A. RISK FACTORS

The following risk factors and other information included in this Annual Report on Form 10-K should be carefully considered. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we presently deem less significant may also impair our business operations. Please see page ii of this Annual Report on Form 10-K for a discussion of some of the forward-looking statements that are qualified by these risk factors. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected.

Risks Related to Our Financial Condition and Need for Additional Capital

We have incurred losses since we were formed and expect to incur losses in the future. We cannot be certain that we will achieve or sustain profitability.

We incurred net losses of $27.0 million, $23.2 million and $15.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we had an accumulated deficit of $144.4 million. We cannot predict if we will achieve sustained profitability in the near future or at all. We expect that our losses will continue at least through the next 24 months as we plan to invest significant additional funds toward expansion of our commercial organization and the development of our technology and related assays. In addition, as a public company, we will incur significant legal, accounting, and other expenses that we did not incur as a private company. These increased expenses will make it harder for us to achieve and sustain future profitability. We may incur significant losses in the future for a number of reasons, many of which are beyond our control, including the other risks described in this Annual Report on Form 10-K, the market acceptance of our products, future product development and our market penetration and margins.

Our quarterly and annual operating results and cash flows have fluctuated in the past and might continue to fluctuate, causing the value of our common stock to decline substantially.

Numerous factors, many of which are outside our control, may cause or contribute to significant fluctuations in our quarterly and annual operating results. These fluctuations may make financial planning and forecasting difficult. In addition, these fluctuations may result in unanticipated decreases

in our available cash, which could negatively affect our business and prospects. In addition, one or more of such factors may cause our revenue or operating expenses in one period to be disproportionately higher or lower relative to the others. As a result, comparing our operating results on a period-to-period basis might not be meaningful. You should not rely on our past results as indicative of our future performance. Moreover, our stock price might be based on expectations of future performance that are unrealistic or that we might not meet and, if our revenue or operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially.

Our operating results have varied in the past. In addition to other risk factors listed in this section, some of the important factors that may cause fluctuations in our quarterly and annual operating results include:

- adoption of our Simoa technology platform and products by customers;
- the timing of customer orders to purchase our Simoa instruments;
- the rate of utilization of consumables by our customers;
- receipt and timing of revenue for services provided in our Simoa Accelerator Laboratory;
- the timing of the introduction of new products, product enhancements and services; and
- the receipt and timing of revenue from collaborations.

In addition, a significant portion of our operating expense is relatively fixed in nature, and planned expenditures are based in part on expectations regarding future revenue. Accordingly, unexpected revenue shortfalls might decrease our gross margins and could cause significant changes in our operating results from quarter to quarter. If this occurs, the trading price of our common stock could fall substantially.

We are an early, commercial-stage company and have a limited commercial history, which may make it difficult to evaluate our current business and predict our future performance.

We are an early, commercial-stage company and have a limited commercial history. Our revenues are derived from sales of our instruments, consumables and services, which are all based on our Simoa technology, which we launched commercially in 2014. Our limited commercial history may make it difficult to evaluate our current business and make predictions about our future success or viability subject to significant uncertainty. We will continue to encounter risks and difficulties frequently experienced by early, commercial-stage companies, including scaling up our infrastructure and headcount. If we do not address these risks successfully, our business will suffer.

If we are unable to maintain adequate revenue growth or do not successfully manage such growth, our business and growth prospects will be harmed.

We have experienced significant revenue growth in a short period of time. We may not achieve similar growth rates in future periods. Investors should not rely on our operating results for any prior periods as an indication of our future operating performance. To effectively manage our anticipated future growth, we must continue to maintain and enhance our financial, accounting, manufacturing, customer support and sales administration systems, processes and controls. Failure to effectively manage our anticipated growth could lead us to over-invest or under-invest in development, operational, and administrative infrastructure; result in weaknesses in our infrastructure, systems, or controls; give rise to operational mistakes, losses, loss of customers, productivity or business opportunities; and result in loss of employees and reduced productivity of remaining employees.

Our continued growth could require significant capital expenditures and might divert financial resources from other projects such as the development of new products and services. As additional products are commercialized, we may need to incorporate new equipment, implement new technology systems, or hire new personnel with different qualifications. Failure to manage this growth or transition could result in turnaround time delays, higher product costs, declining product quality, deteriorating customer service, and slower responses to competitive challenges. A failure in any one of these areas could make it difficult for us to meet market expectations for our products, and could damage our reputation and the prospects for our business.

If our management is unable to effectively manage our anticipated growth, our expenses may increase more than expected, our revenue could decline or grow more slowly than expected and we may be unable to implement our business strategy. The quality of our products and services may suffer, which could negatively affect our reputation and harm our ability to retain and attract customers.

Our future capital needs are uncertain and we may need to raise additional funds in the future.

We believe that our existing cash and cash equivalents as of December 31, 2017, together with our cash generated from commercial sales, excluding any future available borrowings under our debt facility, will enable us to fund our operating expenses and capital expenditure requirements for at least the next 24 months. However, we may need to raise substantial additional capital to:

- expand our sales and marketing efforts to further commercialize our products;
- expand our research and development efforts to improve our existing products and develop and launch new products, particularly if any of our products are deemed by the United States Food and Drug Administration, or FDA, to be medical devices or otherwise subject to additional regulation by the FDA;
- seek premarket approval, or PMA, or 510(k) clearance from the FDA for our existing products or new products if or when we decide to market products for use in the prevention, diagnosis or treatment of a disease or other condition (see "Risk Factors—If the FDA determines that our products are medical devices or if we seek to market our products for clinical diagnostic or health screening use, we will be required to obtain regulatory clearance(s) or approval(s), and may be required to cease or limit sales of our then marketed products, which could materially and adversely affect our business, financial condition and results of operations. Any such regulatory process would be expensive, time-consuming and uncertain both in timing and in outcome." and "Business—Government regulation—501(k) clearance pathway;" "Business—Government regulation—Premarket approval pathway" and "Business—Government regulation—Clinical trials" for further information about the FDA approvals that we may be required to seek and obtain in that circumstance);
- lease a larger facility or build out our existing facility as we continue to grow our employee headcount;
- hire additional personnel;
- enter into collaboration arrangements, if any, or in-license other products and technologies;
- add operational, financial and management information systems; and
- incur increased costs as a result of operating as a public company.

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

- market acceptance of our products, including the recently launched Quanterix SR-X instrument;
- 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 collaborations and our ability to enter into additional collaborations 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. 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.

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

As of December 31, 2017, we had federal net operating loss carry forwards, or NOLs, to offset future taxable income of approximately $108.4 million, which expire at various dates through 2035, if not utilized. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its NOLs to offset future taxable income. We have already experienced one or more ownership changes as defined under Section 382 of the Code. Depending on the timing of any future utilization of our NOLs, we may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. In addition, future changes in our stock ownership, including changes that may be outside of our control, could result in additional ownership changes under Section 382 of the Code. Our NOLs may also be impaired under similar provisions of state law. We have recorded a full valuation allowance related to our NOLs and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

U.S. taxation of international business activities or the adoption of tax reform policies could materially impact our future financial position and results of operations.

Limitations on the ability of taxpayers to claim and utilize foreign tax credits and the deferral of certain tax deductions until earnings outside of the United States are repatriated to the United States, as well as changes to U.S. tax laws that may be enacted in the future, could impact the tax treatment of future foreign earnings. Should the scale of our international business activities expand, any changes in the U.S. taxation of such activities could increase our worldwide effective tax rate and harm our future financial position and results of operations.

Provisions of our secured term loan facility with Hercules Capital, Inc. may restrict our ability to pursue our business strategies. In addition, repayment of our outstanding debt and other obligations under our secured term loan facility with Hercules is subject to acceleration upon the occurrence of an event of default, which would have a material adverse effect on our business, financial condition and results of operations.

Our secured term loan facility with Hercules Capital, Inc., or Hercules, requires us, and any debt instruments we may enter into in the future may require us, to comply with various covenants that limit our ability to take on new indebtedness, to permit new liens, to pay dividends, to dispose of our property (including to license in certain situations), to engage in mergers or acquisitions and make

certain other changes in our business. Debt instruments we may enter into in the future may also include financial covenants such as a requirement to maintain a specified minimum liquidity level or achieve a minimum annual revenue level. These restrictions could inhibit our ability to pursue our business strategies, including our ability to raise additional capital and make certain dispositions or investments without the consent of our lenders.

The obligations under our secured term loan facility with Hercules are subject to acceleration upon the occurrence of specified events of default, including our failure to make payments when due, our breach or default in the performance of our covenants and obligations under the facility following a cure period, bankruptcy and similar events, and the occurrence of a circumstance that would reasonably be expected to have a material adverse effect on (i) our business, operations, properties, assets or financial condition, (ii) our ability to perform our obligations in accordance with the facility documents, (iii) the lender's ability to enforce any of its rights or remedies with respect to our obligations, or (iv) the collateral, the liens on the collateral or the first priority of the lender's liens. While we do not believe it is probable that the lender would accelerate the obligations under the facility, the definition of a material adverse effect is inherently subjective in nature, and we cannot assure that a material adverse effect will not occur or be deemed to have occurred by the lender.

The recently passed comprehensive tax reform bill could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law the "Tax Cuts and Jobs Act," or TCJA, that significantly reforms the Internal Revenue Code of 1986, as amended, or the Code. The TCJA, among other things, includes changes to U.S. federal tax rates, imposes significant additional limitations on the deductibility of interest and net operating loss carryforwards, allows for the expensing of capital expenditures, and puts into effect the migration from a "worldwide" system of taxation to a territorial system. Our net deferred tax assets and liabilities have been revalued at the newly enacted U.S. corporate rate, and there has been no impact due to the required full valuation allowance against our total deferred tax assets. We continue to examine the impact this tax reform legislation may have on our business. The impact of this tax reform is uncertain and could be adverse. This report does not discuss any such tax legislation or the manner in which it might affect our stockholders. We urge our stockholders to consult with their legal and tax advisors with respect to such legislation and the potential tax consequences of investing in our common stock.

Risks Related to Our Business

If our products fail to achieve and sustain sufficient market acceptance, our revenue will be adversely affected.

Our success depends on our ability to develop and market products that are recognized and accepted as reliable, enabling and cost-effective. Most of the potential customers for our products already use expensive research systems in their laboratories that they have used for many years and may be reluctant to replace those systems with ours. Market acceptance of our Simoa technology will depend on many factors, including our ability to convince potential customers that our technology is an attractive alternative to existing technologies. Compared to some competing technologies, our Simoa technology is new and complex, and many potential customers have limited knowledge of, or experience with, our products. Prior to adopting our systems, some potential customers may need to devote time and effort to testing and validating our systems. Any failure of our systems to meet these customer benchmarks could result in potential customers choosing to retain their existing systems or to purchase systems other than ours. In addition, it is important that our Simoa technology be perceived as accurate and reliable by the scientific and medical research community as a whole. Historically, a significant part of our sales and marketing efforts has been directed at demonstrating the advantages of our technology to industry leaders and encouraging such leaders to publish or present the results of their evaluation of our system. If we are unable to continue to motivate leading researchers to use Simoa technology, or if such researchers are unable to achieve or unwilling to publish or present

significant experimental results using our systems, acceptance and adoption of our systems will be slowed and our ability to increase our revenue would be adversely affected.

Our future success is dependent upon our ability to further penetrate our existing customer base and attract new customers.

Our current customer base is primarily composed of academic and governmental research institutions, as well as biopharmaceutical and contract research companies. Our success will depend upon our ability to respond to the evolving needs of, and increase our market share among, existing customers and additional potential customers, marketing new products as we develop them. Identifying, engaging and marketing to customers who are unfamiliar with our current products requires substantial time, expertise and expense and involves a number of risks, including:

- our ability to attract, retain and manage the sales, marketing and service personnel necessary to expand market acceptance for our Simoa technology;
- the time and cost of maintaining and growing a specialized sales, marketing and service force; and
- our sales, marketing and service force may be unable to execute successful commercial activities.

We have utilized third parties to assist with sales, distribution and customer support in certain regions of the world. There is no guarantee, when we enter into such arrangements, that we will be successful in attracting desirable sales and distribution partners. There is also no guarantee that we will be able to enter into such arrangements on favorable terms. Any failure of our sales and marketing efforts, or those of any third-party sales and distribution partners, would adversely affect our business.

Some of the reagents used in our products are labeled for "research use only" and will have to undergo additional testing before we could use them in a product intended for clinical use.

Some of the materials that are used in our consumable products, including certain reagents, are purchased from suppliers with a restriction that they be used for research use only, or RUO. While we have focused initially on the life sciences research market, part of our business strategy is to expand our product line, either alone or in collaboration with third parties, to encompass systems and products that can be used for clinical purposes. Whether or not we continue to use the same RUO materials that we currently use, or obtain similar materials that are not labeled with the RUO restriction, we will be required to demonstrate that the use of our system and products as a clinical test complies with all applicable requirements. In addition, if we were to change the supplier of any material or component used in a clinical test, we would be required to confirm through additional testing that the change does not adversely affect the reliability of the test. Any such additional testing may be expensive and time-consuming and delay our introduction of new products and systems.

In the near term, our business will depend on levels of research and development spending by academic and governmental research institutions and biopharmaceutical companies, a reduction in which could limit demand for our products and adversely affect our business and operating results.

In the near term, we expect that our revenue will be derived primarily from sales of our instruments and consumables to academic and governmental research institutions, as well as biopharmaceutical and contract research companies worldwide for research applications. The demand for our products will depend in part upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as:

- changes in government programs that provide funding to research institutions and companies;
- macroeconomic conditions and the political climate;

- changes in the regulatory environment;
- differences in budgetary cycles; and
- market acceptance of relatively new technologies, such as ours.

For example, in March 2017, the federal government announced the intent to cut federal biomedical research funding by as much as 18%. While there has been significant opposition to these funding cuts, the uncertainty regarding the availability of research funding for potential customers may adversely affect our operating results. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. Any decrease in customers' budgets or expenditures, or in the size, scope or frequency of capital or operating expenditures, could materially and adversely affect our business, operating results and financial condition.

The sales cycle for our Simoa instruments can be lengthy and variable, which makes it difficult for us to forecast revenue and other operating results.

The sales process for our Simoa instruments generally involves numerous interactions with multiple individuals within an organization, and often includes in-depth analysis by potential customers of our technology and products and a lengthy review process. Our customers' evaluation processes often involve a number of factors, many of which are beyond our control. As a result of these factors, the capital investment required to purchase our systems and the budget cycles of our customers, the time from initial contact with a customer to our receipt of a purchase order can vary significantly. Given the length and uncertainty of our sales cycle, we have in the past experienced, and expect to in the future experience, fluctuations in our sales on a period-to-period basis. In addition, any failure to meet customer expectations could result in customers choosing to retain their existing systems, use existing assays not requiring capital equipment or purchase systems other than ours.

Our long-term results depend upon our ability to improve existing products and introduce and market new products successfully.

Our business is dependent on the continued improvement of our existing Simoa products and our development of new products utilizing our Simoa or other potential future technology. As we introduce new products or refine, improve or upgrade versions of existing products, we cannot predict the level of market acceptance or the amount of market share these products will achieve, if any. We cannot assure you that we will not experience material delays in the introduction of new products in the future. In addition, introducing new products could result in a decrease in revenues from our existing products. For example, introduction of the Quanterix SR-X may result in a decrease in revenue from our existing Simoa HD-1 Analyzer instrument. Consistent with our strategy of offering new products and product refinements, we expect to continue to use a substantial amount of capital for product development and refinement. We may need additional capital for product development and refinement than is available on terms favorable to us, if at all, which could adversely affect our business, financial condition or results of operations.

We generally sell our products in industries that are characterized by rapid technological changes, frequent new product introductions and changing industry standards. If we do not develop new products and product enhancements based on technological innovation on a timely basis, our products may become obsolete over time and our revenues, cash flow, profitability and competitive position will suffer. Our success will depend on several factors, including our ability to:

- correctly identify customer needs and preferences and predict future needs and preferences;
- allocate our research and development funding to products with higher growth prospects;

- anticipate and respond to our competitors' development of new products and technological innovations;
- innovate and develop new technologies and applications, and acquire or obtain rights to third-party technologies that may have valuable applications in the markets we serve;
- successfully commercialize new technologies in a timely manner, price them competitively and manufacture and deliver sufficient volumes of new products of appropriate quality on time; and
- convince customers to adopt new technologies.

In addition, if we fail to accurately predict future customer needs and preferences or fail to produce viable technologies, we may invest heavily in research and development of products that do not lead to significant revenue. Even if we successfully innovate and develop new products and product enhancements, we may incur substantial costs in doing so, and our profitability may suffer.

Our ability to develop new products based on innovation can affect our competitive position and often requires the investment of significant resources. Difficulties or delays in research, development or production of new products and services or failure to gain market acceptance of new products and technologies may reduce future revenues and adversely affect our competitive position.

If we do not successfully develop and introduce new assays for our technology, we may not generate new sources of revenue and may not be able to successfully implement our growth strategy.

Our business strategy includes the development of new assays for our Simoa instruments. New assays require significant research and development and a commitment of significant resources prior to their commercialization. Our technology is complex, and we cannot be sure that any assays we may intend to develop will be developed successfully, be proven to be effective, offer improvements over currently available tests, meet applicable standards, be produced in commercial quantities at acceptable costs or be successfully marketed. Moreover, development of particular assays may require licenses or access to third party intellectual property which may not be available on commercially reasonable terms, or at all. In addition, we believe that our future success will depend, in part, on our ability to develop and commercialize multiplex assays that can simultaneously measure multiple biomarkers. The most robust multiplex assay that we have commercially launched to date is a 4-plex assay. If we do not successfully develop new assays for our Simoa instruments, including multiplex assays with the ability to detect an increased number of biomarkers in a single sample, we could lose revenue opportunities with existing or future customers.

If we do not successfully manage the development and launch of new products, our financial results could be adversely affected.

We commercially launched our Quanterix SR-X instrument in December 2017. We face risks associated with launching new products such as the Quanterix SR-X. If we encounter development or manufacturing challenges or discover errors during our product development cycle, the product launch dates of new products may be delayed. The expenses or losses associated with unsuccessful product development or launch activities or lack of market acceptance of our new products could adversely affect our business or financial condition.

Undetected errors or defects in our products could harm our reputation, decrease market acceptance of our products or expose us to product liability claims.

Our Simoa products may contain undetected errors or defects when first introduced or as new versions or new products are released. Disruptions affecting the introduction or release of, or other performance problems with, our products may damage our customers' businesses and could harm their and our reputation. If that occurs, we may incur significant costs, the attention of our key personnel

could be diverted, or other significant customer relations problems may arise. We may also be subject to warranty and liability claims for damages related to errors or defects in our products. In addition, if we do not meet industry or quality standards, if applicable, our products may be subject to recall. A material liability claim, recall or other occurrence that harms our reputation or decreases market acceptance of our products could harm our business and operating results.

Although we do not, and cannot currently, promote the use of our products, or services based on our products, for diagnostic purposes, if our customers develop or use them for diagnostic purposes, someone could file a product liability claim alleging that one of our products contained a design or manufacturing defect that resulted in the failure to adequately perform, leading to death or injury. A product liability claim could result in substantial damages and be costly and time consuming to defend, either of which could materially harm our business or financial condition. We cannot assure investors that our product liability insurance would adequately protect our assets from the financial impact of defending a product liability claim. Any product liability claim brought against us, with or without merit, could increase our product liability insurance rates or prevent us from securing insurance coverage in the future.

We depend on strategic collaborations and licensing arrangements with third parties to develop in vitro diagnostic products. We may not be successful in maintaining these collaborations and licensing arrangements and in establishing or maintaining additional collaborations or license agreements.

We have established strategic collaborations and licensing agreements with third parties to develop products based on our Simoa technology, such as for certain in vitro diagnostic, or IVD, purposes. For example, we have entered into a license agreement with bioMérieux SA, pursuant to which we have granted them an exclusive license to, among other things, develop and sell certain in vitro diagnostic products used in clinical lab applications based on our Simoa technology and a co-exclusive license for certain other in vitro diagnostic products. If bioMérieux or any other partners do not prioritize and commit sufficient resources to develop and sell products based on our Simoa technology, our ability to generate revenue from sales in respect of in vitro diagnostic products may be limited.

We may seek to enter into additional such arrangements; however, there is no assurance that we will be successful in doing so. Moreover, given the exclusive nature of a portion of the license rights granted to bioMérieux, our ability to collaborate with others in the areas of in vitro diagnostics used in clinical lab applications, food quality control testing, and pharmaceutical quality control testing will be limited, in that we may not establish collaborations with others covering these areas while the exclusive license to bioMérieux remains in effect, subject to our right to make and sell the current version of the Simoa HD-1 Analyzer for use in clinical lab applications, either directly or through a partner (but not both). Establishing collaborations and licensing arrangements is difficult and time-consuming. Discussions may not lead to collaborations or licenses on favorable terms, if at all. Even if we establish new relationships, they may never result in the successful development or commercialization of products based on our Simoa technology.

Our reliance on distributors for sales of our products outside of the United States could limit or prevent us from selling our products and could impact our revenue.

We have established exclusive distribution agreements for our Simoa HD-1 Analyzer and related consumable products within Australia, China, India, Japan, Lebanon, Singapore, South Korea, and Taiwan as well as other foreign countries. We intend to continue to grow our business internationally, and to do so we must attract additional distributors and retain existing distributors to maximize the commercial opportunity for our products. There is no guarantee that we will be successful in attracting or retaining desirable sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. Distributors may not commit the necessary resources to market and sell our products to the level of our expectations or may choose to favor marketing the products of our

competitors. If current or future distributors do not perform adequately, or we are unable to enter into effective arrangements with distributors in particular geographic areas, we may not realize long-term international revenue growth. In addition, if our distributors fail to comply with applicable laws and ethical standards, including anti-bribery laws, this could damage our reputation and could have a significant adverse effect on our business and our revenues.

We expect to generate a substantial portion of our revenue internationally in the future and can become further subject to various risks relating to our international activities, which could adversely affect our business, operating results and financial condition.

For the years ended December 31, 2017 and 2016, approximately 45% and 36%, respectively, of our product revenue was generated from customers located outside of North America. We believe that a substantial percentage of our future revenue will come from international sources as we expand our overseas operations and develop opportunities in additional areas. We have limited experience operating internationally and engaging in international business involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws;
- difficulties and costs of staffing and managing foreign operations;
- difficulties protecting or procuring intellectual property rights;
- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act, data privacy requirements, labor laws and anti-competition regulations;
- export or import restrictions;
- laws and business practices favoring local companies;
- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- political and economic instability; and
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers.

Historically, most of our revenue has been denominated in U.S. dollars. In the future, we may sell our products and services in local currency outside of the United States. As our operations in countries outside of the United States grow, our results of operations and cash flows may be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. For example, if the value of the U.S. dollar increases relative to foreign currencies, in the absence of a corresponding change in local currency prices, our revenue could be adversely affected as we convert revenue from local currencies to U.S. dollars. If we dedicate significant resources to our international operations and are unable to manage these risks effectively, our business, operating results and financial condition will suffer.

We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and other worldwide anti-bribery laws by us or our agents.

We are subject to the U.S. Foreign Corrupt Practices Act, or FCPA, which prohibits companies and their intermediaries from making payments in violation of law to non-U.S. government officials for the purpose of obtaining or retaining business or securing any other improper advantage. Our reliance on independent distributors to sell our products internationally demands a high degree of vigilance in maintaining our policy against participation in corrupt activity, because these distributors could be deemed to be our agents, and we could be held responsible for their actions. Other U.S. companies in

the medical device and pharmaceutical fields have faced criminal penalties under the FCPA for allowing their agents to deviate from appropriate practices in doing business with these individuals. We are also subject to similar antibribery laws in the jurisdictions in which we operate, including the United Kingdom's Bribery Act of 2010, which also prohibits commercial bribery and makes it a crime for companies to fail to prevent bribery. We have limited experience in complying with these laws and in developing procedures to monitor compliance with these laws by our agents. These laws are complex and far-reaching in nature, and, as a result, we cannot assure you that we would not be required in the future to alter one or more of our practices to be in compliance with these laws or any changes in these laws or the interpretation thereof. Any violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction, involve significant costs and expenses, including legal fees, and could result in a material adverse effect on our business, prospects, financial condition, or results of operations. We could also incur severe penalties, including criminal and civil penalties, disgorgement, and other remedial measures.

If we are unable to attract, recruit, train, retain, motivate and integrate key personnel, we may not achieve our goals.

Our future success depends on our ability to attract, recruit, train, retain, motivate and integrate key personnel, including our recently expanded senior management team, as well as our research and development, manufacturing and sales and marketing personnel. Competition for qualified personnel is intense. Our growth depends, in particular, on attracting and retaining highly-trained sales personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively identify and sell to potential new customers and develop new products. Because of the complex and technical nature of our products and the dynamic market in which we compete, any failure to attract, recruit, train, retain, motivate and integrate qualified personnel could materially harm our operating results and growth prospects.

We have limited experience in marketing and selling our products, and if we are unable to successfully commercialize our products, our business and operating results will be adversely affected.

We have limited experience marketing and selling our products. We currently sell all our products for research use only, through our direct field sales and support organizations located in North America and Europe and through a combination of our own sales force and third-party distributors in additional major markets, including Australia, China, India, Japan, Lebanon, Singapore, South Korea and Taiwan.

The future sales of our products will depend in large part on our ability to effectively market and sell our products, successfully manage and expand our sales force, and increase the scope of our marketing efforts. We may also enter into additional distribution arrangements in the future. Because we have limited experience in marketing and selling our products, our ability to forecast demand, the infrastructure required to support such demand and the sales cycle to customers is unproven. If we do not build an efficient and effective sales force, our business and operating results will be adversely affected.

We rely on a single contract manufacturer to manufacture and supply our Simoa HD-1 Analyzer and rely on a different single contract manufacturer to manufacture and supply our Quanterix SR-X. If either of these manufacturers should fail or not perform satisfactorily, our ability to supply these instruments would be negatively and adversely affected.

We currently rely on a single contract manufacturer, STRATEC Biomedical AG, or STRATEC, an analytical and diagnostic systems manufacturer located in Germany, to manufacture and supply all of our Simoa HD-1 Analyzer instruments. In addition, we currently rely on a single contract manufacturer, Paramit Corporation, or Paramit, a contract manufacturer located in California, to

manufacture and supply all of our Quanterix SR-X instruments. Since our contract with STRATEC does not commit them to supply quantities beyond the amounts included in our forecasts and our contract with Paramit does not commit them to carry inventory or make available any particular quantities, these contract manufacturers may give other customers' needs higher priority than ours, and we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms. If either of these manufacturers were to be unable to supply instruments, our business would be harmed.

Pursuant to our Supply Agreement with STRATEC, as amended, we are required to purchase a minimum number of commercial units of our Simoa HD-1 Analyzer over a seven-year period ending in May 2021. If we fail to purchase a required minimum number of commercial units, including as a result of the impact of sales of the Quanterix SR-X going forward, we would be obligated to pay a fee based on the shortfall of commercial units purchased compared to the required number. If we fail to purchase a required minimum number of commercial instruments and terminate the arrangement in certain circumstances, we would be obligated to issue a warrant to purchase shares of our common stock. Any amount we may have to pay STRATEC for failing to purchase the minimum number of commercial units of our Simoa HD-1 Analyzer will cause our operating results to suffer.

In the event it becomes necessary to utilize a different contract manufacturer for either the Simoa HD-1 Analyzer or the Quanterix SR-X, we would experience additional costs, delays and difficulties in doing so as a result of identifying and entering into an agreement with a new supplier as well as preparing such new supplier to meet the logistical requirements associated with manufacturing our units, and our business would suffer. We may also experience additional costs and delays in the event we need access to or rights under any intellectual property of STRATEC.

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

We may experience manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We may encounter unforeseen situations that would result in delays or shortfalls in our production as well as delays or shortfalls caused by our outsourced manufacturing suppliers and by other third-party suppliers who manufacture components for our products. If we are unable to keep up with demand for our products, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products. Our inability to successfully manufacture our products would have a material adverse effect on our operating results.

We rely on a limited number of suppliers or, in some cases, one supplier, for some of our materials and components used in our consumable products, and may not be able to find replacements or immediately transition to alternative suppliers, which could have a material adverse effect on our business, financial condition, results of operations and reputation.

We rely on limited or sole suppliers for certain reagents and other materials and components that are used in our consumable products. While we periodically forecast our needs for such materials and enter into standard purchase orders with them, we do not have long-term contracts with many of these suppliers. If we were to lose such suppliers, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis on acceptable terms, if at all. An

interruption in our operations could occur if we encounter delays or difficulties in securing these materials, or if the quality of the materials supplied do not meet our requirements, or if we cannot then obtain an acceptable substitute. The time and effort required to qualify a new supplier and ensure that the new materials provide the same or better quality results could result in significant additional costs. Any such interruption could significantly affect our business, financial condition, results of operations and reputation.

If we cannot provide quality technical and applications support, we could lose customers and our business and prospects will suffer.

The placement of our products at new customer sites, the introduction of our technology into our customers' existing laboratory workflows and ongoing customer support can be complex. Accordingly, we need highly trained technical support personnel. Hiring technical support personnel is very competitive in our industry due to the limited number of people available with the necessary scientific and technical backgrounds and ability to understand our Simoa technology at a technical level. To effectively support potential new customers and the expanding needs of current customers, we will need to substantially expand our technical support staff. If we are unable to attract, train or retain the number of highly qualified technical services personnel that our business needs, our business and prospects will suffer.

The life sciences research and diagnostic markets are highly competitive. If we fail to effectively compete, our business, financial condition and operating results will suffer.

We face significant competition in the life sciences research and diagnostic markets. We currently compete with both established and early stage companies that design, manufacture and market systems and consumable supplies. We believe our principal competitors in the life sciences research and diagnostic markets include Bio-Techne, Luminex Corporation, MesoScale Diagnostics, Singulex, Gyros Corporation and Nanostring Technologies, Inc. As we expand the applications for our products to include health screening, we expect to compete with companies such as Siemens, Abbott, Roche, Ortho Clinical Diagnostics and Thermo Fisher Scientific. In addition, there are a number of new market entrants in the process of developing novel technologies for the life sciences research, diagnostic and screening markets.

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

- greater name and brand recognition;
- substantially greater financial and human resources;
- broader product lines;
- larger sales forces and more established distributor networks;
- substantial intellectual property portfolios;
- larger and more established customer bases and relationships; and
- better established, larger scale, and lower cost manufacturing capabilities.

We believe that the principal competitive factors in all of our target markets include:

- cost of instruments and consumables;
- accuracy, including sensitivity and specificity, and reproducibility of results;
- reputation among customers;

- innovation in product offerings;
- flexibility and ease of use; and
- compatibility with existing laboratory processes, tools and methods.

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

Integrating any business, product or technology we acquire, including recently acquired Aushon Biosystems, Inc., can be expensive, time consuming and can disrupt and adversely affect our ongoing business, including product sales, and distract our management.

We may acquire other businesses, products or technologies as well as pursue strategic alliances, joint ventures, technology licenses or investments in complementary businesses, such as our recent acquisition of Aushon Biosystems, Inc. Our ability to successfully integrate any business, product or technology we acquire depends on a number of factors, including, but not limited to, our ability to:

- minimize the disruption and distraction of our management and other employees, including our sales force, in connection with the integration of any acquired business, product or technology;
- minimize disruption in our relationships with customers, distributors or suppliers as a result of such a transaction;
- avoid acquisition of unanticipated liabilities related to acquired companies;
- maintain and increase sales of our existing products;
- establish or manage the transition of the manufacture and supply of any acquired product;
- identify and add the necessary sales, marketing, manufacturing, regulatory and other related personnel, capabilities and infrastructure that are required to successfully integrate any acquired business, product or technology;
- manage the transition and migration of acquired personnel and all commercial, financial, legal, regulatory and other pertinent information relating to any acquired business, product or technology;
- comply with legal, regulatory and contractual requirements applicable to any acquired business, product or technology; and
- maintain and extend intellectual property protection for any acquired product or technology.

If we are unable to perform the above functions or otherwise effectively integrate any acquired businesses, products or technologies, our business, financial condition and operating results will suffer.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

Also, the anticipated benefit of any acquisition may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our

financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

Risks Related to Government Regulation and Diagnostic Product Reimbursement

If the FDA determines that our products are medical devices or if we seek to market our products for clinical diagnostic or health screening use, we will be required to obtain regulatory clearance(s) or approval(s), and may be required to cease or limit sales of our then marketed products, which could materially and adversely affect our business, financial condition and results of operations. Any such regulatory process would be expensive, time-consuming and uncertain both in timing and in outcome.

We have focused initially on the life sciences research market. This includes laboratories associated with academic and governmental research institutions, as well as pharmaceutical, biotechnology and contract research companies. Accordingly, our products are labeled as "Research Use Only," or RUO, and are not intended for diagnostic use. While we have focused initially on the life sciences research market and RUO products only, our strategy is to expand our product line to encompass products that are intended to be used for the diagnosis of disease, either alone or in collaboration with third parties (such as our collaboration with bioMérieux). Such IVD products will be subject to regulation by the FDA as medical devices, or comparable international agencies, including requirements for regulatory clearance or approval of such products before they can be marketed. If the FDA were to determine that our products are intended for clinical use or if we decided to market our products for such use, we would be required to obtain FDA 510(k) clearance or premarket approval in order to sell our products in a manner consistent with FDA laws and regulations. Such regulatory approval processes or clearances are expensive, time-consuming and uncertain; our efforts may never result in any approved PMA application or 510(k) clearance for our products; and failure by us or a collaborator to obtain or comply with such approvals and clearances could have an adverse effect on our business, financial condition or operating results.

IVD products are regulated as medical devices by the FDA and comparable international agencies and may require either clearance from the FDA following the 510(k) pre-market notification process or PMA from the FDA, in each case prior to marketing. If we or our collaborators are required to obtain a PMA or 510(k) clearance for products based on our technology, we or they would be subject to a substantial number of additional requirements for medical devices, including establishment registration, device listing, Quality Systems Regulations, or QSRs, which cover the design, testing, production, control, quality assurance, labeling, packaging, servicing, sterilization (if required), and storage and shipping of medical devices (among other activities), product labeling, advertising, recordkeeping, post-market surveillance, post-approval studies, adverse event reporting, and correction and removal (recall) regulations. One or more of the products we or a collaborator may develop using our technology may also require clinical trials in order to generate the data required for PMA. Complying with these requirements may be time-consuming and expensive. We or our collaborators may be required to expend significant resources to ensure ongoing compliance with the FDA regulations and/or take satisfactory corrective action in response to enforcement action, which may have a material adverse effect on the ability to design, develop, and commercialize products using our technology as planned. Failure to comply with these requirements may subject us or a collaborator to a range of enforcement actions, such as warning letters, injunctions, civil monetary penalties, criminal prosecution, recall and/or seizure of products, and revocation of marketing authorization, as well as significant adverse publicity. If we or our collaborators fail to obtain, or experience significant delays in obtaining, regulatory approvals for IVD products, such products may not be able to be launched or successfully commercialized in a timely manner, or at all.

Laboratory developed tests, or LDTs, are a subset of IVD tests that are designed, manufactured and used within a single laboratory. The FDA maintains that LDTs are medical devices and has for the most part exercised enforcement discretion for most LDTs. A significant change in the way that the

FDA regulates any LDTs that we, our collaborators or our customers develop using our technology could affect our business. The FDA has considered the appropriate way to regulate such tests, but after publishing several draft guidances and holding a number of public hearings and workshops, no final guidance has been issued. However, if the FDA requires laboratories to undergo premarket review and comply with other applicable FDA requirements in the future, the cost and time required to commercialize an LDT will increase substantially, and may reduce the financial incentive for laboratories to develop LDTs, which could reduce demand for our instruments and our other products.

Failure to comply with applicable FDA requirements could subject us to misbranding or adulteration allegations under the Federal Food, Drug, and Cosmetic Act. We could be subject to a range of enforcement actions, including warning letters, injunctions, civil monetary penalties, criminal prosecution, and recall and/or seizure of products, as well as significant adverse publicity. In addition, changes to the current regulatory framework, including the imposition of additional or new regulations, could arise at any time during the development or marketing of our products, which may negatively affect our ability to obtain or maintain FDA or comparable regulatory approval of our products, if required.

Foreign jurisdictions have laws and regulations similar to those described above, which may adversely affect our ability to market our products as planned in such countries. The number and scope of these requirements are increasing. As in the United States, the cost and time required to comply with regulatory requirements may be substantial, and there is no guarantee that we will obtain the necessary authorization(s) required to make our products commercially viable. As a result, the imposition of foreign requirements may also have a material adverse effect on the commercial viability of our operations.

If we do not comply with governmental regulations applicable to our recently acquired CLIA-certified laboratory, we may not be able to continue our operations.

The operation of our recently acquired CLIA-certified laboratory is subject to regulation by numerous federal, state and local governmental authorities in the United States. This laboratory holds a CLIA certificate of compliance and is licensed by the Commonwealth of Massachusetts and the State of Maryland, and we intend to obtain other state licenses as may be required in the future. Failure to comply with federal or state regulations or changes in those regulatory requirements, could result in a substantial curtailment or even prohibition of the operations of our laboratory and could have an adverse effect on our business. CLIA is a federal law that regulates clinical laboratories that perform testing on human specimens for the purpose of providing information for the diagnosis, prevention or treatment of disease. To maintain CLIA certification, laboratories are subject to survey and inspection every two years. Moreover, CLIA inspectors may make unannounced inspections of these laboratories. If we were to lose our CLIA certification or any required state licenses, whether as a result of a revocation, suspension or limitation, it could have a material adverse effect on our business.

We expect to rely on third parties in conducting any required future studies of diagnostic products that may be required by the FDA or other regulatory authorities, and those third parties may not perform satisfactorily.

We do not have the ability to independently conduct clinical trials or other studies that may be required to obtain FDA and other regulatory clearance or approval for future diagnostic products. Accordingly, we expect that we would rely on third parties, such as clinical investigators, consultants, and collaborators to conduct such studies if needed. Our reliance on these third parties for clinical and other development activities would reduce our control over these activities. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised, we may not be able to obtain regulatory clearance or approval.

If diagnostic procedures that are enabled by our technology are subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, our business could be harmed.

The ability of our customers to commercialize diagnostic tests based on our technology will depend in part on the extent to which coverage and reimbursement for these tests will be available from government health programs, private health insurers and other third-party payors. In the United States, the principal decisions about reimbursement for new technologies are often made by the Centers for Medicare and Medicaid Services, or CMS. Private payors often follow CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of payments for particular products and procedures. We cannot be sure that coverage will be available for any diagnostic tests based on our technology, and, if coverage is available, the level of payments. Reimbursement may impact the demand for those tests. If reimbursement is not available or is available only to limited levels, our customers may not be able to successfully commercialize any tests for which they receive marketing authorization.

Current and future legislation may increase the difficulty and cost to obtain marketing approval of and commercialize any products based on our technology and affect the prices that may be obtained.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, collectively, the ACA, became law. The ACA is a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA. Both Congress and President Trump have expressed their intention to repeal or repeal and replace the ACA, and as a result certain sections of the ACA have not been fully implemented or were effectively repealed. The uncertainty around the future of the ACA, and in particular the impact to reimbursement levels and the number of insured individuals, may lead to uncertainty or delay in the purchasing decisions of our customers, which may in turn negatively impact our product sales. If there are not adequate reimbursement levels, our business and results of operations could be adversely affected.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we or our collaborators will receive for any cleared or approved product. Any reduction in payments from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize any of our products for which we receive marketing approval.

In addition, sales of our tests outside of the United States will subject us to foreign regulatory requirements, which may also change over time.

We cannot predict whether future healthcare initiatives will be implemented at the federal or state level or in countries outside of the United States in which we may do business, or the effect any future legislation or regulation will have on us. The expansion in government's effect on the United States healthcare industry may result in decreased profits to us, lower reimbursements by payors for our products or reduced medical procedure volumes, all of which may adversely affect our business, financial condition and results of operations.

Risks Related to Our Operations

We depend on our information technology systems, and any failure of these systems could harm our business.

We depend on information technology and telecommunications systems to operate our business. We have installed, and expect to expand, a number of enterprise software systems that affect a broad range of business processes and functional areas, including, for example, systems handling human resources, accounting, manufacturing, inventory control, financial controls and reporting, sales administration, and other infrastructure operations. In addition to the aforementioned business systems, we intend to extend the capabilities of both our preventative and detective security controls by augmenting the monitoring and alerting functions, network design, and automatic countermeasure operations of our technical systems. These information technology and telecommunications systems support a variety of functions, including manufacturing operations, quality control, customer service support, and general administrative activities.

Information technology and telecommunications systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious human acts and natural disasters. Moreover, despite network security and back-up measures, some of our servers are potentially vulnerable to physical or electronic break-ins, computer viruses, and similar disruptive problems. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our information technology and telecommunications systems, failures or significant downtime of our information technology or telecommunications systems or those used by our third-party suppliers could prevent us from operating our business and managing the administrative aspects of our business. Any disruption or loss of information technology or telecommunications systems on which critical aspects of our operations depend could have an adverse effect on our business.

Security breaches, loss of data and other disruptions could compromise sensitive information related to our business or prevent us from accessing critical information and expose us to liability, which could adversely affect our business and our reputation.

In the ordinary course of our business, we collect and store sensitive data, intellectual property and proprietary business information owned or controlled by ourselves or our customers. This data encompasses a wide variety of business-critical information including research and development information, commercial information, and business and financial information. We face four primary risks relative to protecting this critical information: loss of access; inappropriate disclosure; inappropriate modification; and inadequate monitoring of our controls over the first three risks.

The secure processing, storage, maintenance, and transmission of this critical information is vital to our operations and business strategy, and we devote significant resources to protecting such information. Although we take measures to protect sensitive information from unauthorized access or disclosure, our information technology and infrastructure may be vulnerable to attacks by hackers or viruses, breaches, interruptions due to employee error, malfeasance, lapses in compliance with privacy and security mandates, or other disruptions. Any such breach or interruption could compromise our networks and the information stored there could be accessed by unauthorized parties, 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, government enforcement actions and regulatory penalties. Unauthorized access, loss or dissemination could also disrupt our operations, including our ability to conduct research and development activities, process and prepare company financial information, manage various general and administrative aspects of our business and damage our reputation, any of which could adversely affect our reputation and our business. In addition, there can be no assurance that we will promptly detect any such disruption or security breach, if at all. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of our product candidates could be delayed.

We face risks related to handling of hazardous materials and other regulations governing environmental safety.

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous materials and the generation, transportation and storage of waste. Although we have secured clearance from the EPA historically, and currently are operating in compliance with applicable EPA rules and regulations, our business could be adversely affected if we discover that we or an acquired business is not in material compliance with these rules and regulations. In the future, we may pursue the use of other surfactant substances that will require clearance from the EPA, and we may fail to obtain such clearance. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business.

Risks Related to Intellectual Property

If we are unable to protect our intellectual property, it may reduce our ability to maintain any technological or competitive advantage over our competitors and potential competitors, and our business may be harmed.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. As of March 1, 2018, we owned or exclusively licensed 18 granted U.S. patents and approximately 11 pending U.S. patent applications. We also owned or exclusively licensed approximately 32 pending patent applications and granted patents in particular jurisdictions outside of the United States. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us, we may lose our technological or competitive advantage, or we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

We cannot assure investors that any of our currently pending or future patent applications will result in granted patents, and we cannot predict how long it will take for such patents to be granted. It is possible that, for any of our patents that have granted or that may grant in the future, others will design around our patented technologies. Further, we cannot assure investors that other parties will not challenge any patents granted to us or that courts or regulatory agencies will hold our patents to be valid or enforceable. We cannot guarantee investors that we will be successful in defending challenges made against our patents and patent applications. Any successful third-party challenge to our patents could result in the unenforceability or invalidity of such patents, or to such patents being interpreted narrowly or otherwise in a manner adverse to our interests. Our ability to establish or maintain a technological or competitive advantage over our competitors may be diminished because of these uncertainties. For these and other reasons, our intellectual property may not provide us with any competitive advantage. 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 granted patents;
- We or our licensors might not have been the first to file patent applications for these inventions. To determine the priority of these inventions, we may have to participate in interference proceedings or derivation proceedings declared by the United States Patent and Trademark Office, or USPTO, that could result in substantial cost to us. No assurance can be given that our patent applications or granted patents (or those of our licensors) will have priority over any other patent or patent application involved in such a proceeding;

- Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies;
- It is possible that our owned or licensed pending patent applications will not result in granted patents, and even if such pending patent applications grant as patents, they may not provide a basis for intellectual property protection of commercially viable products, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;
- We may not develop additional proprietary products and technologies that are patentable;
- The patents of others may have an adverse effect on our business; and
- While we apply for patents covering our products and technologies and uses thereof, as we deem appropriate, we may fail to apply for patents on important products and technologies in a timely fashion or at all, or we may fail to apply for patents in potentially relevant jurisdictions.

To the extent our intellectual property offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate coverage of our competitors' products, our competitive position could be adversely affected, as could our business.

Software is a critical component of our instruments. To the extent such software is not protected by our patents, we depend on trade secret protection and non-disclosure agreements with our employees, strategic partners and consultants, which may not provide adequate protection.

The measures that we use to protect the security of our intellectual property and other proprietary rights may not be adequate, which could result in the loss of legal protection for, and thereby diminish the value of, such intellectual property and other rights.

In addition to pursuing patents on our technology, we also rely upon trademarks, trade secrets, copyrights and unfair competition laws, as well as license agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. Despite these measures, any of our intellectual property rights could be challenged, invalidated, circumvented or misappropriated. In addition, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Moreover, if a party having an agreement with us has an overlapping or conflicting obligation to a third party, our rights in and to certain intellectual property could be undermined. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, the outcome would be unpredictable, and any remedy may be inadequate. In addition, courts outside the United States may be less willing to protect trade secrets.

In addition, competitors could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If our intellectual property does not adequately protect our market share against competitors' products and methods, our competitive position could be adversely affected, as could our business.

Some of our owned and in-licensed intellectual property has been discovered through government funded programs and thus is subject to federal regulations such as "march-in" rights, certain reporting requirements, and a preference for U.S. industry. Compliance with such regulations may limit our exclusive rights, subject us to expenditure of resources with respect to reporting requirements, and limit our ability to contract with non-U.S. manufacturers.

Some of the intellectual property rights we own and have in-licensed have been generated through the use of U.S. government funding and are therefore subject to certain federal regulations. For example, all of the issued U.S. patents we own and all of the intellectual property rights licensed to us under our license agreement with Tufts have been generated using U.S. government funds. As a result, the U.S. government has certain rights to intellectual property embodied in our current or future products pursuant to the Bayh-Dole Act of 1980, or Bayh-Dole Act. These U.S. government rights in certain inventions developed under a government-funded program include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right to require us to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if the government determines that: (i) adequate steps have not been taken to commercialize the invention; (ii) government action is necessary to meet public health or safety needs; or (iii) government action is necessary to meet requirements for public use under federal regulations (also referred to as "march-in rights"). The U.S. government also has the right to take title to these inventions if we fail, or the applicable licensor fails, to disclose the invention to the government, elect title, and file an application to register the intellectual property within specified time limits. In addition, the U.S. government may acquire title to these inventions in any country in which a patent application is not filed within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us, or the applicable licensor, to expend substantial resources. In addition, the U.S. government requires that any products embodying the subject invention or produced through the use of the subject invention be manufactured substantially in the U.S. The manufacturing preference requirement can be waived if the owner of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. manufacturing may limit our ability to license the applicable patent rights on an exclusive basis under certain circumstances.

If we enter into future arrangements involving government funding, and we make inventions as a result of such funding, intellectual property rights to such discoveries may be subject to the applicable provisions of the Bayh-Dole Act. To the extent any of our current or future intellectual property is generated through the use of U.S. government funding, the provisions of the Bayh-Dole Act may similarly apply. Any exercise by the government of certain of its rights could harm our competitive position, business, financial condition, results of operations and prospects.

We depend on technology that is licensed to us by Tufts University. Any loss of our rights to this technology could prevent us from selling our products.

Our core Simoa technology is licensed exclusively to us from Tufts University. We do not own the patents that underlie this license. Our rights to use this technology and employ the inventions claimed in the licensed patents are subject to the continuation of and compliance with the terms of the license. Our principal obligations under our license agreement with Tufts are as follows:

- royalty payments;
- milestone payments;
- annual maintenance fees;

- using commercially reasonable efforts to develop and sell a product using the licensed technology and developing a market for such product;
- paying and/or reimbursing fees related to prosecution, maintenance and enforcement of patent rights; and
- providing certain reports.

If we breach any of these obligations, Tufts may have the right to terminate the license, which could result in our being unable to develop, manufacture and sell our Simoa products or a competitor's gaining access to the Simoa technology. Termination of our license agreement with Tufts would have a material adverse effect on our business.

In addition, we are a party to a number of other agreements that include licenses to intellectual property, including non-exclusive licenses. We expect that we may need to enter into additional license agreements in the future. Our business could suffer, for example, if any current or future licenses terminate, if the licensors fail to abide by the terms of the license, if the licensed patents or other rights are found to be invalid or unenforceable, or if we are unable to enter into necessary licenses on acceptable terms.

As we have done previously, we may need or may choose to obtain licenses from third parties to advance our research or allow commercialization of our current or future products, and we cannot provide any assurances that third-party patents do not exist that might be enforced against our current or future products in the absence of such a license. We may fail to obtain any of these licenses on commercially reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected products, which could materially harm our business and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation.

Licensing of intellectual property is important to our business and involves complex legal, business and scientific issues. Disputes may arise between us and our licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our products, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product, or the dispute may have an adverse effect on our results of operation.

In addition to agreements pursuant to which we in-license intellectual property, we have in the past and will continue in the future to grant licenses under our intellectual property. For example, we have granted certain exclusive and co-exclusive licenses in certain fields to bioMérieux and a non-exclusive license to a diagnostic company in certain fields. Like our in-licenses, our out-licenses are complex and disputes may arise between us and our licensees, such as the types of disputes described above. Moreover, our licensees may breach their obligations, or we may be exposed to liability due to our failure or alleged failure to satisfy our obligations. Any such occurrence could have an adverse affect on our business.

If we or any of our partners are sued for infringing intellectual property rights of third parties, it would be costly and time consuming, and an unfavorable outcome in that litigation could have a material adverse effect on our business.

Our success also depends on our ability to develop, manufacture, market and sell our products and perform our services without infringing upon the proprietary rights of third parties. Numerous U.S. and foreign-issued patents and pending patent applications owned by third parties exist in the fields in which we are developing products and services. As part of a business strategy to impede our successful commercialization and entry into new markets, competitors may claim that our products and/or services infringe their intellectual property rights.

We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against claims of infringement made by third parties. Any adverse ruling by a court or administrative body, or perception of an adverse ruling, may have a material adverse impact on our ability to conduct our business and our finances. Moreover, third parties making claims against us may be able to obtain injunctive relief against us, which could block our ability to offer one or more products or services and could result in a substantial award of damages against us. In addition, since we sometimes indemnify customers, collaborators or licensees, we may have additional liability in connection with any infringement or alleged infringement of third party intellectual property.

Because patent applications can take many years to issue, there may be pending applications, some of which are unknown to us, that may result in issued patents upon which our products or proprietary technologies may infringe. Moreover, we may fail to identify issued patents of relevance or incorrectly conclude that an issued patent is invalid or not infringed by our technology or any of our products. There is a substantial amount of litigation involving patent and other intellectual property rights in our industry. If a third-party claims that we or any of our licensors, customers or collaboration partners infringe upon a third-party's intellectual property rights, we may have to:

- seek to obtain licenses that may not be available on commercially reasonable terms, if at all;
- abandon any infringing product or redesign our products or processes to avoid infringement;
- pay substantial damages including, in an exceptional case, treble damages and attorneys' fees, which we may have to pay if a court decides that the product or proprietary technology at issue infringes upon or violates the third-party's rights;
- pay substantial royalties or fees or grant cross-licenses to our technology; or
- defend litigation or administrative proceedings that may be costly whether we win or lose, and which could result in a substantial diversion of our financial and management resources.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. In the event of infringement or unauthorized use, we may file one or more infringement lawsuits, which can be expensive and time consuming. An adverse result in any such litigation proceedings could put one or more of our patents at risk of being invalidated, being found to be unenforceable or being interpreted narrowly and could put our patent applications at risk of not issuing. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Most of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex patent litigation longer than we could. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise any funds necessary to continue our operations, continue our internal research programs, in-license needed technology, or enter into development partnerships that would help us bring our products to market.

In addition, patent litigation can be very costly and time consuming. An adverse outcome in such litigation or proceedings may expose us or any of our future development partners to loss of our proprietary position, expose us to significant liabilities, or require us to seek licenses that may not be available on commercially acceptable terms, if at all.

Our issued patents could be found invalid or unenforceable if challenged in court, which could have a material adverse impact on our business.

If we or any of our partners were to initiate legal proceedings against a third-party to enforce a patent covering one of our products or services, the defendant in such litigation could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement, or failure to claim patent eligible subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before the USPTO even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the challenged patent. Such a loss of patent protection would have a material adverse impact on our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed alleged trade secrets of their other clients or former employers to us, which could subject us to costly litigation.

As is common in the life sciences industry, we engage the services of consultants and independent contractors to assist us in the development of our products. Many of these consultants and independent contractors were previously employed at, or may have previously or may be currently providing consulting or other services to, universities or other technology, biotechnology or pharmaceutical companies, including our competitors or potential competitors. We may become subject to claims that our company, a consultant or an independent contractor inadvertently or otherwise used or disclosed trade secrets or other information proprietary to their former employers or their former or current

clients. We may similarly be subject to claims stemming from similar actions of an employee, such as one who was previously employed by another company, including a competitor or potential competitor. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team. If we were not successful we could lose access or exclusive access to valuable intellectual property.

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

We generally enter into confidentiality and intellectual property assignment agreements with our employees, consultants, and contractors. These agreements generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, those agreements may not be honored and may not effectively assign intellectual property rights to us. For example, even if we have a consulting agreement in place with an academic advisor pursuant to which such academic advisor is required to assign any inventions developed in connection with providing services to us, such academic advisor may not have the right to assign such inventions to us, as it may conflict with his or her obligations to assign all such intellectual property to his or her employing institution.

In addition, we sometimes enter into agreements where we provide services to third parties, such as customers. Under such circumstances, our agreements may provide that certain intellectual property that we conceive in the course of providing those services is assigned to the customer. In those cases, we would not be able to use that particular intellectual property in, for example, our work for other customers without a license.

We may not be able to protect our intellectual property rights throughout the world, which could materially, negatively affect our business.

Filing, prosecuting and defending patents on current and future products in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, regardless of whether we are able to prevent third parties from practicing our inventions in the United States, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not pursued and 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 it is 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. Even if we pursue and obtain issued patents in particular jurisdictions, our patent claims or other intellectual property rights may not be effective or sufficient to prevent third parties from so competing. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries.

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 and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights

generally. Proceedings to enforce our patent 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 and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license and may adversely impact our business.

In addition, we and our partners also face the risk that our products are imported or reimported into markets with relatively higher prices from markets with relatively lower prices, which would result in a decrease of sales and any payments we receive from the affected market. Recent developments in U.S. patent law have made it more difficult to stop these and related practices based on theories of patent infringement.

Changes in patent laws or patent jurisprudence could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other life science industry companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents involve both technological complexity and legal complexity. Therefore, obtaining and enforcing patents is costly, time-consuming and inherently uncertain. In addition, the America Invents Act, or the AIA, was signed into law on September 16, 2011, and many of the substantive changes became effective on March 16, 2013.

An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by the third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application, but circumstances could prevent us from promptly filing patent applications on our inventions.

Among some of the other changes introduced by the AIA are changes that limit where a patent holder may file a patent infringement suit and providing additional opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of our owned and in-licensed U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

Additionally, the U.S. Supreme Court has ruled on several patent cases in recent years, such as *Impression Products, Inc. v. Lexmark International, Inc., Association for Molecular Pathology v. Myriad Genetics, Inc*,, *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* and *Alice Corporation Pty. Ltd. v. CLS Bank International*, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the

U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case. In some cases, our licensors may be responsible for, for example, these payments, thereby decreasing our control over compliance with these requirements.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition by potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected.

We may use third-party open source software components in future products, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell such products.

While our current products do not contain any software tools licensed by third-party authors under "open source" licenses, we may choose to use open source software in future products. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses may contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar products with less development effort and time and ultimately could result in a loss of product sales.

Although we intend to monitor any use of open source software to avoid subjecting our products to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that any such licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, we cannot assure investors that our processes for controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis, or to make generally available,

in source code form, our proprietary code, any of which could adversely affect our business, operating results, and financial condition.

We use third-party software that may be difficult to replace or cause errors or failures of our products that could lead to lost customers or harm to our reputation.

We use software licensed from third parties in our products. In the future, this software may not be available to us on commercially reasonable terms, or at all. Any loss of the right to use any of this software could result in delays in the production of our products until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated, which could harm our business. In addition, any errors or defects in third-party software or other third-party software failures could result in errors, defects or cause our products to fail, which could harm our business and be costly to correct. Many of these providers attempt to impose limitations on their liability for such errors, defects or failures, and if enforceable, we may have additional liability to our customers or third-party providers that could harm our reputation and increase our operating costs.

We will need to maintain our relationships with third-party software providers and to obtain software from such providers that does not contain any errors or defects. Any failure to do so could adversely impact our ability to deliver reliable products to our customers and could harm our results of operations.

Numerous factors may limit any potential competitive advantage provided by our intellectual property rights.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, provide a barrier to entry against our competitors or potential competitors, or permit us to maintain our competitive advantage. Moreover, if a third party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative:

- others may be able to develop and/or practice technology that is similar to our technology or aspects of our technology but that is not covered by the claims of any patents that have issued, or may issue, from our owned or in-licensed patent applications;
- we might not have been the first to make the inventions covered by a pending patent application that we own or license;
- we might not have been the first to file patent applications covering an invention;
- others may independently develop similar or alternative technologies without infringing our intellectual property rights;
- pending patent applications that we own or license may not lead to issued patents;
- patents, if issued, that we own or license may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- third parties may compete with us in jurisdictions where we do not pursue and obtain patent protection;
- we may not be able to obtain and/or maintain necessary or useful licenses on reasonable terms or at all;
- third parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights over that intellectual property;

- we may not be able to maintain the confidentiality of our trade secrets or other proprietary information;
- we may not develop or in-license additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business and results of operations.

Risks Related to Our Common Stock and Being a Public Company

We expect that our stock price may fluctuate significantly.

The market price of shares of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- announcements by us, our partners or our competitors of new products, significant contracts, strategic partnerships, joint ventures, collaborations, commercial relationships or capital commitments;
- competition from existing products or new products that may emerge;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- issuance of new or updated research or reports by securities analysts or recommendations for our stock;
- adverse regulatory announcements;
- disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- commencement of, or our involvement in, litigation;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- market conditions in our markets;
- manufacturing disputes or delays;
- any future sales of our common stock or other securities;
- any change to the composition of the board of directors or key personnel;
- expiration of the contractual lock-up agreements with our executive officers, directors and security holders entered into in connection with our initial public offering;
- general economic conditions and slow or negative growth of our markets;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional debt or equity financing efforts; and
- other factors described in this Risk Factor section of this Annual Report on Form 10-K.

These and other market and industry factors may cause the market price and demand for our common stock to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, the stock market in general, and life

science companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. In the past, when the market price of a stock has been volatile, holders of that stock have on occasion instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to regularly publish reports on us, we could lose visibility in the public markets, which could cause our stock price or trading volume to decline.

Our principal stockholders and management own a significant percentage of our stock and will be able to exercise significant influence over matters subject to stockholder approval.

As of December 31, 2017, our executive officers, directors and 5% or greater stockholders owned approximately 64% of our outstanding common stock. Accordingly, our executive officers, directors and principal stockholders have significant influence over our operations. This concentration of ownership could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us, which in turn could have a material adverse effect on our stock price and may prevent attempts by our stockholders to replace or remove the board of directors or management.

Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Of the 21,937,510 shares of our common stock outstanding as of March 1, 2018, approximately 16,991,531 shares are currently subject to restrictions on transfer under lock-up arrangements with the underwriters for our initial public offering. These restrictions are due to expire June 4, 2018, resulting in these shares becoming eligible for public sale on June 5, 2018 if they are registered under the Securities Act of 1933, as amended, which we refer to as the Securities Act, or if they qualify for an exemption from registration under the Securities Act, including under Rules 144 or 701. Moreover, holders of an aggregate of 14,721,351 shares of our common stock will have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity incentive plans or that are issuable upon exercise of outstanding options. These shares can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates and the lock-up agreements described above. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

We have never paid dividends on our capital stock and we do not anticipate paying any dividends in the foreseeable future. Consequently, any gains from an investment in our common stock will likely depend on whether the price of our common stock increases.

We have not paid dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. In addition, the terms of our indebtedness with Hercules prohibit us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future. Consequently, in the foreseeable future, you will likely only experience a gain from an investment in our common stock if the price of our common stock increases.

We have broad discretion in the use of our cash and cash equivalents, including the net proceeds from our initial public offering, and may not use these financial resources effectively, which could adversely affect our business, financial condition and results of operations and cause our stock price to decline.

Our management has broad discretion in the application our cash and cash equivalents, including the net proceeds from our initial public offering, and you will be relying on the judgment of our management regarding the application of these financial resources. Our management might not apply these financial proceeds in ways that ultimately increase the value of your investment. If we do not invest or apply these financial resources in ways that enhance stockholder value, we may fail to achieve expected financial results, which could adversely affect our business, financial condition and results of operations and cause our stock price to decline.

Anti-takeover provisions contained in our restated certificate of incorporation and restated by-laws, as well as provisions of Delaware law, could impair a takeover attempt.

Our restated certificate of incorporation, restated by-laws and Delaware law contain provisions which could have the effect of rendering more difficult, delaying or preventing an acquisition deemed undesirable by our board of directors. Our corporate governance documents include provisions:

- authorizing our board of directors to issue up to 5,000,000 shares of preferred stock without stockholder approval upon the terms and conditions and with the rights, privileges and preferences as our board of directors may determine;
- specifying that special meetings of our stockholders can be called only by our board of directors and that our stockholders may not act by written consent;
- establishing an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- providing that directors may be removed only for cause;
- providing that our board of directors may create new directorships and 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;
- establishing that our board of directors is divided into three classes—Class I, Class II, and Class III—with each class serving staggered three-year terms;
- providing that our board of directors may amend our restated by-laws without stockholder approval; and
- requiring a super-majority of votes to amend certain of the above-mentioned provisions.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents some stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of substantially all of our outstanding common stock.

Any provision of our restated certificate of incorporation, restated by-laws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

We are an "emerging growth company" and are able to avail ourselves of reduced disclosure requirements applicable to emerging growth companies, and we plan to avail ourselves of the ability to adopt new accounting standards on the timeline permitted for private companies, which could make our common stock less attractive to investors and our financial statements less comparable to other companies who are complying with new accounting standards on public company timelines.

We are an "emerging growth company," as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including not being required to comply with the auditor attestation requirements of Section 404(b) 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. In addition, Section 107 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 for complying with new or revised accounting standards. In other words, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards and, as a result, will comply with new or revised accounting standards not later than the relevant dates on which adoption of such standards is required for non-public companies. There are currently accounting standards that are expected to affect the financial reporting of many public companies as early as the first calendar quarter of 2018, including ASC 606, *Revenue from contracts with customers*. As a result of this election, the timeline to comply with these standards will in many cases be delayed as compared to other public companies who are not eligible to have made or have not made this election. For more information on the effect of this election, including the timing of when we currently plan to adopt certain accounting standards that could materially affect our financial statements, refer to Note 2 to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K. As a result, investors may view our financial statements as not comparable to other public companies. We cannot predict if investors will 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. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenue of $1.0 billion or more; (ii) December 31, 2022; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

We incur increased costs and devote substantial management time as a result of operating as a public company.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company, and these expenses may increase even more after we are no longer an "emerging growth company." We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Protection Act, as well as rules adopted, and to be adopted, by the SEC and the Nasdaq Global Market. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations substantially increase our legal and financial compliance costs and make some activities more time-consuming and costly. The increased costs increase our net loss. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

In addition, as a public company we incur additional costs and obligations in order to comply with SEC rules that implement Section 404 of the Sarbanes-Oxley Act. Under these rules, beginning with our annual report for the year ending December 31, 2018, we will be required to make a formal assessment of the effectiveness of our internal control over financial reporting, and once we cease to be an emerging growth company, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaging in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of our internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are designed and operating effectively, and implement a continuous reporting and improvement process for internal control over financial reporting.

Item 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

Item 2. PROPERTIES

We lease approximately 30,655 square feet of office, laboratory, and manufacturing space at our headquarters in Lexington, Massachusetts, under a lease that expires June 30, 2020. In addition, pursuant to our acquisition of Aushon Biosystems, Inc. on January 30, 2018, we lease approximately 21,500 square feet of office, laboratory, and manufacturing space in Billerica, Massachusetts, under a lease that expires February 28, 2021. We believe that this existing office, laboratory and manufacturing space will be sufficient to meet our needs for the foreseeable future. However, we may choose in the future to terminate either or both of these leases in order to consolidate operations in one location.

Item 3. LEGAL PROCEEDINGS

We are not currently a party to any material legal proceedings.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock began trading on The Nasdaq Global Market on December 7, 2017 under the symbol "QTRX." The following table sets forth, for the periods indicated, the high and low sales prices for the Common Stock, as reported by Nasdaq, since our common stock commenced public trading:

	Common Stock	
	High	Low
Year Ended December 31, 2017:		
Fourth Quarter (beginning December 7, 2017)	$ 23.70	$ 15.56
Year Ending December 31, 2018:		
First Quarter (through March 15, 2018)	$ 24.805	$ 17.45

Stockholders

As of March 1, 2018, there were approximately 66 stockholders of record of the 21,937,510 outstanding shares of common stock.

Dividends

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and future earnings, if any, for use in the operation of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future. In addition, the terms of our indebtedness with Hercules Capital, Inc. prohibit us from paying dividends. Any future determination to declare and pay dividends will be made at the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, our financial condition, our capital requirements, general business conditions, our future prospects and other factors that our board of directors may deem relevant.

Unregistered Sales of Securities

Set forth below is information regarding shares of preferred stock, common stock and warrants issued, and options granted, by us in the year ended December 31, 2017 that were not registered under the Securities Act. The share and per share amounts reflect the 1-for-3.214 reverse stock split of our common stock that was effected on December 4, 2017.

Issuances of Stock and Warrants

On March 31, 2017, we issued a warrant to purchase 38,828 shares of Series D preferred stock at an exercise price of $3.67 per share to our lender in connection with an amendment to our loan facility. Upon the closing of our initial public offering, this warrant was automatically converted into a warrant to purchase 12,080 shares of our common stock at an exercise price of $11.795 per share.

On June 2, 2017, we issued an aggregate of 2,113,902 shares of Series D-1 preferred stock to five accredited investors at a purchase price of $4.021 per share for an aggregate of $8.5 million. The 2,113,902 shares of Series D-1 preferred stock outstanding converted into 657,715 shares of common stock upon the closing of our initial public offering.

On November 30, 2017, we issued an aggregate of 31,283 shares of Series C preferred stock to 10 accredited investors upon the net exercise of warrants to purchase 102,636 shares of Series C

preferred stock and the cash exercise of warrants to purchase 8,474 shares of Series C preferred stock at an exercise price of $3.3299 per share.

From January 1, 2017 through December 31, 2017, we issued an aggregate of 90,265 shares of common stock upon the exercise of options and no shares of common stock representing stock awards to certain of our employees, directors and consultants under the 2007 Stock Option and Grant Plan, as amended.

Stock Option and Restricted Stock Grants

From January 1, 2017 through December 31, 2017, we granted stock options under the 2007 Stock Option and Grant Plan, as amended, to purchase an aggregate of 1,250,169 shares of common stock, net of forfeitures, at a weighted-average exercise price of $8.47 per share, to certain of our employees, consultants and directors.

Securities Act Exemptions

The offers, sales and issuances of the securities described above were exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D. The grants of stock options described above under "Stock Option and Restricted Stock Grants" were exempt from registration under the Securities Act in reliance on Rule 701 promulgated under the Securities Act as offers and sales of securities under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. Each of the recipients of securities in any transaction exempt from registration either received or had adequate access, through employment, business or other relationships, to information about us.

All certificates representing the securities issued in the transactions described above included appropriate legends setting forth that the securities had not been offered or sold pursuant to a registration statement and describing the applicable restrictions on transfer of the securities. There were no underwriters employed in connection with any of the transactions set forth above.

Use of Proceeds from Initial Public Offering of Common Stock

On December 11, 2017, we completed the initial public offering of our common stock, which resulted in the sale of 4,916,480 shares, including 641,280 shares sold by us pursuant to the exercise in full by the underwriters of their option to purchase additional shares in connection with the initial public offering, at a price to the public of $15.00 per share. The offer and sale of all of the shares in our initial public offering was registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-221475), which was declared effective by the SEC on December 6, 2017, and a registration statement on Form S-1 (File No. 333-221932) under Rule 462(b) of the Securities Act that became effective upon its filing. Following the sale of all of the shares in connection with the closing of our initial public offering, the offering terminated. J.P. Morgan Securities LLC, Leerink Partners LLC and Cowen and Company, LLC acted as joint book-running managers for the initial public offering. BTIG, LLC and Evercore Group L.L.C. acted as a co-managers.

We received approximately $65.6 million in net proceeds after deducting underwriting discounts and commissions and offering costs payable by us. As of December 31, 2017, we had not used any of the net proceeds from the offering. None of the offering expenses consisted of direct or indirect payments made by us to directors, officers or persons owning 10% or more of our common stock or to their associates, or to our affiliates, and we have not used any of the net proceeds from the offering to make payments, directly or indirectly, to any such persons. There has been no material change in the planned use of the net proceeds from our initial public offering as described in our final prospectus filed with the SEC on December 7, 2017 pursuant to Rule 424(b)(4) under the Securities Act. We have

invested the unused proceeds from the offering in cash equivalents in accordance with our investment policy.

Issuer Purchases of Equity Securities

Not applicable.

Item 6. SELECTED FINANCIAL DATA

You should read the following selected financial data together with our consolidated financial statements and the related notes and the information under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report on Form 10-K. We have derived the statement of operations data for the years ended December 31, 2017, 2016 and 2015 and the balance sheet data as of December 31, 2017 and 2016 from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected balance sheet data as of December 31, 2015 is derived from audited financial statements that are not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that should be expected in the future.

Consolidated statement of operations data (in thousands, except per share data)

	Year ended December 31,		
	2017	2016	2015
Total revenue	$ 22,874	$ 17,585	$ 12,180
Cost of revenue	12,887	9,837	6,465
Research and development	16,304	16,993	10,083
Selling, general and administrative	19,688	12,466	10,155
Total operating expenses	48,879	39,296	26,703
Loss from operations	(26,005)	(21,711)	(14,523)
Interest expense, net	(951)	(1,298)	(1,040)
Other income (expense), net	(63)	(164)	(380)
Net loss	(27,019)	(23,173)	(15,943)
Accretion and accrued dividends on redeemable convertible preferred stock	(4,166)	(4,445)	(4,355)
Net loss attributable to common stockholders	$ (31,185)	$ (27,618)	$ (20,298)
Net loss per share attributable to common stockholders, basic and diluted	$ (8.30)	$ (12.89)	$ (11.19)
Weighted-average common shares outstanding	3,757	2,143	1,813

Consolidated balance sheet data (in thousands)

	As of December 31,		
	2017	2016	2015
Cash and cash equivalents	$ 79,682	$ 29,671	2,323
Total assets	91,779	37,117	7,351
Total long term debt	9,382	10,243	9,726
Total redeemable convertible preferred stock	—	128,585	73,445
Total stockholders' equity (deficit)	65,866	(115,109)	(88,640)

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical consolidated financial information, the following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. See "Special Note Regarding Forward-Looking Statements." Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Annual Report on Form 10-K, particularly in "Risk Factors."

Overview

We are a life sciences company that has developed a next generation, ultra-sensitive digital immunoassay platform that advances precision health for life sciences research and diagnostics. Our platform enables customers to reliably detect protein biomarkers in extremely low concentrations in blood, serum and other fluids that, in many cases, are undetectable using conventional, analog immunoassay technologies. It also allows researchers to define and validate the function of novel protein biomarkers that are only present in very low concentrations and have been discovered using technologies such as mass spectrometry. These capabilities provide our customers with insight into the role of protein biomarkers in human health that has not been possible with other existing technologies and enable researchers to unlock unique insights into the continuum between health and disease. We believe this greater insight will enable the development of novel therapies and diagnostics and facilitate a paradigm shift in healthcare from an emphasis on treatment to a focus on earlier detection, monitoring, prognosis and, ultimately, prevention. We are currently focusing our platform on protein detection, which we believe is an area of significant unmet need and where we have significant competitive advantages. In addition to enabling new applications and insights in protein analysis, we are also developing our Simoa technology to detect nucleic acids in biological samples.

We currently sell all of our products for life science research, primarily to laboratories associated with academic and governmental research institutions, as well as pharmaceutical, biotechnology and contract research companies, through a direct sales force and support organizations in North America and Europe, and through distributors or sales agents in other select markets, including Australia, China, Japan, India, Lebanon, Singapore, South Korea and Taiwan. We grew our revenue from $12.2 million to $17.6 million in 2016 and to $22.9 million in 2017.

Our instruments are designed to be used either with assays fully developed by us, including all antibodies and supplies required to run the tests, or with "homebrew" kits where we supply some of the components required for testing, and the customer supplies the remaining required elements. Accordingly, our installed instruments generate a recurring revenue stream. We believe that our recurring consumable revenue is driven by our customers' ability to extract more valuable data using our platform and to process a large number of samples quickly with little hands-on preparation.

While we expect the Quanterix SR-X to generate lower consumables revenue per instrument than the Simoa HD-1 Analyzer due to its lower throughput, as the installed base of the Simoa instruments increases, total consumables revenue overall is expected to increase. We believe that consumables revenue should be subject to less period-to-period fluctuation than our instrument sales revenue, and will become an increasingly important contributor to our overall revenue.

As of December 31, 2017, we had cash and cash equivalents of $79.7 million, including $65.6 million in net proceeds from the sale of 4,916,480 shares of common stock in our initial public offering, or IPO atthe public offering price of $15.00 per share. Prior to the IPO, we had financed our operations principally through private placements of our convertible preferred stock, borrowings from credit facilities and revenue from our commercial operations.

Since inception, we have incurred net losses. Our net loss was $27.0 million, $23.2 million, and $15.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we had an accumulated deficit of $144.4 million and stockholders' equity of $65.9 million. We expect to continue to incur significant expenses and operating losses at least through the next 24 months. We expect our expenses will increase substantially as we:

- expand our sales and marketing efforts to further commercialize our products;
- expand our research and development efforts to improve our existing products and develop and launch new products;
- hire additional personnel;
- enter into collaboration arrangements, if any, or in-license other products and technologies;
- add operational, financial and management information systems; and
- incur increased costs as a result of operating as a public company.

Financial Operations Overview

Revenue

We generate product revenue from sales of our Simoa HD-1 Analyzer and Quanterix SR-X instruments and related reagents and other consumables. We currently sell our products for research use only applications and our customers are primarily laboratories associated with academic and governmental research institutions, as well as pharmaceutical, biotechnology and contract research companies. Sales of our consumables have consistently increased due to an increasing number of Simoa instruments being installed in the field, all of which require certain of our consumables to run customers' specific tests. Consumable revenue consists of sales of complete assays which are developed internally by us, plus sales of "homebrew" kits which contain all the elements necessary to run tests with the exception of the specific antibodies utilized which are separately provided by the customer.

Service and other revenue consists of testing services provided by us in our Simoa Accelerator Laboratory on behalf of certain research customers, in addition to warranty and other service-based revenue. Services provided in our Simoa Accelerator Laboratory include sample testing, homebrew assay development and custom assay development.

Collaboration and license revenue consists of revenue associated with licensing our technology to third parties and for related services.

The following table presents our revenue for the periods indicated (in thousands):

	Year ended December 31,		
	2017	2016	2015
Product revenue	$ 14,124	$ 10,601	$ 9,477
Service and other revenue	7,676	5,012	2,515
Collaboration and license revenue	1,074	1,972	188
Total revenue	$ 22,874	$ 17,585	$ 12,180

The following table reflects product revenue (in thousands) by geography and as a percentage of total product revenue, based on the billing address of our customers. North America consists of the

United States, Canada and Mexico; EMEA consists of Europe, the Middle East, and Africa; and Asia Pacific includes Japan, China, South Korea, Singapore, Malaysia and Australia.

	Year ended December 31,					
	2017		2016		2015	
North America	$ 7,790	55%	$ 6,816	64%	$ 7,131	75%
EMEA	$ 4,435	31%	$ 2,679	25%	$ 1,708	18%
Asia Pacific	$ 1,899	13%	$ 1,106	11%	$ 638	7%
Total	$ 14,124	100%	$ 10,601	100%	$ 9,477	100%

Our revenue is denominated primarily in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States. Changes in foreign currency exchange rates have not materially affected us to date; however, they may become material to us in the future as our operations outside of the United States expand.

Cost of Products, Services and Collaboration Revenue

Cost of goods sold for products consists of Simoa HD-1 Analyzer and Quanterix SR-X instrument cost from the manufacturer, raw material parts costs and associated freight, shipping and handling costs, contract manufacturer costs, salaries and other personnel costs, stock-based compensation, overhead and other direct costs related to those sales recognized as product revenue in the period.

Cost of goods sold for services consists of salaries and other personnel costs, stock-based compensation and facility costs associated with operating the Simoa Accelerator Laboratory on behalf of customers, in addition to costs related to warranties and other costs of servicing equipment at customer sites.

Cost of collaboration revenue consists of royalty expense due to third parties from revenue generated by collaboration or license deals.

Research and Development Expenses

Research and development expenses consist of salaries and other personnel costs, stock-based compensation, research supplies, third-party development costs for new products, materials for prototypes, and allocated overhead costs that include facility and other overhead costs. We have made substantial investments in research and development since our inception, and plan to continue to make substantial investments in the future. Our research and development efforts have focused primarily on the tasks required to support development and commercialization of new and existing products. We believe that our continued investment in research and development is essential to our long-term competitive position and expect these expenses to increase in future periods.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of salaries and other personnel costs, and stock-based compensation for our sales and marketing, finance, legal, human resources and general management, as well as professional services, such as legal and accounting services. We expect selling, general and administrative expenses to increase in future periods as the number of sales, technical support and marketing and administrative personnel grows and we continue to introduce new products, broaden our customer base and grow our business. We also expect to incur additional expenses as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission and the Nasdaq Stock Market, additional insurance expenses, and expenses related to investor relations activities and other administrative and professional services.

Critical Accounting Policies, Significant Judgments and Estimates

Our consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in accounting estimates may occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the following critical accounting policies involve a greater degree of judgment and complexity than our other significant accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating our consolidated financial condition and results of operations. Our significant accounting policies are more fully described in Note 2 of the notes to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Revenue Recognition

We recognize revenue when (1) persuasive evidence of an arrangement exists, (2) shipment and installation, if applicable, has occurred or services have been rendered, (3) the price to the customer is fixed or determinable and (4) collection of the related receivable is reasonably assured. We primarily generate revenue from the sale of products and delivery of services, as well as under license and collaboration agreements. Our product revenue includes the sale of instruments as well as assay kits and other consumables which are used to perform tests on the instrument. Our service revenue is generated from service contracts related to research services performed on behalf of customers and maintenance and support services.

Product Revenue

Revenue for instrument sales is recognized upon installation at the customer's location or upon transfer of title to the customer when installation is not required, which is generally the case with sales to distributors. In sales to end-customers, we always provide the installation service and often payment is tied to the completion of the installation service. When installation is required, we account for the instrument and installation service as one unit of accounting and recognize revenue when installation is completed, assuming all other revenue recognition criteria are met. Instrument transactions often have multiple elements, as discussed below. Included with the purchase of an instrument is a one-year assurance type product warranty assuring that the instrument is free of material defects and will function according to specifications. In addition, the sale of an instrument includes an implied warranty which is promised to the customer during the pre-sales process, at the time that the sales quote is issued to the customer. The implied warranty is provided over the same one-year period as the standard warranty. The services included in the implied warranty are the same as those included in the extended service contracts, and include two bi-annual preventative maintenance service visits, minor hardware updates and software upgrades, additional training and troubleshooting, which is beyond the scope of the standard product warranty. The implied warranty has been identified by us as a separate deliverable and unit of accounting. Consideration allocated to the implied one-year warranty is recognized over the one year period of performance as service and other revenue as described below. Consideration allocated to any other elements is recognized as the goods are delivered or the services are performed.

Service and Other Revenue

Service revenue includes revenue from the implied one-year service type warranty obligation, revenue from extended service contracts, research services performed on behalf of customers in our Simoa Accelerator Laboratory, and other services that may be performed. Revenue for extended warranty contracts is recognized ratably over the service period. Revenue for the implied one-year service type warranty is initially deferred at the time of instrument revenue recognition and is recognized ratably over a 12-month period starting on the date of instrument installation. Revenue for research and development services and other services is generally recognized based on proportional performance of the contract when our ability to complete project requirements is reasonably assured. Most of these services are completed in a short period of time from the receipt of the customer's order. When significant risk exists in our ability to fulfill project requirements, revenue is recognized upon completion of the contract.

Collaboration and License Revenue

Collaboration and license revenue relates to our agreements with bioMérieux and another diagnostic company. For a complete discussion of the accounting policies specific to these collaboration and license agreements, refer to Note 11 to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Multiple Element Arrangements

Many of our instrument sales involve the delivery of multiple products and services. The elements of an instrument sale typically include the instruments, installation (when required), an implied one-year service type warranty, and in some cases, assays, consumables and other services. Revenue recognition for contracts with multiple deliverables is based on the individual units of accounting determined to exist in the contract. A delivered item is considered a separate unit of accounting when the delivered item has value to the customer on a stand-alone basis. In determining the units of accounting, management evaluates certain criteria, including whether the deliverables have standalone value. Items are considered to have stand-alone value when they are sold separately by any vendor or when the customer could resell the item on a stand-alone basis.

The consideration received is allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria are applied to each of the separate units. We determine the estimated selling price for deliverables within the arrangement using vendor-specific objective evidence (VSOE) of selling price, if available. If VSOE is not available, we consider whether third-party evidence is available. If third-party evidence of selling price or VSOE is not available, we use our best estimate of selling price for the deliverable.

In order to establish VSOE of selling price, we must regularly sell the product or service on a standalone basis with a substantial majority priced within a relatively narrow range. If there are not a sufficient number of standalone sales such that VSOE of selling price cannot be determined, then we consider whether third party evidence can be used to establish selling price. Due to the lack of similar products and services sold by other companies within the industry, we have not established selling price using third-party evidence.

For product and service sales, we determine our best estimate of selling price for instruments, consumables, services and assays using average selling prices over a rolling 12-month period coupled with an assessment of market conditions, as VSOE and third-party evidence cannot be established. We recognize revenue for delivered elements only when we determine there are no uncertainties regarding customer acceptance.

Distributor Transactions

In certain markets, we sell products and provide services to customers through distributors that specialize in life science products. In cases where the product is delivered to a distributor, revenue recognition generally occurs when title transfers to the distributor. The terms of sales transactions through distributors are generally consistent with the terms of direct sales to customers, except the distributors do not require our services to install the instrument at the end customer and perform the services for the customer that are beyond our standard warranty in the first year following the sale. These transactions are accounted for in accordance with our revenue recognition policy described above.

Stock-Based Compensation

We account for stock-based compensation awards in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718, *Compensation—Stock Compensation*, or ASC 718. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. Our stock-based compensation awards have historically consisted of stock options.

Prior to adoption of ASU 2016-09 on January 1, 2017, we recognized compensation costs related to stock options granted to employees based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. Effective January 1, 2017, we ceased utilizing an estimated forfeiture rate and began recognizing forfeitures as they occur. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The grant date fair value of the stock-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards.

We recognized compensation costs related to stock options granted to non-employees based on the estimated fair value of the awards on the date of grant in the same manner as we do for options for employees; however, the fair value of the stock options granted to non-employees is re-measured each reporting period until the service is complete, and the resulting increase or decrease in value, if any, is recognized as expense or income, respectively, during the period the related services are rendered. There were no material non-employee awards outstanding during the years ended December 31, 2017, 2016, and 2015.

The Black-Scholes option-pricing model requires the use of subjective assumptions, including the expected volatility of our common stock, the assumed dividend yield, the expected term of our stock options, the risk-free interest rate for a period that approximates the expected term of our stock options, and the fair value of the underlying common stock on the date of grant. In applying these assumptions, we considered the following factors:

- we do not have sufficient history to estimate the volatility of our common stock, as our IPO was completed in December 2017;
- we calculate expected volatility based on reported data for selected similar publicly traded companies for which the historical information is available;
- we plan to continue to use the guideline peer group volatility information until the historical volatility of our common stock is sufficient to measure expected volatility for future option grants;
- the assumed dividend yield of zero is based on our expectation of not paying dividends for the foreseeable future;
- we use the simplified method for determining the expected term of stock options due to the lack of historical exercise data and the plain nature of the stock options; and

- we determine the risk-free interest rate by reference to implied yields available from U.S. Treasury securities with a remaining term equal to the expected life assumed at the date of grant.

The following summarizes the assumptions we used to estimate the fair value of stock options that we granted for the periods indicated:

	Year ended December 31,		
	2017	2016	2015
Weighted-average expected volatility	50%	46%	41%
Weighted-average risk-free rate	1.9%	1.2%	1.7%
Dividend yield	0%	0%	0%
Expected term (in years)	6.0	6.0	6.0

For the years ended December 31, 2017, 2016, and 2015 stock-based compensation expense was $2.2 million, $0.9 million, and $1.1 million respectively.

The table below summarizes the stock-based compensation expense recognized in our statements of operation by classification (in thousands):

	Year ended December 31,		
Stock-based compensation expense	2017	2016	2015
Cost of product revenue	$ 24	$ 6	$ 6
Cost of service revenue	52	12	1
Research and development	180	59	112
Selling, general and administrative	1,912	851	985
Total	$ 2,168	$ 928	$ 1,104

As of December 31, 2017, we had $5.2 million of total unrecognized stock-based compensation costs which we expect to recognize over a weighted-average period of 2.7 years.

The following table summarizes by grant date the number of shares of our common stock subject to stock options granted from January 1, 2016 through December 31, 2017, as well as the associated per-share exercise price of the award and the estimated fair value per share of our common stock on the grant date.

Options granted from January 1, 2016 to December 31, 2017, substantially all of which were granted to our employees and non-employee directors:

Grant date	Number of shares underlying option granted	Exercise price per share	Estimated fair value per share of common stock at grant date
November 7, 2017	45,111	$ 10.25	$ 10.25
August 31, 2017	85,586	$ 9.42	$ 9.42
June 2, 2017	301,722	$ 8.68	$ 8.68
May 25, 2017	51,484	$ 8.68	$ 8.68
March 31, 2017	797,234	$ 8.16	$ 8.68
August 25, 2016	66,892	$ 5.43	$ 5.43
June 24, 2016	208,592	$ 5.08	$ 5.08

Prior to our IPO, the fair value of our common stock underlying our stock options was estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying granted stock options, our board of directors considered, among other things, the most

recent valuations of our common shares prepared by an unrelated third-party valuation firm in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, Valuation of Privately-Held-Company Equity Securities Issued as Compensation.

Given the absence of a public trading market for our common stock, our board of directors exercised reasonable judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including (1) our business, financial condition and results of operations, including related industry trends affecting our operations; (2) our forecasted operating performance and projected future cash flows discounted to present value using our estimated weighted average cost of capital; (3) the illiquid nature of our common stock; (4) liquidation preferences and other rights and privileges of our preferred stock over our common stock; (5) likeliness and estimated timing of the potential option to have our stock become publicly traded; (6) market multiples of our most comparable public peers; (7) recently completed equity financing transactions; and (8) market conditions affecting our industry.

Since the completion of our IPO, we have determined the fair value of each common share underlying share-based awards based on the closing price of our common shares as reported by Nasdaq on the date of grant.

Preferred Stock Warrant Liability

As of January 1, 2015, we had outstanding warrants to purchase 64,441 shares of Series A-2 redeemable convertible preferred stock, or Series A-2 Preferred Stock, 1,300,000 shares of Series A-3 convertible preferred stock, or Series A-3 Preferred Stock, 562,488 shares of Series B redeemable convertible preferred stock, or Series B Preferred Stock, and 226,733 shares of Series C redeemable convertible preferred stock, or Series C Preferred Stock. On March 4, 2015, we issued a warrant to purchase 46,248 shares of Series C Preferred Stock to a lender related to an amendment to a debt facility. The fair value of the warrant was initially accounted for as a debt discount. On January 29, 2016, we issued a warrant to purchase 57,810 shares of Series C Preferred Stock to a lender related to a second amendment to a debt facility. The fair value of the warrant was initially accounted for as a debt discount. On November 18, 2016, we issued a warrant to purchase 700,000 shares of Series A-3 Preferred Stock to a vendor. The fair value of the warrant was recorded as research and development expense. On March 31, 2017, we issued a warrant to purchase 38,828 shares of Series D redeemable convertible preferred stock (Series D Preferred Stock) to a lender as part of a third amendment to a debt facility. The fair value of the warrant was initially accounted for as a debt discount. All of the warrants were initially recorded at fair value and marked to market on each reporting and exercise date with changes in the fair value recorded in other expense (income) on the statement of operations and comprehensive loss. Holders of warrants to purchase shares of Series A-3 and B Preferred Stock exercised the warrants during the year ended December 31, 2016 and holders of warrants to purchase shares of Series A-3 Preferred Stock exercised the warrants during the three months ended March 31, 2017. Upon exercise, the fair value of the warrants was reclassified to redeemable convertible preferred stock along with any proceeds received. Upon the closing of the IPO, all warrants to purchase Preferred Stock automatically converted to warrants to purchase our common stock.

The changes in preferred stock warrant liability measured at fair value for which we have used Level 3 inputs to determine fair value are as follows (in thousands):

	Warrant liability
Balance at December 31, 2015	$ 5,547
Issuance of warrants related to debt facility	128
Issuance of warrants related to a vendor	2,078
Changes in fair value of warrants	307
Warrant exercises	(5,258)
Balance at December 31, 2016	2,802
Issuance of warrants related to debt facility	119
Changes in fair value of warrants	90
Warrant exercises	(2,188)
Conversion to warrants in common stock in connection with IPO	(823)
Balance at December 31, 2017	$ —

The warrants were classified as liabilities because they were exercisable into shares of redeemable convertible preferred stock. On each measurement date, we utilized a Black-Scholes option pricing model to determine the fair value of the warrants and utilized various valuation assumptions based on available market data and other relevant but observable factors. Expected volatility for our redeemable convertible preferred stock was determined based on an analysis of the historical volatility of a representative group of guideline public companies, because, prior to our IPO, there was no market for our common stock and, therefore, a lack of market-based company-specific historical and implied volatility information. The expected term reflects the remaining contractual term of the warrants. The assumed dividend yield is based upon our expectation of not paying dividends in the foreseeable future. The risk-free rate is based upon the U.S. Treasury yield curve in effect at the valuation date, commensurate with the remaining contractual life of the warrants. The fair value of the underlying preferred shares was determined by management, with the assistance of a third-party valuation specialist, using a hybrid valuation method, which includes a weighted analysis of two scenarios. The first scenario was based on the completion of an initial public offering utilizing a market approach and the second scenario was based on remaining privately held utilizing either an income approach or a weighted-average of an income approach and a backsolve to a recent financing event, depending on the proximity of the financing event to the measurement date. The assumption regarding our probability of completing an initial public offering was the primary contributing factor to the changes in fair value of the common stock. See Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K for further details on the changes of the probability of completing an initial public offering. Because all outstanding and exercisable warrants to purchase Preferred Stock were automatically converted to warrants to purchase shares of common stock following the IPO, they are accounted for as equity instruments as of December 31, 2017.

The following assumptions were utilized to determine the fair value of each warrant to purchase preferred stock at each reporting period and as of the change from liability to equity accounting treatment in connection with the IPO:

Balance sheet date	Value of underlying Series D preferred stock	Value of underlying Series C preferred stock	Value of underlying Series B preferred stock	Value of underlying Series A-3 preferred stock	Value of underlying Series A-2 preferred stock	Volatility	Probability of an initial public offering
December 7, 2017	$4.67	$ 4.67	N/A	N/A	$ 4.67	46%	100%
December 31, 2016	N/A	$ 4.16	N/A	$ 2.97	$ 2.95	52%	40%
December 31, 2015	N/A	$ 3.92	$3.00	$ 3.00	$ 1.90	41%	25%

Results of Operations

Comparison of the Years Ended December 31, 2017 and December 31, 2016 (dollars in thousands):

	Year ended December 31, 2017	% of revenue	Year ended December 31, 2016	% of revenue	$ change	% change
Product revenue	$ 14,124	61.7%	$ 10,601	60.3%	$ 3,523	33.2%
Service and other revenue	7,676	33.6%	5,012	28.5%	2,664	53.2%
Collaboration and license revenue	1,074	4.7%	1,972	11.2%	(898)	(45.5)%
Total revenue	22,874	100.0%	17,585	100.0%	5,289	30.1%
Cost of product revenue	7,742	33.8%	6,299	35.8%	1,443	22.9%
Cost of service revenue	5,145	22.5%	3,163	18.0%	1,982	62.7%
Cost of license revenue	—	—%	375	2.1%	(375)	(100)%
Research and development	16,304	71.3%	16,993	96.6%	(689)	(4.1)%
Selling, general and administrative	19,688	86.1%	12,466	70.9%	7,222	57.9%
Total operating expenses	48,879	213.7%	39,296	223.5%	9,583	24.4%
Loss from operations	(26,005)	(113.7)%	(21,711)	(123.5)%	(4,294)	19.8%
Interest expense, net	(951)	(4.2)%	(1,298)	(7.4)%	347	(26.7)%
Other income (expense), net	(63)	(0.2)%	(164)	(0.9)%	102	(61.6)%
Net loss	$ (27,019)	(118.1)%	$ (23,173)	(131.8)%	$ (3,846)	16.6%

Revenue

Revenue increased by $5.3 million, or 30%, to $22.9 million for the year ended December 31, 2017 as compared to $17.6 million for the year ended December 31, 2016. Product revenue consisted of sales of instruments totaling $6.5 million and sales of consumables and other products of $7.6 million for the year ended December 31, 2017. Product revenue consisted of sales of instruments totaling $6.2 million and sales of consumables and other products totaling $4.4 million for the year ended December 31, 2016. Average sales prices of instruments and consumables did not change materially in the year ended December 31, 2017 as compared with the year ended December 31, 2016. The increase in product revenue of $3.5 million was primarily due to the sale of more instruments in the twelve months ended December 31, 2017 and increased sales of consumables. The installed base of Simoa instruments increased from December 31, 2016 to December 31, 2017, and as these additional instruments were used by customers, the consumable sales increased. The increase in service and other revenue of $2.7 million was due to increased services performed in our Simoa Accelerator Laboratory; more customers are using these services, and existing customers are using the Accelerator Laboratory more frequently. Collaboration and license revenue in the year ended December 31, 2017 consists of revenue related to the collaboration arrangement with bioMérieux that was modified in the fourth quarter of

2016. Collaboration and license revenue in the year ended December 31, 2016 consists of one-time payment of $1.8 million of revenue related a licensing arrangement executed in the fourth quarter of 2016, and revenue related to the collaboration arrangement with bioMérieux of $0.2 million.

As part of the modification in the fourth quarter of 2016, we received $2.0 million in additional consideration. This additional consideration along with the deferred revenue on the date of the modification is being recognized over our estimated period of performance, which was initially determined to be 36 months. The estimated performance period is evaluated each reporting period and continues to be consistent with the initial estimate.

Cost of Product, Service and License Revenue

Cost of product revenue increased by $1.4 million, or 23%, to $7.7 million for the year ended December 31, 2017 as compared to $6.3 million for the year ended December 31, 2016. The increase was primarily due to increased sales of consumables and instruments. Cost of service revenue increased to $5.1 million for the year ended December 31, 2017 from $3.2 million forthe year ended December 31, 2016. The increase was primarily due to higher utilization of the Simoa Accelerator Laboratory, plus increased personnel costs from the build out of our field service organization. Overall cost of goods sold as a percentage of revenue slightly increased to 56.3% of total revenue for the year ended December 31, 2017 as compared to 55.9% for the year ended December 31, 2016, primarily as a result of increased headcount in field service and accelerator service groups.

Research and Development Expense

Research and development expense decreased slightly by $0.7 million, or 4%, to $16.3 million for the year ended December 31, 2017 as compared to $17.0 million for the year ended December 31, 2016. The decrease was primarily due to a reduction in outside development costs related to our Quanterix SR-X instrument for which development was completed and product launched commercially in the fourth quarter of 2017. The reduction in project costs for the Quanterix SR-X instrument offset other increase in research and development costs as we have increased headcount in research and development and the increased use of outside development firms as we increased our new product development efforts.

Selling, General and Administrative Expense

Selling, general and administrative expense increased by $7.2 million, or 58%, to $19.7 million for the year ended December 31, 2017 as compared to $12.5 million for the same period in 2016. The increase was primarily due to headcount additions in various departments as we build out our organization to support future growth, and stock compensation expense.

Interest and Other Expense, Net

Interest and other expense, net decreased by $0.5 million, to $1 million for the year ended December 31, 2017 as compared to $1.5 million for the same period in 2016, primarily due to the amortization of debt discounts from warrants we have issued to a lender.

Comparison of the Years Ended December 31, 2016 and December 31, 2015 (dollars in thousands):

	Year ended December 31, 2016	% of revenue	Year ended December 31, 2015	% of revenue	$ change	% change
Product revenue	$ 10,601	60.3%	$ 9,477	77.8%	$ 1,124	11.9%
Service and other revenue	5,012	28.5%	2,515	20.7%	2,497	99.3%
Collaboration and license revenue	1,972	11.2%	188	1.5%	1,784	948.9%*
Total revenue	17,585	100.0%	12,180	100.0%	5,405	44.4%
Cost of product revenue	6,299	35.8%	5,661	46.5%	638	11.3%
Cost of service revenue	3,163	18.0%	804	6.6%	2,359	293.4%
Cost of license revenue	375	2.1%	—	0.0%	375	—
Research and development	16,993	96.7%	10,083	82.8%	6,910	68.5%
Selling, general and administrative	12,466	70.9%	10,155	83.3%	2,311	22.8%
Total operating expenses	$ 39,296	223.5%	$ 26,703	219.2%	$ 12,593	47.2%
Loss from operations	(21,711)	(123.5)%	(14,523)	(119.2)%	(7,188)	49.5%
Interest expense, net	(1,298)	(7.4)%	(1,040)	(8.6)%	(258)	24.8%
Other income (expense), net	(164)	(0.9)%	(380)	(3.1)%	216	(56.8)%
Net loss	$ (23,173)	(131.8)%	$ (15,943)	(130.9)%	$ (7,230)	45.4%

* Not meaningful.

Revenue

Revenue increased by $5.4 million, or 44%, to $17.6 million for the year ended December 31, 2016 as compared to $12.2 million for the year ended December 31, 2015. Product revenue consisted of sales of instruments totaling $6.2 million and consumable and assay revenue of $4.4 million for the year ended December 31, 2016. Product revenue consisted of sales of instruments totaling $6.5 million and consumable and assay revenue of $3.0 million for the year ended December 31, 2015. Average sales price of instruments and consumables did not change materially in the year ended December 31, 2016 as compared with the year ended December 31, 2015. The increase in product revenue of $1.1 million was primarily due to increased sales of consumables of $1.5 million due to having an increased installed base of Simoa instruments as a result of the sale of instruments during 2016. This was partially offset by decreased revenue related to the sale of instruments during the year ended December 31, 2016 compared to the year ended December 31, 2015 due to timing of customer orders. The increase in service and other revenue of $2.5 million was primarily due to increased utilization of our Simoa Accelerator Laboratory, plus increased warranty revenues. The increase in collaboration and license revenue was primarily due to the execution of a license with a diagnostic company in 2016 which resulted in the recognition of $1.8 million of revenue in 2016.

Cost of Product, Service and License Revenue

Cost of product revenue increased by $0.6 million, or 11%, to $6.3 million for the year ended December 31, 2016 as compared to $5.7 million for the year ended December 31, 2015. The increase was primarily due to increased sales of instruments and consumables. Cost of service revenue increased from $0.8 million for the year ended December 31, 2015 to $3.2 million for the year ended December 31, 2016. The increase was primarily due to higher utilization of our Simoa Accelerator Laboratory and a significant increase in the staffing of our field service team. Cost of license revenue was $0.4 million for the year ended December 31, 2016 versus $0 in the prior year due to a royalty payment that we are required to pay Tufts, a related party, as a result of the license with a diagnostic company and a modification to our bioMérieux collaboration agreement. Overall cost of goods sold as a percentage of revenue increased to 55.9% of revenue for the year ended December 31, 2016 as

compared to 53.1% in the comparable prior year period, primarily as a result of lower gross margins on service and other revenue due to the increase in staffing as noted previously.

Research and Development Expense

Research and development expense increased by $6.9 million, or 69%, to $17.0 million for the year ended December 31, 2016 as compared to $10.1 million for the year ended December 31, 2015. The increase was primarily due to increases in salary and other compensation costs from increases in research and development headcount and increased use of outside development firms as we increased our new product development efforts, primarily in regards to our recently launched Quanterix SR-X instrument.

Selling, General and Administrative Expense

Selling, general and administrative expense increased by $2.3 million, or 23%, to $12.5 million for the year ended December 31, 2016 as compared to $10.2 million for the year ended December 31, 2015. The increase was primarily due to headcount additions in various departments as we build out our organization to support future growth.

Interest and Other Expense, Net

Interest and other expense, net increased by less than $0.1 million to $1.5 million for the year ended December 31, 2016 as compared to $1.4 million for the year ended December 31, 2015, primarily due to higher interest expense related to the amortization of debt discounts and higher average borrowings.

Liquidity and Capital Resources

Since our inception, we have incurred net losses and negative cash flows from operations. We incurred net losses of $27.0 million, $23.2 million and $15.9 million and used $22.1 million, $17.7 million and $12.5 million of cash from our operating activities for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we had an accumulated deficit of $144.4 million.

As of December, 2017, we had cash and cash equivalents of $79.7 million. In addition, our debt facility was amended in March 2017 to increase the amount of the facility by $5 million.

Sources of Liquidity

To date, we have financed our operations principally through private placements of our convertible preferred stock, the sale of our common stock in our IPO that was completed in December 2017, borrowings from credit facilities and revenue from our commercial operations.

Preferred Stock Financings

Prior to our IPO, we had raised approximately $107.5 million in gross proceeds through sales of our preferred stock, including the sale of 12,420,262 shares of our Series D redeemable convertible preferred stock, or Series D Preferred Stock, in March 2016 at a purchase price of $3.67 per share for gross proceeds of $45.6 million, and the sale of 2,113,902 shares of our Series D-1 redeemable convertible preferred stock, or Series D-1 Preferred Stock, in June 2017 at a purchase price of $4.021 per share for gross proceeds of $8.5 million.

See Note 7 to our consolidated financial statements for a discussion of the terms and provisions of our Series D Preferred Stock and Series D-1 Preferred Stock issued in 2016 and 2017. All shares of preferred stock were converted to shares of common stock upon completion of the IPO.

Initial Public Offering

In December 2017, we completed our IPO in which we sold 4,916,480 shares of common stock at an initial public offering price of $15.00 per share. The aggregate net proceeds received by us from the offering, net of underwriting discounts and commissions and offering expenses, were $65.6 million.

Loan Facility with Hercules

On April 14, 2014, we executed a Loan Agreement with Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.). The Loan Agreement provided a total debt facility of $10.0 million, which is secured by substantially all of our assets. At closing, we borrowed $5.0 million in principal and had the ability to draw the additional $5.0 million over the period from November 1, 2014 to March 31, 2015. The interest rate on this term loan was variable based on a calculation of 8% plus the prime rate less 5.25%, with a minimum interest rate of 8%. Interest was to be paid monthly beginning the month following the borrowing date. Principal payments were scheduled to begin on September 1, 2015, unless we achieved certain milestones which would have extended this date to December 1, 2015 or March 1, 2016. In connection with the execution of the Loan Agreement, we issued Hercules a warrant to purchase up to 173,428 shares of our Series C Preferred Stock at an exercise price of $3.3299 per share.

On March 4, 2015, we executed Amendment 1 to the Loan Agreement and drew the additional $5.0 million available under the Loan Agreement at that time. The terms of the amendment deferred principal payments to start on December 1, 2015 or March 1, 2016 if we obtained at least $10.0 million in equity financing before December 1, 2015. This equity financing did not occur before December 1, 2015.

In January 2016, we executed Amendment 2 to the Loan Agreement, which increased the total facility available by $5.0 million to a total of $15.0 million and further delaying the start of principal payments to July 1, 2016. Following the Series D Preferred Stock financing in March 2016, we could have elected to further delay the start of principal payments until January 1, 2017, however we voluntarily began paying principal on July 1, 2016. Upon signing this amendment, we drew an additional $3.0 million under the debt facility. The remaining $2.0 million available for borrowing expired unused in 2016, decreasing the amounts available under the debt facility to $13.0 million.

In March 2017, we signed Amendment 3 to the Loan Agreement increasing the total facility available by $5.0 million to a total of $18.0 million. Additionally, the lender is providing an optional term loan, solely at the lender's discretion, for an incremental $5.0 million, increasing the total potential facility to $23.0 million. As of December 31, 2017, we have not drawn any of this additional facility. Principal payments were delayed to March 1, 2018 and the loan maturity date was extended to March 1, 2019. 7. The amendment did not affect the due date of the existing end of term fees (in aggregate $0.5 million) which remain due on February 1, 2018. Upon signing Amendment 3 to the Loan Agreement, we did not draw any of the additional amounts available under the amended debt facility and no amounts have been subsequently drawn under the facility. In connection with this amendment, we issued Hercules a warrant to purchase up to 38,828 shares of our Series D Preferred Stock at an exercise price of $3.67 per share.

The Loan Agreement and amendments contain end of term payments and are recorded in the debt accounts. $0.5 million of end of term payments are due in the first quarter of 2018.

The Loan Agreement contains negative covenants restricting our activities, including limitations on dispositions, mergers or acquisitions, incurring indebtedness or liens, paying dividends or making investments and certain other business transactions. There are no financial covenants associated with the Loan Agreement. The obligations under the Loan Agreement are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in our business,

operations or financial or other condition, which is subjective in nature. We have determined that the risk of subjective acceleration under the material adverse events clause is not probable and therefore have classified the outstanding principal in current and long-term liabilities based on scheduled principal payments.

Debt principal repayments, including the end of term fees, due as of December 31, 2017 are (in thousands):

Years ending December 31:	
2018	$ 5,133
2019	4,430
	$ 9,563

Cash Flows

The following table presents our cash flows for each period presented (in thousands):

	Year ended December 31,		
	2017	2016	2015
Net cash used in operating activities	$ (22,106)	$ (17,742)	$ (12,517)
Net cash used in investing activities	(1,132)	(826)	(554)
Net cash provided by financing activities	73,249	45,916	11,704
Net increase (decrease) in cash and cash equivalents	$ 50,011	$ 27,348	$ (1,367)

Net Cash Used in Operating Activities

We derive cash flows from operations primarily from the sale of our products and services. Our cash flows from operating activities are also significantly influenced by our use of cash for operating expenses to support the growth of our business. We have historically experienced negative cash flows from operating activities as we have developed our technology, expanded our business and built our infrastructure and this may continue in the future.

Net cash used in operating activities was $22.1 million during the year ended December 31, 2017. Net cash used in operating activities primarily consisted of net loss of $27.0 million and an increase of $2.0 million in inventory and an increase in accounts receivable of $1.7 million, primarily offset by non-cash stock compensation expense of $2.2 million, an increase of $2.9 million in deferred revenue, an increase of $2.0 million in accrued expenses and and increase of $1 million in accounts payable.

Net cash used in operating activities was $17.7 million during the year ended December 31, 2016. Net cash used in operating activities primarily consisted of a net loss of $23.2 million and an increase in accounts receivable of $1.7 million, primarily offset by non-cash charges related to issuance of warrants of $2.1 million, other non-cash items including depreciation and stock based compensation, of $1.8 million, and an increase in current liabilities of $2.3 million and an increase in deferred revenue of $0.9 million.

Net cash used in operating activities was $12.5 million during the year ended December 31, 2015. Net cash used in operating activities primarily consisted of a net loss of $15.9 million and an increase in accounts receivable of $1.5 million, primarily offset by non-cash items including depreciation and stock based compensation expense of $1.8 million and increases in current liabilities of $1.8 million and deferred revenue of $0.8 million.

Net Cash Used in Investing Activities

Historically, our primary investing activities have consisted of capital expenditures for the purchase of capital equipment to support our expanding infrastructure and work force. We expect to continue to incur additional costs for capital expenditures related to these efforts in future periods.

We used $1.1 million of cash in investing activities during the year ended December 31, 2017 for purchases of capital equipment to support our infrastructure.

We used $0.8 million of cash in investing activities during the year ended December 31, 2016 primarily for purchases of capital equipment to support our infrastructure, and for a $0.3 million equity investment in another company.

We used $0.6 million of cash in investing activities during the year ended December 31, 2015 for purchases of capital equipment to support our infrastructure.

Net Cash Provided by Financing Activities

Historically, we have financed our operations principally through private placements of our convertible preferred stock and borrowings from credit facilities, the sale of shares of our common stock in our IPO and revenues from our commercial operations.

We generated $73.2 million of cash in financing activities during the year ended December 31, 2017, which primarily was from the sale of 4,916,480 shares of common stock in our IPO in December 2017 for net proceeds of $65.6 million, and the sale of 2,113,902 shares of our Series D-1 Preferred Stock in June 2017 for net proceeds of $8.4 million, which was partially offset by payments of outstanding debt.

We generated $45.9 million of cash from financing activities during the year ended December 31, 2016, which was primarily from the sale of our Series D Preferred Stock in March 2016 for net proceeds of $45.4 million.

We generated $11.7 million of cash from financing activities during the year ended December 31, 2015, which was primarily from the sale of preferred stock of $7.0 million plus an increase in long-term debt of $4.7 million, net of principal payments.

Capital Resources

We have not achieved profitability on a quarterly or annual basis since our inception, and we expect to continue to incur net losses in the future. We also expect that our operating expenses will increase as we continue to increase our marketing efforts to drive adoption of our commercial products. Additionally, as a public company, we have incurred and will continue to incur significant audit, legal and other expenses that we did not incur as a private company. Our liquidity requirements have historically consisted, and we expect that they will continue to consist, of sales and marketing expenses, research and development expenses, working capital, debt service and general corporate expenses.

We believe cash generated from commercial sales, our current cash and cash equivalents, and interest income we earn on these balances will be sufficient to meet our anticipated operating cash requirements for at least the next 24 months. In the future, we expect our operating and capital expenditures to increase as we increase headcount, expand our sales and marketing activities and grow our customer base. Our estimates of the period of time through which our financial resources will be adequate to support our operations and the costs to support research and development and our sales and marketing activities are forward-looking statements and involve risks and uncertainties and actual results could vary materially and negatively as a result of a number of factors, including the factors discussed in Item 1A, "Risk Factors" of this Annual Report on Form 10-K. We have based our

estimates on assumptions that may prove to be wrong and we could utilize our available capital resources sooner than we currently expect. Our future funding requirements will depend on many factors, including:

- market acceptance of our products, including the Quanterix SR-X that we launched in the fourth quarter of 2017;
- 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 collaborations and our ability to enter into additional collaborations in the future;
- the cost and timing of potential regulatory clearances or approvals that may be required in the future for our products; 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. 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 that we raise 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.

Off-Balance Sheet Arrangements

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

Contractual Obligations, Commitments and Contingencies

The following table summarizes our contractual obligations as of December 31, 2017 (in thousands):

	Payments due by period				
(in thousands)	Less than 1 Year	1 to 3 years	3 to 5 years	More than 5 years	Total
Contractual Obligations:(1)					
Operating lease obligations	$ 1,155	$ 1,801	$ 0	$ 0	$ 2,956
Principal payments and end of term fees on the term loan	$ 5,133	$ 4,430	$ 0	$ 0	$ 9,563
Total	$ 6,288	$ 6,231	$ 0	$ 0	$ 12,519

(1) See "—Development and Supply Agreement" for additional contractual obligations.

Our operating lease obligations primarily relate to leases for our current headquarters in Lexington, Massachusetts. The table above does not include lease obligations we assumed in our

acquition of Aushon Biosystems, Inc. in January 2018 for facilities in Billerica, Massachusetts. Including these lease obligations, our contractual obligations as of December 31, 2017 were (in thousands):

	Payments due by period				
(in thousands)	Less than 1 Year	1 to 3 years	3 to 5 years	More than 5 years	Total
Contractual Obligations:(1)					
Operating lease obligations	$ 1,353	$ 2,248	$ 0	$ 0	$ 3,601
Principal payments and end of term fees on the term loan	$ 5,133	$ 4,430	$ 0	$ 0	$ 9,563
Total	$ 6,486	$ 6,678	$ 0	$ 0	$ 13,164

We also have ongoing obligations related to license agreements which contain immaterial minimum annual payments that are credited against the actual royalty expense.

Purchase orders or contracts for the purchase of supplies and other goods and services are not included in the table above. We are not able to determine the aggregate amount of such purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. Our purchase orders are based on our current procurement or development needs and are fulfilled by our vendors within short time horizons.

Development and Supply Agreement

We do not have significant agreements for the purchase of supplies or other goods specifying minimum quantities or set prices that exceed our expected requirements for the next three to six months, with the exception of the agreement with STRATEC, who manufactures our Simoa HD-1 Analyzer system. In 2013, we entered into a supply agreement, or the Supply Agreement, with STRATEC which requires us to purchase a minimum number of commercial units over a seven-year period ending in May 2021. We could be obligated to pay a fee based on the shortfall of commercial units purchased compared to the required number. Based on the commercial units purchased as of December 31, 2017, assuming no additional commercial units were purchased thereafter but prior to May 2021, this fee would equal $11.9 million. The amount we could be obligated to pay under the minimum purchase commitment is reduced as each commercial unit is purchased. We believe that we will purchase sufficient units to meet the requirements of the minimum purchase commitment and, therefore, have not accrued for any of the minimum purchase commitment.

Also, if we terminate the Supply Agreement under certain circumstances and do not purchase up to a required number of commercial units, we would be required to issue warrants to purchase 93,341 shares of common stock at $0.003214 per share. We believe that we will not issue such warrant and therefore have not recorded any amounts related to the potential equity consideration.

In August 2011, we entered into a Strategic Development Services and Equity Participation Agreement, or the Development Agreement, with STRATEC, pursuant to which STRATEC undertook the development of the Simoa HD-1 Analyzer for manufacture and sale to us or a partner whom we designate. During the year ended December 31, 2016, the Development Agreement was amended to modify the deliverables related to the final milestone, to agree on instrument design changes to be implemented, and to reduce the minimum purchase commitment in the Supply Agreement. Additionally, the parties agreed on additional development services for a total fee of $1.5 million, which is payable when development is completed. This amount includes the final milestone payment that was due under the terms of the original agreement.

Backlog

We generally expect to ship all orders received in a given period and as a result our backlog at the end of any period is typically insignificant.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates. We do not hold or issue financial instruments for trading purposes.

Foreign Currency Exchange Risk

As we expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Historically, the substantial majority of our revenue has been denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States, with a portion of expenses incurred in Canada, Europe, Japan and China. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. Fluctuations in currency exchange rates could harm our business in the future. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables as of December 31, 2017 would not have been material.

To date, we have not entered into any material foreign currency hedging contracts although we may do so in the future.

Interest Rate Sensitivity

We had cash and cash equivalents of $79.7 million as of December 31, 2017. These amounts were held primarily in cash on deposit with banks. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, will reduce future investment income. If overall interest rates had decreased by 10% during the periods presented, our interest income would not have been materially affected.

As of December 31, 2017, the principal amount of our term debt outstanding with Hercules was $9.0 million. If overall interest rates had increased by 10% during the periods presented, our interest expense would have increased by approximately $0.8 million on an annualized basis.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required to be filed pursuant to this Item 8 are appended to this Annual Report on Form 10-K beginning on page F-1.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

Item 9A. CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this

Form 10-K, have concluded that, based on such evaluation, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in Internal Controls.* There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such internal control that occurred during the fourth quarter of our last fiscal year that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

(c) *Management's Annual Report on Internal Control Over Financial Reporting.* This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

Item 9B. OTHER INFORMATION

Not applicable.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item 10 will be included in our definitive proxy statement to be filed with the SEC with respect to our 2018 Annual Meeting of Stockholders and is incorporated herein by reference.

Item 11. EXECUTIVE COMPENSATION

The information required by this Item 11 will be included in our definitive proxy statement to be filed with the SEC with respect to our 2018 Annual Meeting of Stockholders and is incorporated herein by reference.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 will be included in our definitive proxy statement to be filed with the SEC with respect to our 2018 Annual Meeting of Stockholders and is incorporated herein by reference.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 will be included in our definitive proxy statement to be filed with the SEC with respect to our 2018 Annual Meeting of Stockholders and is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item 14 will be included in our definitive proxy statement to be filed with the SEC with respect to our 2018 Annual Meeting of Stockholders and is incorporated herein by reference.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(1) *Financial Statements*

The consolidated financial statements are included on pages F-1 through F-48 attached hereto and are filed as part of this Annual Report on Form 10-K.

(2) *Financial Statement Schedules*

Schedules have been omitted since they are either not required or not applicable or the information is otherwise included herein.

(3) *Exhibits*

The following is a list of exhibits filed as part of this Annual Report on Form 10-K

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
3.1	Amended and Restated Certificate of Incorporation		8-K	12/15/17	001-38319
3.2	Restated Bylaws		8-K	12/15/17	001-38319
4.1	Form of Common Stock Certificate		S-1	11/9/17	333-221475
4.2	Form of Warrant to Purchase Series A-2 Preferred Stock of the Registrant issued to Silicon Valley Bank		S-1	11/9/17	333-221475
4.3	Form of Warrant to Purchase Series C Preferred Stock of the Registrant		S-1	11/9/17	333-221475
4.4	Warrant Agreement, dated as of April 14, 2014, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Group Capital, Inc.)		S-1	11/9/17	333-221475
4.5	Warrant Agreement, dated as of January 29, 2016, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Group Capital, Inc.)		S-1	11/9/17	333-221475
4.6	Warrant Agreement, dated as of March 31, 2017, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Group Capital, Inc.)		S-1	11/9/17	333-221475
4.7	Fourth Amended and Restated Stockholders Agreement, dated as of June 2, 2017, by and among the Registrant and the stockholders named therein		S-1	11/9/17	333-221475

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
4.8	Fourth Amended and Restated Registration Rights Agreement, dated as of June 2, 2017, by and among the Registrant and the investors named therein		S-1	11/9/17	333-221475
4.9	Warrant Agreement, dated as of January 30, 2018, by and between the Registrant and Azul Divinal Consultoria Unipessoal LDA	X			
10.1.1+	2007 Stock Option and Grant Plan, as amended		S-1	11/9/17	333-221475
10.1.2+	Form of Incentive Stock Option Agreement under the 2007 Stock Option and Grant Plan, as amended		S-1	11/9/17	333-221475
10.1.3+	Form of Non-qualified Stock Option Agreement under the 2007 Stock Option and Grant Plan, as amended		S-1	11/9/17	333-221475
10.1.4+	Form of Restricted Stock Agreement under the 2007 Stock Option and Grant Plan, as amended		S-1	11/9/17	333-221475
10.2.1+	2017 Employee, Director and Consultant Equity Incentive Plan		S-1/A	11/27/17	333-221475
10.2.2+	Form of Stock Option Agreement under the 2017 Employee, Director and Consultant Equity Incentive Plan		S-1/A	11/27/17	333-221475
10.2.3+	Form of Restricted Stock Agreement under the 2017 Employee, Director and Consultant Equity Incentive Plan		S-1/A	11/27/17	333-221475
10.2.4+	Form of Restricted Stock Unit Agreement under the 2017 Employee, Director and Consultant Equity Incentive Plan		S-1/A	11/27/17	333-221475
10.3+	Employment Agreement, dated January 1, 2015, by and between the Registrant and E. Kevin Hrusovsky		S-1	11/9/17	333-221475
10.4+	Letter Agreement, dated April 8, 2017, by and between the Registrant and Joseph Driscoll		S-1	11/9/17	333-221475
10.5+	Letter Agreement, dated December 1, 2011, by and between the Registrant and Ernest Orticerio		S-1	11/9/17	333-221475
10.6+	Letter Agreement, dated April 6, 2016, by and between the Registrant and Bruce Bal		S-1	11/9/17	333-221475

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.7+	Letter Agreement, dated August 8, 2014, by and between the Registrant and Mark T. Roskey, Ph.D.		S-1	11/9/17	333-221475
10.8+	Letter Agreement, dated March 20, 2017, by and between the Registrant and Marijn Dekkers, Ph.D.		S-1	11/9/17	333-221475
10.9+	Letter Agreement, dated August 7, 2013, by and between the Registrant and Paul M. Meister		S-1	11/9/17	333-221475
10.10	Lease Agreement, dated as of November 22, 2011, between the Registrant and King 113 Hartwell LLC		S-1	11/9/17	333-221475
10.11	First Amendment to lease dated August 22, 2014, by and between the Registrant and King 113 Hartwell LLC		S-1	11/9/17	333-221475
10.12.1*	Exclusive License Agreement, dated June 18, 2007, between the Registrant and Tufts University, as amended on April 29, 2013		S-1	11/9/17	333-221475
10.12.2*	Second Amendment, dated August 22, 2017, to the Exclusive License Agreement between the Registrant and Tufts University		S-1	11/9/17	333-221475
10.13*	Amended and Restated License Agreement, dated December 22, 2016, between the Registrant and bioMérieux, S.A.		S-1	11/9/17	333-221475
10.14.1*	Supply and Manufacturing Agreement, dated September 14, 2011, between the Registrant and STRATEC Biomedical AG		S-1	11/9/17	333-221475
10.14.2	First Amendment to Supply and Manufacturing Agreement, dated October 17, 2013, between the Registrant and STRATEC Biomedical AG		S-1	11/9/17	333-221475
10.15.1*	STRATEC Development Services and Equity Participation Agreement, dated August 15, 2011, between the Registrant and STRATEC Biomedical Systems AG		S-1	11/9/17	333-221475

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.15.2*	First Amendment to STRATEC Development Services and Equity Participation Agreement and Second Amendment to Supply and Manufacturing Agreement, dated November 18, 2016, between the Registrant and STRATEC Biomedical AG		S-1	11/9/17	333-221475
10.16*	Manufacturing Services Agreement, dated November 23, 2016, between the Registrant and Paramit Corporation		S-1	11/9/17	333-221475
10.17.1	Loan and Security Agreement, dated April 14, 2014, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.)		S-1	11/9/17	333-221475
10.17.2	Amendment No. 1 to Loan and Security Agreement, dated March 4, 2015, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.)		S-1	11/9/17	333-221475
10.17.3	Amendment No. 2 to Loan and Security Agreement, dated January 29, 2016, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.)		S-1	11/9/17	333-221475
10.17.4	Amendment No. 3 to Loan and Security Agreement, dated March 31, 2017, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.)		S-1	11/9/17	333-221475
10.18+	Form of Indemnification Agreement		S-1/A	11/27/17	333-221475
10.19+	Letter Agreement, dated January 1, 2014, by and between the Registrant and David R. Walt, Ph.D.		S-1	11/9/17	333-221475
10.20.1	Lease, dated September 24, 2007, between RAR2 Boston Industrial QRS-MA, Inc. and Aushon Biosystems, Inc.	X			
10.20.2	First Amendment, dated October 28, 2009, to Lease, dated September 24, 2007, between RAR2 Boston Industrial QRS-MA, Inc. and Aushon Biosystems, Inc.	X			

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
10.20.3	Second Amendment, dated September 23, 2015, to Lease, dated September 24, 2007, between RAR2 Boston Industrial QRS-MA, Inc. and Aushon Biosystems, Inc.	X			
21.1	Subsidiaries of Registrant	X			
31.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32.1	Certifications of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X			

+ Management contract or compensatory plan or arrangement.

* Confidential treatment has been granted for portions of this Exhibit. Redacted portions have been filed separately with the Securities and Exchange Commission.

Item 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

QUANTERIX CORPORATION

Date: March 19, 2018

By: /s/ E. KEVIN HRUSOVSKY

E. Kevin Hrusovsky
Chairman, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated below and on the dates indicated.

Signature	Title	Date
/s/ E. KEVIN HRUSOVSKY E. Kevin Hrusovsky	Chairman, President and Chief Executive Officer and Director (principal executive officer)	March 19, 2018
/s/ JOSEPH DRISCOLL Joseph Driscoll	Chief Financial Officer (principal financial officer and principal accounting officer)	March 19, 2018
/s/ DOUGLAS G. COLE, M.D. Douglas G. Cole, M.D.	Director	March 19, 2018
/s/ JOHN M. CONNOLLY John M. Connolly	Director	March 19, 2018
/s/ KEITH L. CRANDELL Keith L. Crandell	Director	March 19, 2018
/s/ MARIJN DEKKERS, PH.D. Marijn Dekkers, Ph.D.	Director	March 19, 2018
/s/ MARTIN D. MADAUS, PH. D. Martin D. Madaus, Ph. D.	Director	March 19, 2018

Signature	Title	Date
/s/ PAUL M. MEISTER Paul M. Meister	Director	March 19, 2018
/s/ DAVID R. WALT, PH.D. David R. Walt, Ph.D.	Director	March 19, 2018

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

QUANTERIX CORPORATION

Years ended December 31, 2017, 2016 and 2015

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Quanterix Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Quanterix Corporation ("the Company") as of December 31, 2017 and 2016, the consolidated statements of operations and comprehensive loss, redeemable convertible preferred stock and stockholders' (deficit) equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

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/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Boston, Massachusetts

March 19, 2018

Quanterix Corporation

Consolidated Balance Sheets

(amounts in thousands, except share and per share data)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 79,682	$ 29,671
Accounts receivable (including $123 and $124 from related parties as of December 31, 2017 and 2016, respectively)	5,599	3,917
Inventory	3,571	1,528
Prepaid expenses and other current assets	400	127
Total current assets	89,252	35,243
Property and equipment, net	1,874	1,223
Other non-current assets	653	651
Total assets	$ 91,779	$ 37,117
Liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity		
Current liabilities:		
Accounts payable (including $0 and $8 to related parties as of December 31, 2017 and 2016, respectively)	$ 3,552	$ 2,549
Accrued compensation and benefits	2,624	1,693
Other accrued expenses (including $170 and $516 to related parties as of December 31, 2017 and 2016, respectively)	3,560	2,386
Deferred revenue (including $1,182 and $1,204, with related parties as of December 31, 2017 and 2016, respectively)	4,942	3,428
Current portion of long term debt	5,036	899
Total current liabilities	19,714	10,955
Preferred stock warrant liability	—	2,802
Deferred revenue, net of current portion (including $1,074 and $149 with related parties as of December 31, 2017 and 2016, respectively)	1,709	328
Long term debt, net of current portion	4,346	9,344
Other non-current liabilities	144	212
Total liabilities	$ 25,913	$ 23,641
Commitments and contingencies (*Note 9*)		
Redeemable convertible preferred stock:		
Series A redeemable convertible preferred stock, $0.001 par value: authorized—no shares and 16,464,442 shares as of December 31, 2017 and 2016, respectively; issued and outstanding—no shares and 15,700,001 shares as of December 31, 2017 and 2016, respectively	—	28,979
Series B redeemable convertible preferred stock, $0.001 par value: authorized—no shares and 6,186,594 shares as of December 31, 2017 and 2016, respectively; issued and outstanding—no shares and 6,021,636 shares as of December 31, 2017 and 2016, respectively	—	17,459
Series C redeemable convertible preferred stock, $0.001 par value: authorized—no shares and 9,791,421 shares as of December 31, 2017 and 2016; issued and outstanding—no shares and 8,605,944 shares as of December 31, 2017 and 2016, respectively	—	36,678
Series D redeemable convertible preferred stock, $0.001 par value: authorized—no shares and 12,420,262 shares as of December 31, 2017 and 2016, respectively; issued and outstanding—no shares and 12,420,262 shares as of December 31, 2017 and 2016, respectively	—	45,469
Total redeemable convertible preferred stock	—	128,585
Stockholders' (deficit) equity:		
Preferred stock, $0.001 par value:		
Authorized—5,000,000 and no shares as of December 31, 2017 and 2016, respectively; no shares outstanding as of December 31, 2017 and 2016, respectively	—	—
Common stock, $0.001 par value:		
Authorized—120,000,000 and 70,000,000 shares as of December 31, 2017 and 2016, respectively; issued and outstanding—21,707,041 and 2,315,496 shares as of December 31, 2017 and 2016, respectively	22	2
Additional paid-in capital	210,196	—
Accumulated deficit	(144,352)	(115,111)
Total stockholders' (deficit) equity	65,866	(115,109)
Total liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity	$ 91,779	$ 37,117

See accompanying notes.

Quanterix Corporation

Consolidated Statements of Operations and Comprehensive Loss

(amounts in thousands, except share and per share data)

	Year ended December 31,		
	2017	2016	2015
Product revenue (including related party activity of $339, $509, and $527 for the years ended December 31, 2017, 2016 and 2015, respectively)	$ 14,124	$ 10,601	$ 9,477
Service and other revenue (including related party activity of $165, $107 and $93 for the years ended December 31, 2017, 2016, and 2015, respectively)	7,676	5,012	2,515
Collaboration and license revenue (including related party activity of $1,074, $172 and $188 for the years ended December 31, 2017, 2016, and 2015, respectively)	1,074	1,972	188
Total revenue	22,874	17,585	12,180
Operating expenses:			
Cost of product revenue (including related party activity of $235, $322 and $415 for the years ended December 31, 2017, 2016 and 2015, respectively)	7,742	6,299	5,661
Cost of services and other revenue	5,145	3,163	804
Cost of license revenue, related party	—	375	—
Research and development	16,304	16,993	10,083
Selling, general and administrative	19,688	12,466	10,155
Total operating expenses	48,879	39,296	26,703
Loss from operations	(26,005)	(21,711)	(14,523)
Interest expense, net	(951)	(1,298)	(1,040)
Other (expense) income, net	(63)	(164)	(380)
Net loss	$ (27,019)	$ (23,173)	$ (15,943)
Reconciliation of net loss to net loss attributable to common stockholders:			
Net loss	$ (27,019)	$ (23,173)	$ (15,943)
Accretion of preferred stock to redemption value	(4,110)	(4,437)	(4,355)
Accrued dividends on preferred stock	(59)	(8)	—
Net loss attributable to common stockholders	$ (31,188)	$ (27,618)	$ (20,298)
Net loss per share attributable to common stockholders, basic and diluted	$ (8.30)	$ (12.89)	$ (11.19)
Weighted-average common shares outstanding, basic and diluted	3,756,954	2,142,840	1,813,203

See accompanying notes.

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Quanterix Corporation

Year ended December 31, 2017, 2016 and 2015

Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' (Deficit) Equity

	Series A redeemable convertible preferred stock		Series B redeemable convertible preferred stock		Series C redeemable convertible preferred stock		Series D redeemable convertible preferred stock		Common stock		Additional paid-in capital	Accumulated (deficit)	Total stockholders' (deficit) equity
	Shares	Value	Shares	Value	Shares	Value	Shares	Value	Shares	Value			
Balance at December 31, 2014	14,400,001	$ 22,692	5,624,106	$ 14,266	6,503,780	$ 25,132	—	$ —	1,705,541	$ 2	—	$ (69,491)	$ (69,489)
Issuance of Series C preferred stock, net of issuance costs	—	—	—	—	2,102,164	7,000	—	—	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	35,348	—	43	—	43
Vesting of restricted stock	—	—	—	—	—	—	—	—	236,103	—	—	—	—
Accretion of preferred stock to redemption value	—	1,206	—	912	—	2,237	—	—	—	—	(1,147)	(3,208)	(4,355)
Stock-based compensation expense	—	—	—	—	—	—	—	—	—	—	1,104	—	1,104
Net loss	—	—	—	—	—	—	—	—	—	—	—	(15,943)	(15,943)
Balance at December 31, 2015	14,400,001	$ 23,898	5,624,106	$ 15,178	8,605,944	$ 34,369	—	$ —	1,976,992	$ 2	$ —	$ (88,642)	$ (88,640)
Issuance of Series D preferred stock, net of issuance costs	—	—	—	—	—	—	12,420,262	45,428	—	—	—	—	—
Exercise of preferred stock warrants	1,300,000	3,901	397,530	1,374	—	—	—	—	—	—	—	—	—
Exercise of common stock options	—	—	—	—	—	—	—	—	90,883	—	213	—	213
Vesting of restricted stock	—	—	—	—	—	—	—	—	247,621	—	—	—	—
Accretion of preferred stock to redemption value	—	1,180	—	907	—	2,309	—	41	—	—	(1,141)	(3,296)	(4,437)
Stock-based compensation expense	—	—	—	—	—	—	—	—	—	—	928	—	928
Net loss	—	—	—	—	—	—	—	—	—	—	—	(23,173)	(23,173)
Balance at December 31, 2016	15,700,001	$ 28,979	6,021,636	$ 17,459	8,605,944	$ 36,678	12,420,262	$ 45,469	2,315,496	$ 2	$ —	$ (115,111)	$ (115,109)
Issuance of Series D-1 preferred stock, net of issuance costs	—	—	—	—	—	—	2,113,902	8,423	—	—	—	—	—
Exercise of preferred stock warrants	700,000	2,078	—	—	31,283	138	—	—	—	—		—	—
Exercise of common stock options and vesting of restricted stock	—	—	—	—	—	—	—	—	289,321	—	204	—	204
Cumulative effect of adoption of ASU No. 2016-09	—	—	—	—	—	—	—	—	—	—	141	(141)	—

Accretion of preferred stock to redemption value	—	1,080	—	840	—	2,140	—	50	—	—	(2,029)	(2,081)	(4,110)
Conversion of preferred stock into common stock	(16,400,001)	(32,137)	(6,021,636)	(18,299)	(8,637,227)	(38,956)	(14,534,164)	(53,942)	14,185,744	15	143,319	—	143,334
Warrant liability reclassified to equity upon IPO	—	—	—	—	—	—	—	—	—	—	823	—	823
Issuance of common stock in initial public offering, net of $8,173 in offering costs	—	—	—	—	—	—	—	—	4,916,480	5	65,570	—	65,575
Stock-based compensation expense	—	—	—	—	—	—	—	—	—	—	2,168	—	2,168
Net loss	—	—	—	—	—	—	—	—	—	—	—	(27,019)	(27,019)
Balance at December 31, 2017	— $	—	— $	—	— $	—	— $	—	21,707,041 $	22 $	210,196 $	(144,352)$	65,866

See accompanying notes.

Quanterix Corporation

Consolidated Statements of Cash Flows

(amounts in thousands)

	Year ended December 31,		
	2017	2016	2015
Operating activities			
Net loss	$ (27,019)	$ (23,173)	$ (15,943)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation expense	482	444	425
Stock-based compensation expense	2,168	928	1,104
Non-cash interest expense	238	388	306
Gain on disposal of fixed assets	—	11	—
Non-cash research and development expense for issuance of warrants to a vendor	—	2,078	—
Change in fair value of preferred stock warrants	90	307	598
Changes in operating assets and liabilities:			
Accounts receivable	(1,682)	(1,655)	(1,467)
Restricted cash and deposits	—	200	(1)
Prepaid expenses and other assets	(273)	6	65
Inventory	(2,043)	(526)	(254)
Accounts payable	1,003	1,131	542
Accrued compensation and benefits, other accrued expenses and other liabilities	2,035	1,200	1,302
Deferred revenue	2,895	919	806
Net cash used in operating activities	(22,106)	(17,742)	(12,517)
Investing activities			
Purchases of property and equipment	(1,132)	(526)	(597)
Investment in equity securities	—	(300)	—
Proceeds from sale of property and equipment	—	—	43
Net cash used in investing activities	(1,132)	(826)	(554)
Financing activities			
Proceeds from sale of common stock, net of issuance costs	65,575	—	—
Proceeds from sale of preferred stock, net of issuance costs	8,423	45,428	7,000
Proceeds from exercise of stock warrants	29	18	—
Proceeds from stock options exercised	202	213	43
Proceeds from the issuance of notes payable and warrants, net of issuance costs	(59)	2,954	5,000
Payments on notes payable	(921)	(2,697)	(339)
Net cash provided by financing activities	73,249	45,916	11,704
Net increase (decrease) in cash and cash equivalents	50,011	27,348	(1,367)
Cash and cash equivalents at beginning of year	29,671	2,323	3,690
Cash and cash equivalents at end of year	$ 79,682	$ 29,671	$ 2,323
Supplemental cash flow information			
Accretion of redeemable convertible preferred stock to redemption value	$ 4,110	$ 4,437	$ 4,355
Cash paid for interest	$ 743	$ 945	$ 702
Warrants issued to lenders	$ 119	$ 128	$ 87
Purchases of property and equipment included in accounts payable	$ 74	$ 72	$ —
Fair value of preferred stock warrants exercised and reclassified as shares of preferred stock	$ 2,187	$ 5,257	$ —

See accompanying notes.

Quanterix Corporation

Notes to consolidated financial statements

1. Organization and operations

Quanterix Corporation (the Company) is a life sciences company that has developed a next generation, ultra-sensitive digital immunoassay platform that advances precision health for life sciences research and diagnostics. The Company's platform enables customers to reliably detect protein biomarkers in extremely low concentrations in blood, serum and other fluids that, in many cases, are undetectable using conventional, analog immunoassay technologies. It also allows researchers to define and validate the function of novel protein biomarkers that are only present in very low concentrations and have been discovered using technologies such as mass spectrometry. These capabilities provide the Company's customers with insight into the role of protein biomarkers in human health that has not been possible with other existing technologies and enable researchers to unlock unique insights into the continuum between health and disease. The Company is currently focusing its platform on protein detection and is also developing its Simoa technology to detect nucleic acids in biological samples.

The Company currently markets the Simoa HD-1 Analyzer, a fully automated immunoassay platform with multiplexing and custom assay capability, and related assay test kits and consumable materials. The Company launched a second immunoassay platform to early adopters in the fourth quarter of 2017 and will launch commercially in the first quarter of 2018 with a more compact footprint than the Simoa HD-1 Analyzer and less automation designed for lower volume requirements while still allowing multiplexing and custom assay capability. The Company also performs research services on behalf of customers to apply the Simoa technology to specific customer needs. The Company's primary customers are in the research use only market which includes academic and governmental research institutions, the research and development laboratories of pharmaceutical manufacturers, contract research organizations, and specialty research laboratories performing lab developed tests.

Initial Public Offering

In December 2017, the Company completed its initial public offering (IPO) in which the Company sold 4,916,480 shares of its common stock at the initial public offering price of $15.00 per share. The Company's common stock began trading on The Nasdaq Global Market on December 7, 2017. The aggregate net proceeds received by us from the IPO, net of underwriting discounts and commissions and offering expenses, was $65.6 million. Immediately prior to the completion of the IPO, all then outstanding shares of our convertible preferred stock were converted into 14,185,744 shares of common stock. The related carrying value of shares of preferred stock, notes and warrants in the aggregate amount of $143.3 million was reclassified as common stock and additional paid-in capital. Additionally, the Company filed an amended and restated certificate of incorporation with the Secretary of State of the State of Delaware, effective December 11, 2017 to, among other things, change the authorized number of shares of common stock to 120,000,000 and the authorized number of shares of preferred stock to 5,000,000.

Liquidity

The Company has had recurring losses from operations since inception and has an accumulated deficit of $144.4 million at December 31, 2017 and the Company incurred a net loss of $27.0 million, $23.2 million, and $15.9 million for the years ended December 31, 2017, 2016, and 2015, respectively. Prior to the IPO the Company had funded its operations principally from issuances of preferred stock, debt financings, grants, product and service sales and development and license agreements. At December 31, 2017, the Company had $79.7 million of unrestricted cash and cash equivalents. The Company expects the current cash balance will be sufficient to fund operations for a period of at least

Quanterix Corporation

Notes to consolidated financial statements (Continued)

1. Organization and operations (Continued)

one year from the date the consolidated financial statements are issued. Prior to achieving profitability, the Company projects that it will not need additional funding. There can be no assurances, however, that no additional funding will be required or that additional funding will be available on terms acceptable to the Company, or at all.

2. Significant accounting policies

The following is a summary of significant accounting policies followed in the preparation of these financial statements.

Reverse Stock Split

On December 4, 2017 the Company effected a reverse stock split at a ratio of 1-for-3.214 of its common stock. The shares of common stock subject to then outstanding stock options were adjusted accordingly to reflect the reverse stock split.

All common stock and related per share amounts presented in these financial statements and related notes have been retroactively adjusted to reflect the 1-for-3.214 reverse stock split.

Principles of consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and include the accounts of Quanterix Corporation and its wholly-owned subsidiary. All material intercompany transactions and balances have been eliminated in consolidation.

Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. In making those estimates and assumptions, the Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. The Company's significant estimates included in the preparation of the consolidated financial statements are related to revenue recognition, fair value of equity instruments, valuation allowances recorded against deferred tax assets, and stock-based compensation. Actual results could differ from those estimates.

Revenue recognition

The Company recognizes revenue when (1) persuasive evidence of an arrangement exists, (2) shipment and installation, if applicable, has occurred or services have been rendered, (3) the price to the customer is fixed or determinable and (4) collection of the related receivable is reasonably assured. The Company primarily generates revenue from the sale of products and delivery of services, as well as under license and collaboration agreements. The Company's product revenue includes the sale of instruments as well as assay kits and consumables which are used to perform tests on the instrument. The Company's service revenue is generated from services performed in the Company's Simoa Accelerator Lab under contracts to perform research services on behalf of customers and maintenance and support services.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Product revenue

Revenue for instrument sales is recognized upon installation at the customer's location or upon transfer of title to the customer when installation is not required, which is generally the case with sales to distributors. In sales to end-customers, the Company provides the installation service and often payment is tied to the completion of the installation service. When installation is required, the Company accounts for the instrument and installation service as one unit of accounting and recognizes revenue when installation is completed, assuming all other revenue recognition criteria are met. Instrument transactions often have multiple elements, as discussed below. Included with the purchase of an instrument is a one-year assurance type product warranty assuring that the instrument is free of material defects and will function according to specifications. In addition, the sale of an instrument includes an implied warranty which is promised to the customer during the pre-sales process, at the time that the sales quote is issued to the customer. The implied warranty is provided over the same one-year period as the standard warranty. The services included in the implied warranty are the same as those included in the extended service contracts, and include two bi-annual preventative maintenance service visits, minor hardware updates and software upgrades, additional training and troubleshooting which is beyond the scope of the standard product warranty. The implied warranty has been identified by the Company as a separate deliverable and unit of accounting. Consideration allocated to the implied one year service type warranty is recognized over the one year period of performance as service and other revenue as described below. Consideration allocated to any other elements is recognized as the goods are delivered or the services are performed.

Service and other revenue

Service revenue includes revenue from the implied one-year service type warranty obligation, revenue from extended service contracts, research services performed on behalf of a customer in the Company's Simoa Accelerator Lab, and other services that may be performed. Revenue for the implied one-year service type warranty is initially deferred at the time of instrument revenue recognition and is recognized ratably over a 12-month period starting on the date of instrument installation. Revenue for extended warranty contracts is recognized ratably over the service period. Revenue for research and development services and other services is generally recognized based on proportional performance of the contract, when the Company's ability to complete project requirements is reasonably assured. Most of these services are completed in a short period of time from the receipt of the customer's order. When significant risk exists in the Company's ability to fulfill project requirements, revenue is recognized upon completion of the contract.

Collaboration and license revenue

Collaboration and license revenue relates to the Joint Development and License Agreement (JDLA) with bioMérieux SA (bioMérieux) as amended and restated in December 2016 by the Amended and Restated License Agreement (the 2016 Amendment) and the agreements with a diagnostics company. Refer to Note 11 for a description of these arrangements and the Company's revenue recognition policies for these agreements.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Multiple element arrangements

Many of our instrument sales involve the delivery of multiple products and services. The elements of an instrument sale typically include the instrument installation (when required), an implied one year service type warranty, and in some cases the Company may also sell assays, consumables, or other services. Revenue recognition for contracts with multiple deliverables is based on the individual units of accounting determined to exist in the contract. A delivered item is considered a separate unit of accounting when the delivered item has value to the customer on a stand-alone basis. Items are considered to have stand-alone value when they are sold separately by any vendor or when the customer could resell the item on a stand-alone basis.

The consideration received is allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria are applied to each of the separate units. The Company determines the estimated selling price for deliverables within the arrangement using vendor-specific objective evidence (VSOE) of selling price, if available. If VSOE is not available, the Company considers if third-party evidence is available. If third-party evidence of selling price or VSOE is not available, the Company uses its best estimate of selling price for the deliverable.

In order to establish VSOE of selling price, the Company must regularly sell the product or service on a standalone basis with a substantial majority priced within a relatively narrow range. If there are not a sufficient number of standalone sales such that VSOE of selling price cannot be determined, then the Company considers whether third party evidence can be used to establish selling price. Due to the lack of similar products and services sold by other companies within the industry, the Company has not established selling price using third-party evidence.

For product and service sales, the Company determines its best estimate of selling price for instruments, consumables, services and assays using average selling prices over a rolling 12-month period coupled with an assessment of market conditions, as VSOE and third-party evidence cannot be established. The Company recognizes revenue for delivered elements only when it determines there are no uncertainties regarding customer acceptance.

Distributor transactions

In certain markets, the Company sells products and provides services to customers through distributors that specialize in life sciences products. In cases where the product is delivered to a distributor, revenue recognition generally occurs when title transfers to the distributor. The terms of sales transactions through distributors are generally consistent with the terms of direct sales to customers, except the distributors do not require the Company's services to install the instrument at the end customer and perform the services for the customer that are beyond our standard warranty in the first year following the sale. These transactions are accounted for in accordance with the Company's revenue recognition policy described herein.

Cost of revenue

Cost of product revenue consists of raw materials, part costs and associated freight, shipping and handling costs, contract manufacturer costs, personnel costs, yield loss, in-license payments and royalties, stock-based compensation, other direct costs and overhead.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Cost of service and other revenue consists of personnel, facility costs associated with operating the Simoa Accelerator Lab on behalf of customers, costs related to instrument maintenance and servicing equipment at customer sites, other direct costs and overhead.

Cost of license revenue, related party consists of license fees that are the direct result of cash payments received related to license agreements.

Research and development expenses

Research and development expenses, including personnel costs, allocated facility costs, lab supplies, outside services, and contract laboratory costs are charged to research and development expense as incurred. The Company accounts for nonrefundable advance payments for goods and services that will be used in future research and development activities as expenses when the service has been performed or when the goods have been received rather than when the payment is made.

Selling, general, and administrative expenses

Selling, general, and administrative expenses are primarily composed of compensation and benefits associated with sales and marketing, finance, human resources, and other administrative personnel, outside marketing, advertising, allocated facilities costs, legal expenses, and other general and administrative costs.

Comprehensive loss

Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. For the years ended December 31, 2017 and 2016, comprehensive loss was equal to net loss.

Net loss per share

Basic net loss per common share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common shares and potentially dilutive securities outstanding for the period determined using the treasury-stock and if-converted methods. For purposes of the diluted net loss per share calculation, preferred stock, unvested restricted common stock and stock options are considered to be potentially dilutive securities, but are excluded from the calculation of diluted net loss per share because their effect would be anti-dilutive and therefore basic and diluted net loss per share were the same for all periods presented.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

The following table sets forth the outstanding potentially dilutive securities that have been excluded in the calculation of diluted net loss per share because to do so would be anti-dilutive (in common stock equivalent shares):

	Year ended December 31,		
	2017	2016	2015
Series A redeemable convertible preferred stock	—	4,884,869	4,480,389
Series B redeemable convertible preferred stock	—	1,873,561	1,749,877
Series C redeemable convertible preferred stock	—	2,677,649	2,677,649
Series D redeemable convertible preferred stock	—	3,864,421	—
Unvested restricted common stock	177,192	376,248	623,869
Outstanding stock options	2,249,843	1,119,671	1,043,030
Outstanding preferred warrants	—	326,374	670,086
Outstanding common stock warrants	86,090	—	—
Total	2,513,125	15,122,793	11,244,900

As of December 31, 2017, 2016, and 2015 the Company had an obligation to issue warrants to purchase an additional 93,341 shares of common stock, 300,000 shares of Series A-3 Preferred Stock, and 300,000 shares of Series A-3 Preferred Stock, respectively, to a vendor if a contract is terminated prior to a minimum purchase commitment being met. Upon completion of the IPO in December 2017, the warrants to purchase shares of Preferred Stock were converted to warrants to purchase shares of common stock at a one-for-3.214 basis. No amounts are presented in the table above for this obligation to issue a warrant as the issuance of the warrant is not considered probable.

The Company's redeemable convertible preferred stock was entitled to receive dividends based on dividends declared to common stockholders, thereby giving the preferred stockholders the right to participate in undistributed earnings of the Company above the stated dividend rate. However, preferred stockholders did not have a contractual obligation to share in the net losses of the Company. The Company operated in a net loss position for the years ended December 31, 2017, 2016 and 2015 and, therefore the Company's accounting for basic and diluted earnings per share was unaffected by the participation rights of the preferred stockholders.

Cash and cash equivalents

Cash and cash equivalents consists of cash deposits and short-term, highly liquid investments that are readily convertible into cash, with original maturities of three months or less. Cash equivalents are carried at fair value based on third-party pricing services. Cash and cash equivalents consist of the following (in thousands):

	As of December 31,	
	2017	2016
Cash and cash equivalents:		
Cash	$ 1,500	$ 29,671
Money market funds invested in U.S. Treasury obligations	78,182	—
Total cash and cash equivalents	$ 79,682	$ 29,671

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Restricted cash and deposits

As of December 31, 2017 and 2016, the Company had $0.4 million and $0.4 million, respectively, in restricted cash and deposits related to amounts held as a security deposit for the Company's facility lease obligation and a business registration application, which are recorded in other non-current assets on the consolidated balance sheets.

Accounts receivable and allowance for doubtful accounts

The Company provides credit, in the normal course of business, to customers and does not require collateral. Accounts receivable consist of amounts due to the Company for sales to customers and are recorded net of an allowance for doubtful accounts. The Company reviews accounts receivable on a regular basis to determine if any receivable will potentially be uncollectable and to estimate the amount of allowance for doubtful accounts necessary. Once a receivable is deemed uncollectible, such balance is written off and charged against the allowance for doubtful accounts. The Company has not incurred material write offs in any of the periods presented. As of December 31, 2017, and 2016, no allowance for doubtful accounts has been recorded.

Inventory

Inventory is stated at the lower of cost or market on a first-in, first-out (FIFO) basis. The Company analyzes its inventory levels on each reporting date and writes down inventory that is expected to expire prior to being sold and inventory in excess of expected sales requirements. In the event that the Company identifies these conditions exist in its inventory, the carrying value is reduced to its estimated net realizable value.

Property and equipment

Property and equipment, including leasehold improvements, are stated at cost and are depreciated, or amortized in the case of leasehold improvements, over their estimated useful lives using the straight-line method. Expenditures for maintenance and repairs are charged to expense as incurred, whereas major betterments are capitalized as additions to property and equipment. The Company reviews its property and equipment whenever events or changes in circumstances indicate that the carrying value of certain assets might not be recoverable and recognizes an impairment loss when it is probable that an asset's realizable value is less than the carrying value. To date, no such impairment losses have been recorded. Depreciation is calculated based upon the following estimated useful lives of the assets:

Laboratory and manufacturing equipment	Five years
Computers and software	Three years
Office furniture and equipment	Seven years
Leasehold improvements	Shorter of the useful life of the asset or the remaining term of the lease

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Software development costs

The Company develops and modifies software related to the operation of the instrument. Software development costs are expensed as incurred until the point the Company establishes technological feasibility. Based on the Company's product development process, technological feasibility is established upon the completion of a working model. The Company does not incur material costs between the completion of the working model and the point at which the product is ready for release. Therefore, software development costs are charged to the statement of operations as incurred as research and development expense.

Investments

During the third quarter of 2016, the Company purchased a minority interest in preferred stock in a privately held company for $0.3 million. The investment is recorded on a cost basis in other non-current assets on the accompanying consolidated balance sheets as the Company does not have a controlling investment, does not have the ability to exercise significant influence over the privately held company and the fair value of this equity investment is not readily determinable. The Company performs an impairment analysis at each reporting period to determine if the carrying value must be reduced due to a decrease in the value of the investment, which includes consideration of whether an event or change in circumstances has occurred that may have a significant adverse effect on the fair value of the investment. The Company determined there was no impairment during the years ended December 31, 2017 and 2016.

Fair value of financial instruments

ASC Topic 820, *Fair Value Measurement* (ASC 820), establishes a fair value hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and the Company's own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances.

ASC 820 identifies fair value as the exchange price, or exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As a basis for considering market participant assumptions in fair value measurements, ASC 820 establishes a three-tier fair value hierarchy that distinguishes between the following:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 inputs are inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly; and

Level 3 inputs are unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The carrying amount reflected on the balance sheets for cash and cash equivalents, accounts receivable, prepaid expenses and other current assets, accounts payable and accrued liabilities approximated their fair values, due to the short-term nature of these instruments. The carrying value of the long-term debt approximates its fair value as the debt arrangement is based on interest rates the Company believes it could obtain for borrowings with similar terms. The Company has an investment in the preferred stock of a privately held company which is recorded within other non-current assets on a cost basis. This cost method investment's fair value has not been estimated as there are no identified events or changes in circumstances that would indicate a significant adverse effect on the fair value of the investment and to do so would be impractical.

Fair value measurements as of December 31, 2017 are as follows (in thousands):

Description	Total	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
		(unaudited)		
Financial assets				
Cash equivalents	$ 78,182	$ 78,182	$ —	$ —
Total	$ 78,182	$ 78,182	$ —	$ —

Fair value measurements as of December 31, 2016 are as follows (in thousands):

Description	Total	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Financial liabilities				
Preferred stock warrant liability	$ 2,802	$ —	$ —	$ 2,802
Total	$ 2,802	$ —	$ —	$ 2,802

As of January 1, 2016, the Company had outstanding warrants to purchase 64,441 shares of Series A-2 redeemable convertible preferred stock (Series A-2 Preferred Stock), 1,300,000 shares of Series A-3 convertible preferred stock (Series A-3 Preferred Stock), 562,488 shares of Series B redeemable convertible preferred stock (Series B Preferred Stock), and 226,733 shares of Series C redeemable convertible preferred stock (Series C Preferred Stock). During the years ended December 31, 2017 and 2016, the Company issued the following warrants:

- On January 29, 2016, the Company issued a warrant to purchase 57,810 shares of Series C Preferred Stock to a lender related to a second amendment to a debt facility (Note 10)
- On November 18, 2016, the Company issued a warrant to purchase 700,000 shares of Series A-3 Preferred Stock to a vendor (Note 9).

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

- On March 31, 2017, the Company issued a warrant to purchase 38,828 shares of Series D redeemable convertible preferred stock (Series D Preferred Stock) to a lender as part of a third amendment to a debt facility (Note 10).

All of the warrants were initially recorded as a preferred stock warrant liability on the accompanying consolidated balance sheets at fair value. Warrants issued for goods or services are initially accounted for under ASC 505-50 and are recognized over the required performance period in the consolidated statements of operations or consolidated balance sheets at the vesting date or reporting date fair value based on the nature of the underlying arrangement. Warrants issued in connection with a product development contract were recorded to research and development expense. Warrants issued in connection with a revenue arrangement were recorded as a reduction in revenue. Warrants issued in connection with debt arrangements were recorded as a reduction in the carrying value of debt. Once the counterparty's performance is complete and the warrants have become fully vested, they are marked to market on each reporting and exercise date with changes in the fair value recorded in other expense (income) on the statement of operations and comprehensive loss. Holders of warrants to purchase 1,300,000 shares of Series A-3 Preferred Stock and 562,488 Series B Preferred Stock exercised the warrants during the year ended December 31, 2016 and holders of warrants to purchase 700,000 shares of Series A-3 Preferred stock, and holders of warrants to purchase 111,114 shares of Series C Preferred Stock exercised the warrants during the year ended December 31, 2017. Upon exercise, the fair value of the warrants was reclassified to redeemable convertible preferred stock along with any proceeds received. Upon completion of the IPO, the outstanding warrants to purchase shares of preferred stock were automatically converted into warrants to purchase shares of common stock and are therefore accounted for as equity instruments.

The changes in preferred stock warrant liability measured at fair value for which the Company has used Level 3 inputs to determine fair value are as follows (in thousands):

	Warrant liability
Balance at December 31, 2015	$ 5,547
Issuance of warrants related to debt facility	128
Issuance of warrants related to a vendor	2,078
Changes in fair value of warrants	307
Warrant exercises	(5,258)
Balance at December 31, 2016	2,802
Issuance of warrants related to debt facility	119
Changes in fair value of warrants	90
Warrant exercises	(2,188)
Conversion to warrants to purchase common stock in connection with IPO	(823)
Balance at December 31, 2017	$ —

Prior to the completion of the IPO, the warrants were classified as liabilities because they were exercisable for shares of redeemable convertible preferred stock. On each measurement date and immediately prior to the IPO and the resulting change in classification of the warrants to equity instruments, the Company utilized a black-scholes option pricing model to determine the fair value of the warrants and utilized various valuation assumptions based on available market data and other

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

relevant but unobservable factors. Expected volatility for the Company's redeemable convertible preferred stock was determined based on an analysis of the historical volatility of a representative group of guideline public companies because, prior to the IPO, there was no market for the Company's common stock and, therefore, a lack of market-based company-specific historical and implied volatility information. The expected term reflects the remaining contractual term of the warrants. The assumed dividend yield is based upon the Company's expectation of not paying dividends in the foreseeable future. The risk-free rate is based upon the U.S. Treasury yield curve in effect at the valuation date, commensurate with the remaining contractual life of the warrants. The fair value of the underlying preferred shares was determined by management, with the assistance of a third party valuation specialist, using a hybrid valuation method, which includes a probability weighted analysis of two scenarios. The first scenario was based on the completion of an initial public offering utilizing a market approach and the second scenario was based on the Company remaining privately held utilizing either an income approach or a weighted-average of an income approach and a backsolve to a recent financing event, depending on the proximity of the financing event to the measurement date. The assumption regarding the Company's probability of completing an initial public offering was the primary contributing factor to the changes in fair value of the underlying preferred stock. See "Stock-based Compensation" section of this Note 2 for discussion of the changes of the probability of completing an initial public offering.

The following assumptions were utilized to determine the fair value of each warrant to purchase preferred stock at each reporting period and as of the change from liability to equity accounting treatment of the warrants in connection with the IPO:

Balance sheet date	Value of underlying Series D preferred stock	Value of underlying Series C preferred stock	Value of underlying Series B preferred stock	Value of underlying Series A-3 preferred stock	Value of underlying Series A-2 preferred stock	Volatility	Probability of an initial public offering
December 7, 2017	$4.67	$ 4.67	N/A	$ 4.67	$ 4.67	46%	100%
December 31, 2016	N/A	$ 4.16	N/A	$ 2.97	$ 2.95	52%	40%
December 31, 2015	N/A	$ 3.92	$3.00	$ 3.00	$ 1.90	41%	25%

Warranties

The Company provides a one-year warranty and maintenance service related to its instruments and sells extended warranty contracts for additional periods. The Company defers revenue associated with these services and recognizes them on a pro-rata basis over the period of service. If expected costs are in excess of deferred revenue, a warranty accrual is recorded. As of December 31, 2017 and 2016 no warranty accruals were recorded.

Income taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on differences between the consolidated financial statement carrying amounts and the tax bases of the assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance against deferred tax assets is recorded if, based on the

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions in accordance with the provisions of ASC 740 *Income Taxes* ("ASC 740"). When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. As of December 31, 2017 and 2016 the Company did not have any significant uncertain tax positions.

Credit, product and supplier concentrations and off-balance-sheet risk

The Company has no significant off-balance-sheet risk, such as foreign exchange contracts, option contracts, or other hedging arrangements. Financial instruments that potentially expose the Company to concentrations of credit risk primarily consist of cash and cash equivalents and a cost method investment. The Company places its cash and cash equivalents principally in depository accounts with a bank.

The Company is also subject to supply chain risks related to the outsourcing of the manufacturing of its instruments. Although there are a limited number of manufacturers for instruments of this type, the Company believes that other suppliers could provide similar products on comparable terms. A change in suppliers, however, could cause a delay in manufacturing and a possible loss of sales, which would adversely affect operating results. In addition to outsourcing the manufacturing of its instruments, the Company also purchases antibodies through a number of different suppliers. Although a disruption in service from any one of its antibody suppliers is possible, the Company believes that it would be able to find an adequate supply from alternative suppliers.

Customers outside the United States represented 34%, and 21% of the Company's gross trade accounts receivable balance as of December 31, 2017 and 2016, respectively.

At December 31, 2017, one customer's accounts receivable balance was 16% of the Company's aggregate accounts receivable, and no single customer represented 10% of the Company's revenue for the year ended December 31, 2017. At December 31, 2016, one customer's accounts receivable balance was 26% of the Company's aggregate accounts receivable and represented 11% of the Company's revenue for the year ended December 31, 2016.

Segment information

Operating segments are defined as components of an enterprise about which separate discrete information is available for evaluation by the chief operating decision-maker in deciding how to allocate resources and assess performance. The Company and the Company's chief operating decision-maker reviews the Company's operations and manages its business as a single operating segment.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Net revenue by product and service line are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Product revenue			
Instrument	$ 6,494	$ 6,167	$ 6,542
Consumable and other product	7,630	4,434	2,935
Total	$ 14,124	$ 10,601	$ 9,477
Service and other revenue			
Simoa Accelerator Lab services	$ 4,859	$ 3,092	$ 1,625
Other services	2,817	1,920	890
Total	$ 7,676	$ 5,012	$ 2,515

The following table reflects total revenue (in thousands) by geography and as a percentage of total revenue, based on the billing address of our customers. North America consists of the United States, Canada and Mexico; EMEA consists of Europe, Middle East, and Africa; and Asia Pacific includes Japan, China, South Korea, Singapore, Malaysia and Australia.

	Year ended December 31,					
	2017		2016		2015	
North America	$ 13,864	61%	$ 13,018	74%	$ 9,417	77%
EMEA	$ 6,922	30%	$ 3,416	19%	$ 2,081	17%
Asia Pacific	$ 2,088	9%	$ 1,151	7%	$ 682	6%
Total	$ 22,874	100%	$ 17,585	100%	$ 12,180	100%

Stock-based compensation

The Company accounts for stock-based compensation awards in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718, *Compensation—Stock Compensation*, or ASC 718. ASC 718 requires all stock-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. Stock-based compensation awards have historically consisted of stock options and restricted stock.

Prior to adoption of ASU 2016-09 on January 1, 2017, the Company recognized compensation costs related to stock options granted to employees based on the estimated fair value of the awards on the date of grant, net of estimated forfeitures. Effective January 1, 2017, the Company ceased utilizing an estimated forfeiture rate and began recognizing forfeitures as they occur. The Company estimates the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The grant date fair value of the stock-based awards is generally recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

The Company recognizes compensation costs related to share-based payments granted to non-employees based on the estimated fair value of the awards on the date of grant in the same manner as options for employees; however, the fair value of the stock options granted to non-employees is re-measured each reporting period until the service is complete, and the resulting increase or decrease in value, if any, is recognized as expense or income, respectively, during the period the related services are rendered to the same financial statement line item as any cash consideration would be recognized. There were no material non-employee awards outstanding during the years ended December 31, 2017, 2016 and 2015.

The fair value of stock options granted to employees and directors for their services on the Company's Board of Directors is estimated on the grant date using the Black-Scholes option-pricing model, based on the assumptions noted in the following table:

	Year ended December 31,		
	2017	2016	2015
Risk-free interest rate	1.9%	1.2%	1.7%
Expected dividend yield	None	None	None
Expected term (in years)	6.0	6.0	6.0
Expected volatility	50.0%	46.0%	41.3%

Using the Black-Scholes option-pricing model, the weighted-average grant date fair value of options granted for the years ended December 31, 2017, 2016, and 2015 was $4.52, $2.41 and $2.06 per share, respectively. Expected volatility was calculated based on reported volatility data for a representative group of guideline publicly traded companies for which historical information was available. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant, commensurate with the expected life assumption. The Company estimates the expected life of options granted to employees utilizing the simplified method which calculates the expected life of an option as the average of the time to vesting and contractual life of the options. The expected life is applied to the stock option grant group as a whole, as the Company does not expect substantially different exercise or post-vesting termination behavior among its employee population. The Company uses the simplified method due to the lack of historical exercise data and the plain nature of the stock options. The Company uses the remaining contractual term for the expected life of non-employee awards. The expected dividend yield is assumed to be zero as the Company has never paid dividends and has no current plans to pay any dividends on common stock. Prior to the completion of the IPO, the fair value of the underlying common shares was determined by management, with the assistance of a third party valuation specialist, using a hybrid valuation method, which includes a weighted analysis of two scenarios. The first scenario is based on the completion of an initial public offering utilizing a market approach and the second scenario is based on the Company remaining privately held utilizing either an income approach or a weighted-average of an income approach and a backsolve to a recent financing event approach, depending on the proximity of the financing event to the measurement date. The initial public offering scenario reflected data gathered from relevant comparable initial public offering transactions and the current value method of equity allocation was used in determining the value of common stock. For the privately held scenario, traditional income methods of business valuation were employed, where the total equity value was then allocated using the option pricing model (OPM). The assumption regarding the Company's probability of completing an initial public

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

offering was the primary contributing factor to the changes in fair value of the common stock. The probability of initial public offering was 40% at December 31, 2016. Since December 31, 2015, the Company had performed the common stock valuations on a quarterly basis. Upon completion of the IPO in December 2017, the Company determines the fair value of the underlying common shares based on the closing price of the common stock on the option grant date.

The probability of completing an initial public offering was based on the facts and circumstances as of each measurement date. During the three months ended December 31, 2016, the Company began initial preparations for completing an initial public offering; including assessing quarterly financial information and holding initial discussions with prospective investment bankers, which resulted in an increase in the probability of completing an initial public offering. Subsequent to March 31, 2017, the Company obtained approval from the Board of Directors to pursue the transaction, selected investment bankers, held an organizational meeting, and performed other procedures necessary to complete an initial public offering. As a result, the probability of completing an initial public offering increased subsequent to March 31, 2017.

The Company is using the straight-line attribution method to recognize stock-based compensation expense for service based awards for employees and non-employees. However, cumulative compensation expense recognized through the end of any period must at least equal the value of vested awards through that period, with compensation expense adjusted accordingly. For the year ended December 31, 2016, the amount of stock-based compensation expense recognized during a period was based on the value of the portion of the awards that were ultimately expected to vest. Prior to January 1, 2017, forfeitures were estimated at the time of grant, and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. During the year ended December 31, 2016, the Company applied an estimate of forfeitures which did not have a material effect on the consolidated financial statements. Effective January 1, 2017, the Company adopted Accounting Standards Update (ASU) 2016-09 *Stock Compensation*, and has elected to account for forfeitures as incurred and therefore no forfeiture estimate is utilized in the year ended December 31, 2017. The effect of this adoption has been recorded as a $0.1 million cumulative effect adjustment to accumulated deficit as of January 1, 2017.

The Company applies an accelerated attribution method to recognize stock-based compensation expense when accounting for performance-based stock awards. The Company records the expense for stock-based compensation awards subject to performance-based milestone vesting over the remaining service period when management determines that achievement of the milestone is probable. Management evaluates when the achievement of a performance-based milestone is probable based on the expected satisfaction of the performance conditions as of the reporting date. Compensation expense for performance-based stock awards is included in total stock-based compensation expense. There were no material performance-based stock awards outstanding as of December 31, 2017, 2016, and 2015.

Recent accounting pronouncements

The Company is considered to be an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (JOBS Act). The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. The Company has elected

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

to avail itself of this extended transition period and, as a result, the Company will not be required to adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies so long as the Company remains an emerging growth company.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (ASU 2014-09). The FASB has issued several updates to the standard which (i) clarify the application of the principal versus agent guidance; (ii) clarify the guidance relating to performance obligations and licensing; (iii) clarify assessment of the collectability criterion, presentation of sales taxes, measurement date for non-cash consideration and completed contracts at transaction; and (iv) clarify narrow aspects of ASC 606 or corrects unintended application of the guidance (collectively, the Revenue ASUs). The Revenue ASUs provide an accounting standard for a single comprehensive model for use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. Under Topic 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of Topic 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. Topic 606 also impacts certain other areas, such as the accounting for costs to obtain or fulfill a contract. The standard also requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

The accounting standard is effective for the Company for the year ended December 31, 2019 and for interim periods within such year. Early adoption is permitted. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (the full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). The Company does not currently intend to early adopt the provisions of this accounting standard and currently intend to adopt the standard effective January 1, 2019. The Company is in the process of determining which adoption method will be utilized and assessing the effect of this accounting standard with regards to the arrangements with bioMérieux and a diagnostic company (see Note 11 for the Company's revenue recognition under current guidance for these agreements). The Company's performance under the bioMérieux arrangement is not expected to be completed prior to the anticipated date of adoption on January 1, 2019, and the revenue recognition for this contract may be affected by Topic 606. The Company cannot predict at this time whether performance obligations under the arrangement with a diagnostic company will remain open at January 1, 2019. The Company is also assessing the other significant revenue streams, including instrument revenue, consumable revenue, research services revenue, and services contract revenue, to determine the effect of the adoption of this standard on those arrangements.

In July 2015, the FASB issued ASU No. 2015-11, Inventory (Topic 330): *Simplifying the Measurement of Inventory* (ASU 2015-11). ASU 2015-11 simplifies the subsequent measurement of inventory by requiring inventory to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. ASU 2015-11, which is applied prospectively, is effective for the Company for the year ended December 31, 2017 and for interim periods beginning in the three months ending March 31, 2018 with early application permitted. The

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Company adopted ASU 2015-11 as of January 1, 2017. The adoption of this standard did not have, for 2017, and is not expected to have, in future periods, a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842): *Recognition and Measurement of Financial Assets and Financial Liabilities* (ASU 2016-02). Under ASU 2016-02, lessees will be required to recognize a lease liability and a right-of-use asset for all leases (with the exception of short term leases) at the commencement date. Lessor accounting under ASU 2016-02 is largely unchanged. ASU 2016-02 is effective for the Company for the year ending December 31, 2020. Early adoption is permitted. Under ASU 2016-02, lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. Lessees and lessors may not apply a full retrospective transition approach. The Company is currently evaluating the requirements of ASU 2016-02 and has not yet determined whether the adoption of the standard will have a material impact on its consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* (ASU 2016-09). ASU 2016-09 simplifies the accounting for share-based payment award transactions including the financial statement presentation of excess tax benefits and deficiencies, classification of awards as either equity or liabilities, accounting for forfeitures and classifica7tion on the statement of cash flows. The Company early adopted ASU 2016-09 on January 1, 2017 and elected to account for forfeitures as they occur. The effect of this change in accounting policy has been recorded as a $0.1 million cumulative effect adjustment to accumulated deficit, as of January 1, 2017. ASU 2016-09 also provides that companies no longer record excess tax benefits or certain tax deficiencies in additional paid-in capital. Instead, all excess tax benefits and tax deficiencies are recorded as income tax expense or benefit in the statement of operations and comprehensive loss. There was no financial statement impact of adopting this provision of ASU 2016-09 as the Company is currently in a net operating loss position and the excess tax benefits that existed from options previously exercised had a full valuation allowance. The effects of adopting the remaining provisions in ASU 2016-09 affecting the classification of awards as either equity or liabilities when an entity partially settles the award in cash in excess of the employer's minimum statutory withholding requirements and classification in the statement of cash flows did not have a significant impact on the Company's financial position, results of operations or cash flows.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities* (ASU 2016-01). This guidance changes how entities measure equity investments that do not result in consolidation and are not accounted for under the equity method. Entities will be required to measure these investments at fair value at the end of each reporting period and recognize changes in fair value in net income. A practicability exception will be available for equity investments that do not have readily determinable fair values, however; the exception requires the Company to consider relevant transactions that can be reasonably known to identify any observable price changes that would impact the fair value. This guidance also changes certain disclosure requirements and other aspects of current U.S. GAAP. This guidance is effective for the Company for the year ending December 31, 2019 and for interim periods effective the three months ending March 31, 2020. Early adoption is permitted. The

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

Company is currently evaluating the requirements of ASU 2016-01 and has not yet determined whether the adoption of the standard will have a material impact on its consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern* (ASU 2014-15). ASU 2014-15 requires management to evaluate, at each annual or interim reporting period, whether there are conditions or events that exist that raise substantial doubt about an entity's ability to continue as a going concern within one year after the date the financial statements are issued and provide related disclosures. ASU 2014-15 is effective for the Company for the year ended December 31, 2016 and interim periods thereafter. The adoption of ASU 2014-15 did not have a material effect on the Company's consolidated financial statements but the standard requires enhanced disclosures in certain circumstances based on the Company's assessment of whether any such conditions or events exist that raise substantial doubt regarding the Company's ability to continue as a going concern within the one-year period.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flow (Topic 230)* (ASU 2016-15). The guidance reduces diversity in how certain cash receipts and cash payments are presented and classified in the Statements of Cash Flows. Certain requirements of ASU 2016-15 are as follows: (i) cash payments for debt prepayment or debt extinguishment costs should be classified as cash outflows for financing activities, (ii) contingent consideration payments made soon after a business combination should be classified as cash outflows for investing activities and cash payment made thereafter should be classified as cash outflows for financing up to the amount of the contingent consideration liability recognized at the acquisition date with any excess classified as operating activities, (iii) cash proceeds from the settlement of insurance claims should be classified on the basis of the nature of the loss, (iv) cash proceeds from the settlement of Corporate-Owned Life Insurance (COLI) Policies should be classified as cash inflows from investing activities and cash payments for premiums on COLI policies may be classified as cash outflows for investing activities, operating activities, or a combination of investing and operating activities, and (v) cash paid to a tax authority by an employer when withholding shares from an employee's award for tax-withholding purposes should be classified as cash outflows for financing activities. The guidance is effective for the Company for the year ending December 31, 2019 and for interim periods for the three months ending March 31, 2020. Early adoption is permitted. The adoption of ASU 2016-15 is not expected to have a material effect on the Company's consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash* (ASU 2016-18). The amendments of ASU 2016-18 were issued to address the diversity in classification and presentation of changes in restricted cash and restricted cash equivalents on the statement of cash flows which is currently not addressed under Topic 230. The ASU would require an entity to include amounts generally described as restricted cash and restricted cash equivalents with cash and cash equivalents when reconciling the beginning of period and end of period total amounts on the statement of cash flows. The ASU is effective for annual reporting periods beginning after December 15, 2018, and interim periods within those annual periods. Early adoption is permitted and the adoption of the ASU should be applied retrospectively. The Company does not believe the accounting standard will have a material effect on the consolidated financial statements upon adoption, but would affect the presentation of restricted cash in the statement of cash flows. The amount of restricted cash held as of December 31, 2017 and 2016 was $50 thousand.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

2. Significant accounting policies (Continued)

There have been no other changes in accounting standards issued by the FASB which have not yet been adopted that are expected to have a material impact on the Company's financial position, results of operations or cash flows.

3. Inventory

Inventory consists of the following (in thousands):

	As of December 31,	
	2017	2016
Raw materials	$ 1,032	$ 563
Work in process	968	304
Finished goods	1,571	661
Total	$ 3,571	$ 1,528

Inventory comprises commercial instruments, assays, and the materials required to manufacture assays.

4. Property and equipment

Property and equipment consists of the following (in thousands):

	As of December 31,	
	2017	2016
Laboratory and manufacturing equipment	$ 2,969	$ 1,937
Office furniture and equipment	689	657
Computers and software	459	451
Leasehold improvements	180	133
	4,297	3,178
Less: accumulated depreciation	(2,423)	(1,955)
Property and equipment, net	$ 1,874	$ 1,223

The Company incurred depreciation expense of $0.5 million, and $0.4 million for the years ended December 31, 2017 and 2016, respectively.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

5. Other accrued expenses

Other accrued expenses consist of the following (in thousands):

	As of December 31,	
	2017	2016
Accrued inventory	$ 835	$ 70
Accrued royalties	221	544
Accrued professional services	346	396
Accrued development costs	1,559	843
Accrued other	599	533
Total accrued expenses	$ 3,560	$ 2,386

6. Income taxes

In 2017, the Company adopted ASU No. 2016-09, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which eliminates the requirement that excess tax benefits be realized as a reduction in current taxes payable before the associated tax benefit can be recognized in additional paid-in capital. The Company does not have any excess tax benefits, as a result, there was no cumulative effect adjustment to accumulated deficit.

The Tax Cuts and Jobs Act of 2017 (the 2017 Tax Act), which was signed into law on December 22, 2017, has resulted in significant changes to the U.S. corporate income tax system. These changes include a federal statutory tax rate reduction from 34% to 21%, which reduced the Company's deferred tax assets and corresponding valuation allowance. The Company reevaluates the positive and negative evidence bearing upon the realizability of its deferred tax assets on an annual basis. Since the Company has generated operating losses and expects to continue to incur future losses, the Company has concluded, in accordance with the applicable accounting standards, that it is more likely than not that the Company may not realize the benefit of all of its deferred tax assets. Accordingly, the Company has recorded a full valuation allowance against its deferred tax assets. The $3.9 million decrease in the valuation allowance for the year ended December 31, 2017 was primarily driven by $14.4 million reduction in the federal statutory tax rate partially offset by the current period net loss.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118, or SAB 118, to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. The Company has recognized the provisional tax impacts related to the revaluation of the deferred tax assets and liabilities and included these amounts in its consolidated financial statements for the year ended December 31, 2017. The ultimate impact may differ from these provisional amounts due to, among other things, additional analysis, changes in interpretations and assumptions the Company has made, additional regulatory guidance that may be issued, and actions the Company may take as a result of the Tax Reform Act. The accounting is expected to be complete when the 2017 U.S. corporate income tax return is filed in 2018.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax

Quanterix Corporation

Notes to consolidated financial statements (Continued)

6. Income taxes (Continued)

purposes. Significant components of the Company's net deferred income taxes are as follows (in thousands):

Deferred tax component reconciliation	December 31, 2017	December 31, 2016
Deferred tax assets / (liabilities)		
Net operating loss carryforwards	$ 27,952	$ 33,461
Research & development credits	3,637	2,801
Deferred revenue	1,795	1,443
Depreciation and amortization	629	879
Stock compensation	185	73
Other deferred tax assets	496	206
Total deferred tax assets	34,694	38,863
Valuation allowance	(34,552)	(38,457)
Subtotal	142	406
Stock-based compensation	(142)	(406)
Net deferred tax assets	—	—

A reconciliation of the expected income tax provision computed using the federal statutory income tax rate to the Company's effective income tax rate is as follows:

Effective tax rate reconciliation	December 31, 2017	December 31, 2016
Tax due at statutory rate	34.0%	34.0%
State taxes, net of federal benefit	4.8%	4.3%
Permanent items	–1.6%	–0.8%
Tax credits	2.6%	2.9%
Valuation allowance	14.5%	–42.4%
U.S. tax reform	–53.2%	0.0%
Other, net	–1.1%	2.0%
	0.00%	0.00%

No provision for income taxes has been recorded as the Company has incurred losses since inception. As of December 31, 2017, the Company had federal and state net operating loss (NOL) carryforwards of approximately $108.4 million and $81.8 million, respectively, which may be used to offset future taxable income. The Company also had federal and state credits of $2.9 million and $0.9 million, respectively, to offset future tax liabilities as of December 31, 2017. The NOL and tax credit carryforwards will expire at various dates through 2035, and are subject to review and possible adjustment by federal and state tax authorities. The Internal Revenue Code of 1986, as amended (the Code) contains provisions that may limit the NOL and tax credit carryforwards available to be used in any given year in the event of certain changes in the ownership interests of significant stockholders under Section 382 and 383 of the Code. The Company has not determined whether such a change has occurred.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

6. Income taxes (Continued)

At December 31, 2017 and 2016, the Company had no unrecognized tax benefits. For all tax years through December 31, 2017, the Company generated research credits but have not conducted a study to document the qualified activities. This study may result in an adjustment to the Company's research and development credit carryforwards; however, until a study is completed and any adjustment is known, no amounts are being presented as an uncertain tax position. A full valuation allowance has been provided against the Company's research and development credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the consolidated balance sheets or consolidated statements of operations and comprehensive loss if an adjustment were required.

Interest and penalty charges, if any, related to unrecognized tax benefits would be classified as income tax expense in the accompanying consolidated statements of operations and comprehensive loss. Since the Company is in a loss carryforward position, the Company is generally subject to examination by the U.S. federal, state, and local income tax authorities for all tax years in which a loss carryforward is available. There are no current examinations pending.

7. Redeemable convertible preferred stock

Preferred Stock Prior to IPO

The Company had authorized 47,015,449 shares of preferred stock, $0.001 par value per share, of which 3,972,415 shares were designated Series A-1 redeemable convertible preferred stock (Series A-1 Preferred Stock), 10,492,027 shares were designated Series A-2 Preferred Stock, 2,000,000 shares were designated Series A-3 Preferred Stock, 6,186,594 shares were designated Series B Preferred Stock, 9,247,089 shares were designated as Series C Preferred Stock, 544,332 shares were designated Series C-1 redeemable convertible preferred stock (Series C-1 Preferred Stock), 12,459,090 shares were designated Series D Preferred Stock and 2,113,902 were designated Series D-1 redeemable convertible preferred stock (Series D-1 Preferred Stock) as of immediately prior to the completion of the IPO.

In February 2016, the Company issued 1,300,000 shares of Series A-3 Preferred Stock to a vendor (Note 9) upon the exercise of Series A-3 Preferred Stock warrants at a purchase price of $0.001 per share. The fair value of the settled warrant was $3.9 million at the time of exercise which was reclassified from Preferred Stock Warrant Liability to Series A Preferred Stock.

In March 2016, the Company issued 12,420,262 shares of Series D Preferred Stock at a purchase price of $3.67 per share. The issuance resulted in cash proceeds of $45.4 million, net of issuance costs.

In June and July 2016, the Company issued 397,530 shares of Series B Preferred Stock upon exercise of Series B Preferred Stock warrants, which included 312,500 shares of Series B Preferred Stock at a purchase price of $0.001 per share, 8,330 shares of Series B Preferred Stock at purchase price of $2.00 per share, and 76,700 shares of Series B Preferred Stock upon a cashless exercise of a warrant. The fair value of the settled warrants was $1.4 million at the time of exercise which was reclassified from Preferred Stock Warrant Liability to Series B Preferred Stock.

In January 2017, the Company issued 700,000 shares of Series A-3 Preferred Stock to a vendor (Note 9) upon the exercise of Series A-3 Preferred Stock warrants at a purchase price of $0.001 per share. The fair value of the settled warrant was $2.1 million at the time of exercise which was reclassified from Preferred Stock Warrant Liability to Series A Preferred Stock.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

7. Redeemable convertible preferred stock (Continued)

In June 2017, the Company issued 2,113,902 shares of Series D-1 Preferred Stock at a purchase price of $4.021 per share. The issuance resulted in cash proceeds of $8.4 million, net of issuance costs.

In November 2017, the Company issued 31,283 shares of Series C Preferred Stock upon exercise of Series C Preferred Stock warrants, which included 8,474 shares of Series C Preferred Stock at a purchase price of $3.3299 per share, and 22,809 shares of Series C Preferred Stock upon a cashless exercise of a warrant. The fair value of the settled warrants was $0.1 million at the time of exercise which was reclassified from Preferred Stock Warrant Liability to Series C Preferred Stock.

The Company had a Stock Purchase Agreement (SPA) with bioMérieux, a related party, which required the Company to issue additional shares of Series C Preferred Stock if certain milestones were met in exchange for $10.0 million in gross proceeds. The milestones were related to activities under a Joint Development and License Agreement (JDLA) (Note 11). bioMérieux also purchased Series C Preferred Stock when the JDLA was entered into in 2012. When the SPA was entered into, the Company evaluated whether the requirement to issue additional shares ('Tranche Feature") required separate accounting. The Company determined that the Tranche Feature was not legally detachable and therefore was an embedded feature in the Series C Preferred Stock that bioMérieux purchased.

During the year ended December 31, 2015, the Company amended the terms of the SPA which restructured the equity milestone from one payment of $10.0 million to three separate payments ($5.0 million; $3.0 million and $2.0 million) based on components of the initial technical milestones. No other terms of the Series C Preferred Stock changed. The Company achieved the first milestone in January 2015 at which time bioMérieux purchased 1,501,546 shares of Series C Preferred Stock at a price of $3.3299 for total gross proceeds of $5.0 million. The Company also achieved the second milestone in May 2015 at which time bioMérieux purchased 600,618 shares of Series C Preferred Stock at a price of $3.3299 for total gross proceeds of $2.0 million. In December 2016, the Company further amended the JDLA and SPA which cancelled the third and final milestone (Note 11).

The rights, preferences, and privileges of Series A-1, A-2, A-3, B, C, C-1, D, and D-1 Preferred Stock were as follows:

Conversion

Shares of Series A-1, A-2, A-3, B, C, C-1, D, and D-1 Preferred Stock were convertible into common stock on a 3.214-for-one basis, adjustable for certain dilutive events. Conversion was at the option of the preferred stockholders, although conversion was automatic upon the earlier of the consummation of an initial public offering, resulting in gross proceeds to the Company of at least $40.0 million and for a minimum per-share amount of $5.00 per share, or the approval of a Preferred Majority, defined as 60% of the outstanding shares of Series A-1, A-2, B, C, D, and D-1 Preferred Stock voting as a single class.

Dividends

Holders of the Series A-1, A-2, B, C, and C-1 Preferred Stock were entitled to receive, before any cash was paid out or set aside for any common stock, cumulative dividends in arrears at the annual rate of $0.08, $0.08, $0.16, $0.2664, and $0.2664 per share, respectively, subject to adjustment for stock splits, stock dividends, combinations and reorganizations. Holders of Series D, and D-1 Preferred Stock were entitled to receive non-cumulative dividends at the rate of $0.2936, and $0.3217 per share,

Quanterix Corporation

Notes to consolidated financial statements (Continued)

7. Redeemable convertible preferred stock (Continued)

respectively, subject to adjustment for stock splits, when and if declared by the Board of Directors of the Company. The cumulative accrued dividends as of immediately prior to the completion of the IPO were $3.3 million, $7.8 million, $5.7 million, $9.5 million, and $0.7 million for Series A-1, A-2, B, C and C-1 Preferred Stock, respectively. Holders of Series A-3 Preferred Stock were not entitled to receive any preferred stock dividends. Upon full payment of preferred dividends, additional dividends would have been shared among all preferred stock holders and common stock holders on a pro rata basis.

Liquidation preference

Holders of the Series A-1, A-2, A-3, B, C, C-1, D, and D-1 Preferred Stock had preference in the event of a liquidation or dissolution of the Company equal to $1.0416667, $1.0416667, $2.00, $2.00, $3.3299, $3.3299, $3.67, and $4.021 per share, respectively, plus any accrued but unpaid dividends. In any liquidation event, Series D and D-1 Preferred Stock holders would receive first priority in liquidation payments. In the event that the amounts available for distribution were insufficient to pay the full amounts, the assets would be distributed ratably among Series D, and D-1 Preferred Stock holders in proportion to their aggregate liquidation preference amounts until such amounts were paid full. Series B, C, and C-1 Preferred Stock holders would receive next priority in liquidation payments after Series D Preferred Stock holders. In the event that the amounts available for distribution were insufficient to pay the full amounts, the assets would be distributed ratably among B, C, and C-1 Preferred Stock holders in proportion to their aggregate liquidation preference amounts. Series A-1, A-2, and A-3 Preferred Stock holders would receive next priority in liquidation preference after Series B, C, and C-1 Preferred Stock holders. In the event that the amounts available for distribution after payment were insufficient to pay the full amounts, the assets would be distributed ratably among A-1, A-2, and A-3 Preferred Stock holders in proportion to their aggregate liquidation preference amounts. Any remaining amounts would be distributed to holders of common stock on a pro rata basis. However, if the holders of any series of preferred stock would receive a greater liquidation preference if they were converted into shares of common stock immediately prior to the liquidation event, then these shares would receive consideration equal to the amount that would be received if the shares had been converted in common stock in lieu of the applicable liquidation preference.

Voting rights

Holders of the Series A-1, A-2, A-3, B, C, D and D-1 Preferred Stock (Voting Preferred) were entitled to vote as a single class with the holders of common stock, and had one vote for each equivalent common share into which the preferred stock was convertible. A Preferred Majority vote was required in order to amend the Certificate of Incorporation or By-Laws, reclassify common stock or establish another class of stock, create or authorize additional shares of preferred stock, effect a sale, liquidation, or merger of the Company, repurchase or redeem any capital stock, or engage in any action which would adversely affect the holders of the preferred stock.

The holders of the Series A-1, A-2 and B Preferred Stock could elect three members to the Board of Directors, voting as a single class. The holders of the Series C Preferred Stock could elect one member to the Board of Directors. The holders of the Voting Preferred could elect one member to the Board of Directors, voting as a single class.

Holders of Series C-1 Preferred Stock had no voting rights.

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Notes to consolidated financial statements (Continued)

7. Redeemable convertible preferred stock (Continued)

Redemption rights

Prior to the issuance of Series D Preferred Stock in March 2016, a majority vote of the Series B, C and C-1 Preferred Stock holders could elect to redeem all of the outstanding shares of Series B, C and C-1 Preferred Stock at any time on or after November 14, 2016. The Series A-1 and A-2 Preferred Stockholders had the right to elect to redeem all of the outstanding shares at any time after the redemption of the Series B, C and C-1 Preferred Stock shares was made. The preferred stockholders were entitled to the redemption in three equal annual installments.

Upon issuance of the Series D Preferred Stock in March 2016, the redemption rights were adjusted. A majority vote of the Series D Preferred Stockholders could elect to redeem all of the outstanding shares of Series D on or after March 18, 2019. Upon issuance of the Series D-1 Preferred Stock in June 2017 the redemption rights were adjusted. A majority vote of the Series D and D-1 Preferred Stockholders, voting as separate classes, could elect to redeem all of the outstanding shares of Series D and D-1 Preferred Stock on or after June 2, 2020. Holders of the Series C-1, C and B Preferred Stock could only redeem their shares following the redemption in full of all shares of Series D and D-1 Preferred Stock and upon a Preferred Majority Vote. Holders of the Series A-1 and A-2 Preferred Stock could only redeem their shares following the redemption in full of the Series D-1, D, C-1, C and B Preferred Stock, and upon a Preferred Majority Vote. Series A-3 Preferred Stock didnot have redemption rights other than in certain deemed liquidation scenarios.

The redemption value of the Series A-1, A-2, B, C and C-1 Preferred Stock was equal to the original issuance price of the preferred stock plus any accrued or declared but unpaid cumulative dividends. The redemption price of the Series D and D-1 Preferred Stock was the greater of (i) the fair market value of the common stock which it was convertible into or (ii) the original issuance price plus all declared but unpaid dividends, which were non-cumulative. As of December 31, 2016, the fair market value of the Company's common stock was less than the original issuance price of the Series D Preferred Stock.

Preferred stock was presented in mezzanine equity. The Series A-1, A-2, B, C, C-1, D and D-1 Preferred Stock were redeemable at the option of the holder at a fixed date and therefore the Company was accreting the preferred stock to its redemption value through the earliest possible redemption date for all issuances where the carrying value is less than the redemption value. The Series A-3 Preferred Stock was redeemable only upon certain deemed liquidation scenarios which were outside of the Company's control. The accretion included the accretion of issuance costs and cumulative preferred stock dividends. Series A-3 Preferred Stock was not entitled to dividends. The Company assessed all terms and features of the preferred stock in order to identify any potential embedded features that would require bifurcation or any beneficial conversion features. As part of this analysis, the Company assessed the economic characteristics and risks of its preferred stock, including conversion and liquidation features, as well as dividend and voting rights. The Company determined that all features of the preferred stock were clearly and closely associated with an equity host, and although the preferred stock included conversion features, such conversion features did not require bifurcation as a derivative liability. On the date of issuance, the fair value of common stock into which the Series A-1, A-2, A-3, B, C, C-1, D and D-1 Preferred Stock was convertible was less than the effective conversion price of the Series A-1, A-2, A-3, B, C, C-1, D and D-1 Preferred Stock and as such, there was no intrinsic value of the conversion option at the commitment date.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

7. Redeemable convertible preferred stock (Continued)

Automatic Conversion Upon IPO

Upon completion of the IPO on December 7, 2017 all outstanding shares of Preferred Stock were automatically converted into shares of common stock on a 3.214-for-one basis, resulting in the issuance of 14,185,744 shares of common stock. Details of the shares of Preferred Stock converted to common stock upon the completion of the IPO by class of Preferred Stock is as follows:

Preferred Stock	Shares of Preferred Stock
A-1	3,972,415
A-2	10,427,586
A-3	2,000,000
B	6,021,636
C	8,092,895
C-1	544,332
D	12,420,262
D-1	2,113,902
Total	45,593,028

Pursuant to the amended and restated certificate of incorporation filed in connection with the IPO in December 2017, the Company authorized 5,000,000 shares of preferred stock. The amended and restated certificate of incorporation authorized our board of directors, without any further stockholder action or approval, to issue these shares in one or more classes or series, to establish from time to time the number of shares to be included in each class or series and to fix the rights, preferences and privileges of the shares of each wholly unissued class or series and any of its qualifications, limitations or restrictions. There was no preferred stock issued or outstanding as of December 31, 2017.

8. Common stock, restricted stock, stock options and warrants

Common stock reserved

The Company reserved the following shares of common stock, on a common stock equivalent basis, for the conversion of shares of preferred stock, the exercise of warrants and common stock options and vesting of restricted common stock:

	Year ended December 31,	
	2017	2016
Series A Preferred Stock	—	4,884,869
Series B Preferred Stock	—	1,873,561
Series C Preferred Stock	—	2,677,649
Series D Preferred Stock	—	3,864,421
Preferred stock warrants	—	326,374
Common stock warrants	86,090	—
Common stock options and unvested restricted common stock	2,427,035	1,495,919
Shares reserved for future awards under compensation plan	3,500,620	499,609
	6,013,745	15,622,402

Quanterix Corporation

Notes to consolidated financial statements (Continued)

8. Common stock, restricted stock, stock options and warrants (Continued)

Warrants

The following tables summarize the Company's outstanding warrants as of December 31, 2017, and 2016:

As of December 31, 2017:

Class	Issued and exercisable	Weighted Average Exercise price
Common stock	86,090	$ 9.14
	86,090	

As of December 31, 2016:

Series	Issued and exercisable	Exercise price
Series A-3 Preferred Stock	700,000	$ 0.0010
Series A-2 Preferred Stock	64,441	$ 1.0417
Series C Preferred Stock	111,114	$ 3.3299
Series C Preferred Stock	173,428	$ 3.3299
	1,048,983	

The Company has an agreement with a vendor (Note 9) where the Company could be obligated to issue warrants to purchase an additional 93,341 shares of common stock to the vendor if the contract with the vendor is terminated prior to a minimum purchase commitment being met. No shares have been reserved related to these potential obligations to issue warrants in the future.

Stock options and restricted stock

Share-based compensation expense for all stock awards consists of the following:

	Year ended December 31,		
	2017	2016	2015
Cost of product revenue	$ 24	$ 6	$ 6
Cost of service and other revenue	52	12	1
Research and development	180	59	112
General and administrative	1,912	851	985
Total	$ 2,168	$ 928	$ 1,104

In June 2007, the Company adopted the 2007 Stock Option and Grant Plan (the 2007 Plan), under which it could grant incentive stock options, non-qualified stock options, restricted stock, and stock grants. At December 31, 2016, the 2007 Plan allowed for the issuance of up to 3,229,935 shares of common stock. During the three months ended March 31, 2017, the 2007 Plan was amended to allow for the issuance of an additional 622,277 shares of common stock for total issuance of up to 3,852,213 shares of common stock at June 30, 2017. During the three months ended September 30, 2017 the 2007

Quanterix Corporation

Notes to consolidated financial statements (Continued)

8. Common stock, restricted stock, stock options and warrants (Continued)

Plan was further amended to allow for the issuance of an additional 497,822 shares of common stock for total issuance of up to 4,350,035 shares of common stock at September 30, 2017. As of December 31, 2017, under the 2007 Plan, options to purchase 2,249,843 shares of our common stock were outstanding, 571,838 shares of our common stock had been issued and were outstanding pursuant to the exercise of options, 1,128,975 shares of our common stock had been issued and were outstanding pursuant to restricted or unrestricted stock awards, and 399,379 shares of our common stock were available for future awards. In connection with the completion of the IPO, the Company terminated the 2007 Plan.

In December 2017, the Company adopted the 2017 Employee, Director and Consultant Equity Incentive Plan (the 2017 Plan), under which it may grant incentive stock options, non-qualified stock options, restricted stock, and other stock-based awards. As of December 31, 2017, the 2017 Plan allowed for the issuance of up to 1,042,314 shares of common stock plus up to 2,490,290 shares of our common stock represented by awards granted under the 2007 Plan that are forfeited, expire or are cancelled without delivery of shares or which result in the forfeiture of shares of common stock back to the Company on or after the date the 2017 Plan becomes effective. As of December 31, 2017, 1,042,314 shares were available for grant under the 2017 Plan.

In addition, the 2017 Plan contains an "evergreen" provision, which allows for an annual increase in the number of shares of common stock available for issuance under the 2017 Plan on the first day of each fiscal year during the period beginning in fiscal year 2019 and ending in fiscal year 2027. The annual increase in the number of shares shall be equal to the lowest of: 4% of the number of shares of common stock outstanding as of such date; and an amount determined by the Company's Board of directors or Compensation Committee.

In December 2017, the Company adopted the 2017 Employee Stock Purchase Plan (the 2017 ESPP). As December 31, 2017, the 2017 ESPP allowed for the issuance of up to 208,463 shares of common stock. As of December 31, 2017, 208,463 shares were available for grant under the 2017 ESPP.

In addition, the 2017 ESPP contains an "evergreen" provision, which allows for an increase on the first day of each fiscal year beginning with fiscal year 2018. The increase in the number of shares shall be equal to the lowest of: 1% of the number of shares of common stock outstanding on the last day of the immediately preceding fiscal year or an amount determined by the Company's Board of Directors or Compensation Committee.

Stock options

Under the 2007 and 2017 Plans, stock options may not be granted with exercise prices of less than fair market value on the date of the grant. Options generally vest ratably over a four-year period with 25% vesting on the first anniversary and the remaining 75% vesting ratably on a monthly basis over the

Quanterix Corporation

Notes to consolidated financial statements (Continued)

8. Common stock, restricted stock, stock options and warrants (Continued)

remaining three years. These options expire ten years after the grant date. Activity under the 2007 and the 2017 Plans was as follows:

	Options	Weighted-average exercise price	Remaining contractual life (in years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2015	1,043,030	$ 2.47	7.1	$ 2,313
Granted	275,484	$ 5.16		
Exercised	(90,883)	$ 2.35		
Cancelled or forfeited	(107,960)	$ 4.13		
Outstanding at December 31, 2016	1,119,671	$ 2.99	6.8	$ 5,796
Granted	1,281,135	$ 8.46		
Exercised	(90,265)	$ 2.25		
Cancelled or forfeited	(60,698)	$ 6.16		
Outstanding at December 31, 2017	2,249,843	$ 6.05	7.8	$ 34,695
Vested and expected to vest at December 31, 2017	2,249,843	$ 6.05	7.8	$ 34,695
Exercisable at December 31, 2017	936,334	$ 3.50	5.9	$ 16,676

Using the Black-Scholes option pricing model, the weighted-average fair value of options granted to employees and directors during the years ended December 31, 2017, 2016, and 2015 was $4.52, $2.41 and $2.06 per share, respectively. The expense related to awards granted to employees was $1.5 million, $0.2 million, and $0.3 million for the years ended December 31, 2017, 2016 and 2015 respectively. The intrinsic value of stock options exercised was $1.1 million, $0.4 million, and $0.1 million for the years ended December 31, 2017, 2016 and 2015, respectively. Activity related to non-employee awards was not material to the years ended December 31, 2017, 2016 and 2015.

At December 31, 2017, there was $4.8 million of total unrecognized compensation cost related to unvested stock options, which is expected to be recognized over the remaining weighted-average vesting period of 3.1 years.

Restricted stock

In December 2014, the Company issued 78,912 shares of restricted common stock to a director of the Company under the 2007 Plan. Under the terms of the agreement, shares of common stock issued are subject to a four year vesting schedule. Vesting occurs periodically at specified time intervals and specified percentages. In January 2015, the Company issued 781,060 shares of restricted common stock to an executive of the Company under the 2007 Plan. The majority of these shares were issued subject to a four year vesting schedule with 25% vesting on the first anniversary and the remaining vesting 75% ratably on a monthly basis over the remaining three years, while another portion was issued subject to performance based vesting. The vesting of performance based awards is dependent upon achievement of specified financial targets of the Company. The majority of the performance criteria were achieved during the years ended December 31, 2016 and 2015 and the remaining unvested awards with

Quanterix Corporation

Notes to consolidated financial statements (Continued)

8. Common stock, restricted stock, stock options and warrants (Continued)

performance conditions are not material. No restricted stock awards were granted during the years ended December 31, 2017 or 2016. A summary of restricted stock activity is as follows:

	Shares	Weighted-average grant date fair value per share
Unvested restricted common stock as of December 31, 2014	78,912	$ 2.96
Granted	781,060	$ 3.12
Vested	(236,103)	$ 3.12
Unvested restricted common stock as of December 31, 2015	623,869	$ 3.12
Vested	(247,621)	$ 3.09
Unvested restricted common stock as of December 31, 2016	376,248	$ 3.12
Vested	(199,056)	$ 3.12
Unvested restricted common stock as of December 31, 2017	177,192	$ 3.11

The expense related to awards granted to employees and directors was $0.6 million, $0.7 million, and $0.8 million for the years ended December 31, 2017, 2016, and 2015, respectively.

At December 31, 2017, there was $0.5 million of total unrecognized compensation cost related to unvested restricted stock, which is expected to be recognized over the remaining weighted-average vesting period of 0.7 years.

The aggregate fair value of restricted stock awards that vested during the years ended December 31, 2017, 2016, and 2015, based on estimated fair values of the stock underlying the restricted stock awards on the day of vesting, was $1.9 million, $1.1 million and $1.1 million, respectively.

9. Commitments and contingencies

License agreements

Tufts University

In June 2007, the Company entered into a license agreement (the License Agreement) for certain intellectual property with Tufts University (Tufts). Tufts is a related party to the Company due to Tuft's equity ownership in the Company and because a board member of the Company's Board of Directors was affiliated with Tufts. The License Agreement, which was subsequently amended, is exclusive and sub licensable, and will continue in effect on a country by country basis as long as there is a valid claim of a licensed patent in a country. The Company is committed to pay license and maintenance fees, prior to commercialization, in addition to low single digit royalties on direct sales and services and a royalty on sublicense income. During the year ended December 31, 2016, the Company executed a license agreement with a diagnostic company and also amended the bioMérieux agreement (Note 11). The Company accrued $0.4 million for license fees related to these arrangements during the year ended

Quanterix Corporation

Notes to consolidated financial statements (Continued)

9. Commitments and contingencies (Continued)

December 31, 2016, which were recorded to cost of collaboration and license revenue on the consolidated statements of operations and comprehensive loss. During the years ended December 31, 2017, 2016 and 2015, the Company recorded royalty expense of $0.5 million, $0.3 million and $0.2 million, respectively, in cost of product revenue on the consolidated statements of operations and comprehensive loss.

Other licenses

During the year ended December 31, 2012, the Company entered into a license agreement for certain intellectual property with a third party. The non-exclusive, non-sublicenseable third party's license provides the Company access to certain patents specifically for protein detection, and shall be in effect until the expiration of the last licensed patent. In consideration for these rights, the Company committed to certain license fees, milestone payments, minimum annual royalties and a mid-single digit royalty. The license also extends to bioMérieux as a partner of the Company, in addition to containing restrictions on a change of control of the Company and identification of excluded parties, without the third party's prior consent. The Company is required to make mid-single digit royalty payments on net sales of products and services which utilize the licensed technology. The Company must pay the greater of calculated royalties on net sales or an annual minimum royalty of $50 thousand. During the year ended December 31, 2017, 2016 and 2015, the Company recorded royalty expense of $0.2 million, $0.3 million, and $0.2 million, respectively, in cost of product revenue on the consolidated statements of operations.

Lease commitments

During the year ended December 31, 2014, the Company entered into a lease agreement for the Company's current corporate headquarters with a lease term that expires in June 2020 which can be extended to June 2023. The lease agreement contains a period of free rent and annual increases to rental amounts. Rent expense is recognized straight-line over the course of the lease term. As of December 31, 2017, $0.1 million of deferred rent expense was recorded in other non-current liabilities, and less than $0.1 million was recorded in other accrued expenses.

As of December 31, 2017, the minimum future rent payments under the lease agreement and amendment are as follows (in thousands):

Years ending December 31:	
2018	$ 1,155
2019	1,196
2020	605
	$ 2,956

The Company recorded $1.1 million, $1.1 million and $0.9 million in rent expense for the years ended December 31, 2017, 2016 and 2015, respectively.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

9. Commitments and contingencies (Continued)

Development and supply agreement

On August 15, 2011, the Company signed a Development Services and Equity Participation Agreement (Development Agreement) with a strategic manufacturing partner, STRATEC Biomedical Systems (STRATEC Biomedical), for the development/customization and manufacture of an instrument based on STRATEC technology using the Company's single-molecule assay (Simoa) technology. Under the terms of the Development Agreement, the Company was originally required to pay a fee of $1.5 million (the Development Fee) and issue warrants (the Development Warrants) for the purchase of 2,000,000 shares of Series A-3 Preferred Stock at an exercise price of $0.001 per share. The Development Warrants become exercisable upon the achievement of certain developmental milestones.

The Company also had entered into a supply agreement with STRATEC Biomedical which requires the Company to purchase a minimum number of commercial units over a seven-year period ending in May 2021. If the Company were to fail to purchase a required number of commercial units, the Company would be obligated to pay termination costs and in addition a fee based on the shortfall of commercial units purchased compared to the required minimum amount. Based on the number of commercial instruments purchased as of December 31, 2017, assuming no additional commercial units were purchased, this fee would equal $11.9 million. The amount the Company could be obligated to pay under the minimum purchase commitment is reduced as each commercial unit is purchased. Also, if the Company terminates the Supply Agreement under certain circumstances and has not purchased a required number of commercial units, it would be obligated to issue warrants to purchase 93,341 shares of common stock (the Supply Warrants) at $0.003.214 per share. The Company believes that it will purchase sufficient units to meet the requirements of the minimum purchase commitment and, therefore, has not accrued for any of the potential cash consideration. The Supply Warrants are accounted for at fair value; however, the fair value of the Supply Warrants as of December 31, 2017 and 2016 was insignificant as there was a low probability of the warrants being issued.

During the year ended December 31, 2016, the Development Agreement was amended (the Amendment) to modify the deliverables related to the final milestone, to agree on instrument design changes to be implemented, and to reduce the minimum purchase commitment. Prior to the Amendment, the Company had paid $0.9 million of the $1.5 million Development Fee and issued 1.3 million of the 2.0 million Development Warrants to purchase shares of Series A-3 Preferred Stock, which were exercised during the year ended December 31, 2016. The final milestone in the Development Agreement included the release of an in vitro diagnostic (IVD) instrument for manufacturing and was determined to not be probable of completion and, as a result, no expense had been recorded related to this milestone in the year ended December 31, 2016 or prior years.

Upon signing the Amendment, the Company agreed to issue the remaining 700,000 Development Warrants immediately, in consideration for reducing the required number of commercial units to be purchased and certain development activities, and those warrants were fully vested upon issuance. The reduction in the minimum purchase commitment did not affect the fee that would be payable based on the units purchased as of December 31, 2016 assuming no additional units were purchased. The Company recognized a total of $2.1 million in research and development expense for the year ended December 31, 2016 for the issuance of the additional Development Warrants representing the fair value of the 700,000 warrants at the time of issuance. These Development Warrants were exercised during the three months ended March 31, 2017.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

9. Commitments and contingencies (Continued)

Additionally, the parties agreed on additional development services for an additional fee, which is payable when the additional development is completed. The fee includes the final Development Fee of $0.6 million that was due under the terms of the Development Agreement. These amounts are being recorded to research and development expense and accrued expenses as the services are performed. The services are expected to be completed during the year ending December 31, 2018. Substantive efforts related to these additional development activities started in the first quarter of 2017.

Legal contingencies

The Company is subject to claims in the ordinary course of business; however, the Company is not currently a party to any pending or threatened litigation, the outcome of which would be expected to have a material adverse effect on its financial condition or the results of its operations. The Company accrues for contingent liabilities to the extent that the liability is probable and estimable.

10. Notes payable

Loan agreement

On April 14, 2014, the Company executed a Loan Agreement with a lender. The Loan Agreement provided a total debt facility of $10.0 million which is secured by substantially all of the assets of the Company. At closing, the Company borrowed $5.0 million in principal and had the ability to draw the additional $5.0 million over the period from November 1, 2014 to March 31, 2015. The interest rate on this term loan is variable based on a calculation of the prime rate less 5.25% with a minimum interest rate of 8%. Interest is paid monthly beginning the month following the borrowing date. Principal payments were scheduled to begin on September 1, 2015, unless the Company achieved certain milestones which would extend this date to either December 1, 2015 or March 1, 2016. The Loan Agreement also contains prepayment penalties and an end of term charge. The end of term charge of $0.2 million is being accreted over the life of the loan.

In connection with the Loan Agreement, the Company granted the lender warrants to purchase shares of either Series C Preferred Stock or shares of preferred stock in the next financing round. Following the completion of the IPO, these warrants became exercisable for shares of the Company's common stock. The number of warrants eligible to be issued increases as the Company draws on the facility. Therefore, additional warrants will be issued if the Company draws on any of the remaining debt facility. The warrants issued in connection with the initial borrowing were initially recorded at fair value of $0.1 million as a preferred stock warrant liability in the accompanying consolidated balance sheets and a corresponding debt discount was recorded.

The Company also incurred debt issuance costs of $0.1 million. As a result of the debt discounts recorded related to the warrants and the debt issuance costs, the debt was initially recorded at less than its face value. The debt, including the end of term charge, is being accreted over the life of the loan using the effective interest method.

The Loan Agreement also provided the lender with a right to invest up to $1.0 million or, subject to Company approval and consent, to convert up to $1.0 million of outstanding principal into shares of preferred stock in the next financing round at the same price as all other investors. The lender invested $1.0 million in March 2016 as part of the Series D Preferred Stock financing.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

10. Notes payable (Continued)

Amendment 1 to loan agreement

On March 4, 2015, the Company executed Amendment 1 to the Loan Agreement (Amendment 1) and borrowed the remaining $5.0 million that was available under the loan facility. The terms of Amendment 1 allowed the Company to defer the commencement of principal payments to December 1, 2015 and extended the loan maturity date to February 1, 2018. If the Company obtained at least $10.0 million in equity financing before December 1, 2015, the commencement of principal payments could be further deferred until March 1, 2016 and the loan maturity date could be extended to May 1, 2018. As the financing milestone was not achieved, the Company made the first principal payment of $0.3 million on December 1, 2015 and the loan maturity date was February 1, 2018 under Amendment 1.

The additional $5.0 million borrowed included an additional $0.2 million end of term charge. The end of term charge on this borrowing is being accreted over the life of the loan as additional interest expense. The additional borrowing also resulted in the issuance of additional warrants with a grant date fair value of $0.1 million. The fair value of the additional warrants were initially recorded at fair value as a preferred stock warrant liability in the accompanying consolidated balance sheets and a corresponding debt discount was recorded. The debt, including the end of term charge, is being accreted over the remaining life of the loan using the effective interest method.

Amendment 2 to loan agreement

In January 2016, the Company executed Amendment 2 to the Loan Agreement (Amendment 2). Amendment 2 increased the total facility available by $5.0 million to a total of $15.0 million and further delayed the commencement of principal payments to July 1, 2016. Under Amendment 2, following the Series D Preferred Stock financing (Note 6), the Company could have elected to further delay the commencement of principal payments until January 1, 2017, however the Company voluntarily began paying principal on July 1, 2016. Upon signing Amendment 2, the Company drew an additional $3.0 million under the debt facility. The remaining $2.0 million available under the facility expired unexercised in April 2016, which reduced the amounts available under the facility to $13.0 million.

The additional $3.0 million borrowed included an additional $0.1 million end of term charge. The end of term charge on this borrowing is being accreted over the life of the loan. The additional borrowing also resulted in the issuance of additional warrants with a grant date fair value of $0.1 million. The fair value of the additional warrants were initially recorded at fair value as a preferred stock warrant liability in the accompanying consolidated balance sheets and a corresponding debt discount was recorded. The debt, including the end of term charge, is being accreted to over the remaining life of the loan using the effective interest method.

Amendment 3 to loan agreement

In March 2017, the Company signed Amendment 3 to the Loan Agreement (Amendment 3). Amendment 3 increased the total facility available by $5.0 million to a total of $18.0 million. Additionally, the lender may provide an additional optional term loan, solely at the lender's discretion, for an incremental $5.0 million, increasing the total potential facility to $23.0 million. As of December 31, 2017, the Company has not drawn any of this additional facility. The terms of Amendment 3 allowed the Company to defer the commencement of principal payments to March 1,

Quanterix Corporation

Notes to consolidated financial statements (Continued)

10. Notes payable (Continued)

2018 and extended the loan maturity date to March 1, 2019. Amendment 3 did not change the due date of the existing end of term fees of $0.5 million which remained due on February 1, 2018. Upon signing Amendment 3, the Company did not draw any of the additional amounts available under the amended debt facility and no amounts have been subsequently drawn under the facility. The Company has until September 3, 2018 to draw the additional amounts.

In connection with Amendment 3, the Company issued the lender additional warrants with a grant date fair value of $0.1 million. The fair value of the additional warrants were initially recorded at fair value as a preferred stock warrant liability in the accompanying consolidated balance sheets and a corresponding debt discount was recorded. The debt is being accreted to its face value over the remaining life of the loan using the effective interest method.

Debt payment obligations and end of term fees due based on principal payments commencing on March 1, 2018, are as follows (in thousands):

Years ending December 31:	
2018	$ 5,133
2019	4,430
	$ 9,563

Non-cash interest expense related to debt discount amortization and accretion of end of term fees was $0.2 million, $0.4 million, and $0.3 million for the year ended December 31, 2017, 2016, and 2015, respectively.

The Company assessed all terms and features of the Loan Agreement and the subsequent amendments in order to identify any potential embedded features that would require bifurcation. As part of this analysis, the Company assessed the economic characteristics and risks of the debt. The Company determined that all features of the Loan Agreement and the subsequent amendments are either clearly and closely associated with a debt host or have a de minimis fair value and, as such, do not require separate accounting as a derivative liability. The Company assessed each amendment under ASC 470-50 and concluded that all of the amendments constituted modifications. In this analysis, consideration was given to the fact that Amendments 1 and 2 were executed within one year of each other. The Company also assessed whether the amendments represented a troubled debt restructuring and concluded they did not. The Company accounted for each of the amendments to the Loan Agreement as a modification of its debt and the unamortized discount and issuance costs related to the prior debt are amortized over the modified term of the new debt.

The Loan Agreement and the subsequent amendments contain negative covenants restricting the Company's activities, including limitations on dispositions, mergers or acquisitions, incurring indebtedness or liens, paying dividends or making investments and certain other business transactions. There are no financial covenants associated with the Loan Agreement and the subsequent amendments. The obligations under the Loan Agreement and subsequent amendments are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in the Company's business, operations or financial or other condition. The Company has determined that the risk of subjective acceleration under the material adverse events clause is not probable and therefore has classified the outstanding principal in current and long-term liabilities based on scheduled principal payments.

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Notes to consolidated financial statements (Continued)

11. Collaboration and license arrangements

Joint development and license agreement (JDLA)

In November 2012, the Company entered into the JDLA with bioMérieux, a related party. As discussed below, the JDLA has been subsequently amended. Under the terms the JDLA, the Company granted bioMérieux an exclusive, royalty-bearing license, without right to sublicense, to manufacture and sell instruments and assays using our Simoa technology exclusively for in vitro diagnoses used in clinical lab applications, food quality control testing, and pharma quality control testing, and co-exclusively in certain related fields, as defined in the contract. As part of the JDLA, the Company was also to develop and manufacture instruments to bioMérieux's specifications for bioMérieux's use or for sale by bioMérieux. The Company retained rights to sell the instrument in the co-exclusive fields and any other fields not licensed exclusively to bioMérieux. bioMérieux was to develop and sell diagnostic assays to be used in conjunction with the Company's instruments.

Upon execution of the JDLA, the Company received $10.0 million in consideration and was entitled to receive two additional payments of $5.0 million each upon the achievement of certain developmental criteria. Neither of these criteria have been achieved. The Company was also entitled to receive royalty payments on the sale of assays and payments for the manufacture and delivery of instruments based on a contractual rate subject to future adjustments.

At the inception of the JDLA, the Company determined that the deliverables were as follows: (1) licenses to the Company's technology and trademarks, training, completion and delivery of a prototype instrument per contractual specifications (License and Protoype), (2) various activities to assist bioMérieux in the development of the initial assay and an instrument that is IVD compliant (Initial Assay Assistance), (3) various activities to assist bioMérieux in the development of a benchtop instrument (Benchtop Assistance), and (4) joint steering committee participation (JSC). Each of these deliverables were considered separate units of accounting, and the License and Prototype unit of accounting was determined to have standalone value as the License and Prototype unit of accounting could be utilized by bioMérieux without the related services included in the other units of accounting.

The Company allocated the allocable arrangement consideration based on the relative selling price of each unit of accounting. For all units of accounting, the Company determined the selling price using the best estimate of selling price (BESP). Management's best estimate of the selling price of the License and Prototype unit of accounting was based on a discounted cash flow analysis to support the estimated selling price of the license. The Company determined the BESP of the other units of accounting based on internal estimates of the costs to perform the services, adjusted to reflect a reasonable profit margin as well as based on market prices for similar instruments and services.

Revenue related to the License and Prototype unit of accounting of $8.3 million was recognized in 2013 upon delivery of both the license which was delivered at inception, and the first prototype instrument, which was required for bioMérieux to make use of the license. Prior to the effect of the 2016 Amendment described below, revenue for the other units of accounting were recognized over an estimated period of performance.

Amendments to the JDLA

In May 2014 and January 2015, the parties executed a First and Second Amendment to the JLDA, respectively. These amendments addressed revised timelines related to completing the development activities under the JDLA and enacted additional governance protocols to monitor those activities.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

11. Collaboration and license arrangements (Continued)

These amendments did not change the deliverables under the JDLA or the total arrangement consideration. The Company revised its estimates of the remaining period of performance for the remaining undelivered units of accounting and these revisions did not have a material effect on revenue recognition.

On December 22, 2016, the Company entered into the 2016 Amendment which ended the ongoing joint development efforts between the parties, and modified the rights and obligations of both parties accordingly, as follows:

- For a period of not more than three years from the date of the 2016 Amendment bioMérieux has the ability to evaluate independently whether it will develop a new, smaller in vitro diagnostic instrument using the Simoa technology for use in clinical lab applications, food quality control testing, and pharmaceutical quality control testing benchtop (the "Feasibility Period") and has the sole right to determine whether or not to develop such a new instrument during the Feasibility Period. If bioMérieux does elect to pursue development of such a new instrument, they will have a set number of years to complete development within a specified period, which contains various development milestones which must be accomplished.

- bioMérieux received a license to the source and object code of the Company's Level 1 Data Reduction (L1DR) software. The L1DR software the Company's proprietary image processing algorithms that convert images of microscopic beads associated with biomarker molecules in microwells. Also, the Company must provide to bioMérieux access to any know how and intellectual property associated with the L1DR software, including any updates and upgrades to the L1DR software during the Feasibility Period. If bioMéreiux exercises its right to develop an instrument independently, this right will continue throughout the development period to the end of the term of the agreement related to independently developed instruments.

- It was clarified that the Company can engage a collaboration partner (IVD Partner), subject to restrictions as to the particular parties with which the Company could elect to partner and the assays that can be developed, in the field of in vitro diagnostics used in Clinical Lab Applications. The Company shall pay bioMérieux a mid-double-digit percentage of royalties received from the IVD Partner based on assays sales by the IVD Partner.

- bioMérieux's licenses include all patents and know-how owned or controlled by the Company related to the Company's Simoa technology and upgrades thereto that are necessary for the development, manufacture, use or sale of instruments and assays or consumables on such instruments over the Feasibility Period. If bioMérieux exercises its right to develop an instrument independently, this right will continue throughout the development period to the end of the term of the 2016 Amendment related to independently developed instruments.

- bioMérieux retains an option (the Option) to obtain worldwide distribution rights to the HD-1 floor standing instrument in the applicable fields. The Option is exercisable over a three year period and upon exercise, the Company and bioMérieux are required to negotiate, in good faith, a distribution agreement that would include a specified upfront payment.

The 2016 Amendment included a cash payment of $2.0 million from bioMérieux which was paid in January 2017.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

11. Collaboration and license arrangements (Continued)

Accounting assessment

Prior to the execution of the 2016 Amendment, the Company was recognizing revenue over the estimated period of performance of the ongoing units of accounting (Initial Assay Assistance, Benchtop Assistance, and JSC). As a result, the Company recognized $0.2 million and $0.2 million in revenue for the years ended December 31, 2015 and 2016, respectively. At the date of the execution of the 2016 Amendment, the Company had $1.2 million in deferred revenue related to the JDLA. Upon the execution of the 2016 Amendment, all undelivered elements and contingent consideration of the JDLA were cancelled. The Company determined the 2016 Amendment should be accounted for as a modification to the JDLA and the balance of deferred revenue prior to the 2016 Amendment should be included as allocable consideration under the 2016 Amendment resulting in total allocable consideration of $3.2 million. The Company recorded an increase to deferred revenue upon receipt of the $2.0 million during the three months ended March 31, 2017.

The Company has determined that the deliverables included under the 2016 Amendment are rights to the L1DR software, training and rights to future technology improvements for L1DR Software, rights to all future technological improvements related to the Simoa technology, and participation on joint committees.

The Company determined that the L1DR and rights to unspecified technology improvements (the "L1DR Unit of Accounting") includes the sale of software and software related elements and therefore should be accounted for under ASC 985-605—*Software Revenue Recognition*. The Company cannot demonstrate Vendor Specific Objective Evidence (VSOE) of fair value for the ongoing obligation to provide unspecified technology improvements. Therefore, the deliverables in the L1DR Unit of Accounting cannot be separated. The Company has applied the combined service approach and the consideration allocated to this unit of accounting is being recognized ratably over the estimated period of performance, which has initially been determined to be estimated to be the three year Feasibility Period. This will be reevaluated each period to determine if there are any changes to the estimated period of performance.

The Company concluded that the rights to future technology improvements for the Simoa technology and the participation on joint committees represented a second unit of accounting (the "Instrument Know How Unit of Accounting"). The deliverables in the Instrument Know How Unit of Accounting are considered non-software deliverables that are subject to ASC 605-25 and will be delivered over time on a when and if available basis. Revenue is being recognized on a straight line basis over the estimated period of performance, which has initially been determined to be the three year Feasibility Period. This period will be reevaluated each period to determine if there are any changes to the period of performance.

The Option is considered substantive as the Company is at risk with regard to whether bioMérieux will exercise the Option. In addition, the Option exercise payment payable by bioMérieux upon exercise is not priced at a significant and incremental discount. Accordingly, the Option is not considered a deliverable at the inception of the arrangement and the associated Option exercise payment is not included in allocable arrangement consideration.

The Company recognized revenue of $1.1 million for the year ended December 31, 2017 as collaboration revenue and as of December 31, 2017, $2.1 million of arrangement consideration remains

Quanterix Corporation

Notes to consolidated financial statements (Continued)

11. Collaboration and license arrangements (Continued)

in deferred revenue. Revenue recognized for the year ended December 31, 2016 following the 2016 Amendment was not material.

Under the 2016 Agreement the Company is eligible to receive royalties on net sales of assays sold by bioMérieux in the mid to high single digits, and to receive low double digit royalties on sales of instruments by bioMérieux based on manufactured cost. No royalties have been recognized through December 31, 2017.

Evaluation and option agreements and license agreement

In 2015, the Company entered into three agreements, for three separate fields, with a diagnostic company for the evaluation of the Company's Simoa technology. These agreements each allowed for the option to negotiate a license agreement. In return, the Company received non-refundable payments totaling $2.0 million. In December 2016, the diagnostic company exercised one of its options and the parties entered into a license agreement in one of the fields. This agreement has a one-time non-refundable license fee of $1.0 million and the right to receive running low single digit royalties on licensed products. The negotiation periods for the other two agreements were extended and the negotiations remain ongoing.

For each of the three fields, the right to evaluate the technology, the right to negotiate a license to the technology, and the undelivered license to the technology represents a combined unit of accounting, and the licenses to each of the three fields each have standalone value. The Company has allocated the allocable arrangement consideration based on the relative selling price of each unit of accounting. The BESP of each of the three options was determined to be representative of the contractual amount paid for each option. The Company defers the amounts allocated to each of the three options until the corresponding license is delivered or, if no license agreement is executed and delivered, when the negotiations for each option terminates.

Upon execution of the license in one of the fields in December 2016, the $1.0 million license fee, in addition to the $0.8 million allocated to the option for this field, resulted in a total of $1.8 million of consideration being recognized as revenue as there were no remaining undelivered performance obligations. Because the negotiations remain ongoing with respect to the other two fields, the consideration allocated to these options of $1.2 million has been deferred and is recorded as deferred revenue as of December 31, 2017 and 2016.

12. Employee benefit-plans

The Company sponsors a 401(k) savings plan for our employees The Company may make discretionary contributions for each 401(k) plan year. During the year years ended December 31, 2017 and 2016 the Company did not make contributions to the plan.

13. Related party transactions

As described in Notes 11 and 7, bioMérieux is a customer through its Joint Development and License Agreement and also a holder of the Company's common stock. bioMérieux formerly also had a designee on the Company's Board of Directors. The Company recognized revenue related to the JDLA with bioMérieux of $1.1 million, $0.2 million, and $0.2 million, in the years ended December 31, 2017, 2016, and 2015 respectively, from bioMérieux. The Company also had deferred revenue of $2.1 million

Quanterix Corporation

Notes to consolidated financial statements (Continued)

13. Related party transactions (Continued)

and $1.3 million at December 31, 2017 and 2016, respectively. As described in Note 7, bioMérieux purchased shares of our Series C Preferred Stock totaling $7.0 million in the year ended December 31, 2015.

As described in Note 7, in March 2016, the Company issued an aggregate of 12,420,262 shares of Series D Preferred Stock for an aggregate purchase price of $45.6 million. Of the amount issued, $22.9 million was purchased by the Company's existing principal stockholders, officers and directors.

As described in Note 7, in June 2017, the Company issued an aggregate of 2,113,902 share of Series D-1 Preferred Stock for an aggregate purchase price of $8.5 million. Of the amount issued, $1.0 million was purchased by a director of the Company.

As described in Note 9, in June 2007, the Company entered into a license agreement (the License Agreement) for certain intellectual property with Tufts University (Tufts). Tufts is a related party to the Company due to Tuft's equity ownership in the Company and because a board member of the Company's Board of Directors was affiliated with Tufts. During the years ended December 31, 2017, 2016, and 2015 the Company recorded royalty expense of $0.5 million, $0.3 million and $0.2 million, respectively, in cost of product revenue on the consolidated statements of operations and comprehensive loss. During the year ended December 31, 2016, the Company recognized $0.4 million as cost of license revenue associated with a payment made to Tufts.

During the year ended December 31, 2017 Harvard University became a related party. Revenue recorded from sales to Harvard University were less than $0.1 million for the year ended December 31, 2017.

Quanterix Corporation

Notes to consolidated financial statements (Continued)

14. Quarterly Data

Quarterly Results (Unaudited)

(in thousands, except per share data)

2017	Q1	Q2	Q3	Q4	Total Year
Product revenue	$ 3,425	$ 3,337	$ 3,293	$ 4,069	$ 14,124
Service and other revenue	1,644	1,608	2,172	2,252	7,676
Collaboration and license revenue	269	268	269	268	1,074
Total revenue	5,338	5,213	5,734	6,589	22,874
Operating expenses:					
Cost of product revenue	1,834	1,834	1,905	2,169	7,742
Cost of services and other revenue	1,144	1,198	1,264	1,539	5,145
Cost of license revenue, related party	—	—	—	—	—
Research and development	4,250	3,903	4,224	3,927	16,304
Selling, general and administrative	4,166	4,747	4,728	6,047	19,688
Total operating expenses	11,394	11,682	12,121	13,682	48,879
Loss from operations	(6,056)	(6,469)	(6,387)	(7,093)	(26,005)
Interest expense, net	(255)	(240)	(240)	(216)	(951)
Other (expense) income, net	(80)	77	13	(73)	(63)
Net loss	$ (6,391)	$ (6,632)	$ (6,614)	$ (7,382)	$ (27,019)
Reconciliation of net loss to net loss attributable to common stockholders:					
Net loss	$ (6,391)	$ (6,632)	$ (6,614)	$ (7,382)	$ (27,019)
Accretion of preferred stock to redemption value	(1,090)	(1,099)	(1,112)	(809)	(4,110)
Accrued dividends on preferred stock	(16)	(16)	(16)	(11)	(59)
Net loss attributable to common stockholders	$ (7,497)	$ (7,747)	$ (7,742)	$ (8,202)	$ (31,188)
Net loss per share attributable to common stockholders, basic and diluted	$ (3.18)	$ (3.21)	$ (3.13)	$ (1.06)	$ (8.30)
Weighted-average common shares outstanding, basic and diluted	2,357,503	2,416,984	2,475,166	7,731,514	3,756,954

Quanterix Corporation

Notes to consolidated financial statements (Continued)

14. Quarterly Data (Continued)

2016	Q1	Q2	Q3	Q4	Total Year
Product revenue	$ 2,999	$ 2,307	$ 2,129	$ 3,166	$ 10,601
Service and other revenue	1,014	1,090	1,226	1,682	5,012
Collaboration and license revenue	47	47	47	1,831	1,972
Total revenue	4,060	3,444	3,402	6,679	17,585
Operating expenses:					
Cost of product revenue	1,543	1,650	1,308	1,798	6,299
Cost of services and other revenue	742	732	771	918	3,163
Cost of license revenue, related party	—	—	—	375	375
Research and development	3,366	3,423	3,403	6,801	16,993
Selling, general and administrative	2,723	3,067	3,076	3,600	12,466
Total operating expenses	8,374	8,872	8,558	13,492	39,296
Loss from operations	(4,314)	(5,428)	(5,156)	(6,813)	(21,711)
Interest expense, net	(325)	(364)	(323)	(286)	(1,298)
Other (expense) income, net	164	(76)	(37)	(215)	(164)
Net loss	$ (4,475)	$ (5,868)	$ (5,516)	$ (7,314)	$ (23,173)
Reconciliation of net loss to net loss attributable to common stockholders:					
Net loss	$ (4,475)	$ (5,868)	$ (5,516)	$ (7,314)	$ (23,173)
Accretion of preferred stock to redemption value	(1,110)	(1,101)	(1,113)	(1,113)	(4,437)
Accrued dividends on preferred stock	—	—	(1)	(7)	(8)
Net loss attributable to common stockholders	$ (5,585)	$ (6,969)	$ (6,630)	$ (8,434)	$ (27,618)
Net loss per share attributable to common stockholders, basic and diluted	$ (2.73)	$ (3.30)	$ (3.06)	$ (3.77)	$ (12.89)
Weighted-average common shares outstanding, basic and diluted	2,046,895	2,114,136	2,169,105	2,239,869	2,142,840

15. Subsequent events

The Company has evaluated, for potential recognition and disclosure, events that occurred prior to the date at which the consolidated financial statements were available to be issued. All material subsequent events are disclosed in the preceding notes and in the following paragraph.

(a) On January 30, 2018, the Company acquired Aushon Biosystems, Inc. (Aushon). Aushon is a leader in protein biomarker discovery, development and analysis. The Company paid $3.2 million in cash, with an additional payment of $0.8 million to be made six months after the acquisition date assuming certain post-closing conditions are met.

Exhibit 4.9

THIS WARRANT AND THE SHARES OF CAPITAL STOCK ISSUED UPON ANY EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS AND MAY NOT BE SOLD OR OTHERWISE TRANSFERRED BY ANY PERSON, INCLUDING A PLEDGEE, UNLESS (1) EITHER (A) A REGISTRATION WITH RESPECT THERETO SHALL BE EFFECTIVE UNDER THE SECURITIES ACT, OR (B) THE COMPANY SHALL HAVE RECEIVED AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT IS AVAILABLE, AND (2) THERE SHALL HAVE BEEN COMPLIANCE WITH ALL APPLICABLE STATE SECURITIES OR "BLUE SKY" LAWS.

Right to Purchase 10,000 Shares of Common Stock of
Quanterix Corporation

COMMON STOCK PURCHASE WARRANT

Quanterix Corporation, a Delaware corporation (the "Company"), hereby certifies that for value received Azul Divinal Consultoria Unipessoal Lda., a Portuguese limited liability company, registered under the single corporate and taxpayer number 514.251.646, with its registered office at Rua Conde de Avelar 103, Block C2 Esq., 2460-642 São Martinho do Porto, Portugal (the "Holder"), or assigns, is entitled to purchase, subject to the terms and conditions hereinafter set forth, up to 10,000 shares of Common Stock (the "Warrant Shares") (subject to adjustment as hereinafter provided) at the Stated Purchase Price, payable as hereinafter provided. This Warrant is being issued pursuant to the terms of that certain Consulting Agreement, dated January 2, 2018, by and between the Company and Holder (the "Consulting Agreement").

1. Definitions. As used herein, the following terms shall have the following meanings, unless the context otherwise requires:

   (a) "Common Stock" shall mean the Company's common stock, $0.001 par value per share.

   (b) "Stated Purchase Price" shall mean the purchase price per share of Common Stock to be paid upon exercise of this Warrant in accordance with the terms hereof, which price shall be $21.00 per Warrant Share. The Stated Purchase Price shall be subject to adjustment from time to time pursuant to the provisions of Sections 5 and 6 hereof.

   (c) "Warrant Expiration Date" shall mean 5:00 p.m., Eastern Time, on January 2, 2023.

2. Exercise.

(a) Vesting of Warrant Shares. The Warrant Shares subject to this Warrant shall vest and become exercisable in full as of July 2, 2018, provided that the Consulting Agreement has not previously been terminated for Cause (as defined therein).

(b) Manner of Exercise. This Warrant may be exercised at any time or from time to time, on any day which is not a Saturday, Sunday or holiday under the laws of the Commonwealth of Massachusetts prior to the Warrant Expiration Date, for all or any part of the Warrant Shares that have vested pursuant to Section 2(a) above. In order to exercise this Warrant, in whole or in part, the Holder shall deliver to the Company at its principal executive offices, or at such other office as the Company may designate by notice in writing, (i) this originally executed Warrant and (ii) a duly executed written notice of Holder's election to exercise its Warrant in whole or in part substantially in the form of Exhibit A attached hereto, and shall pay to the Company by check made payable to the order of the Company or wire transfer of funds to a bank account designated by the Company an amount equal to the aggregate purchase price for all Warrant Shares as to which this Warrant is being exercised.

(c) Cashless Exercise. In addition to and without limiting the rights of the Holder hereof under the terms of this Warrant, the Holder may elect to receive, without the payment by the Holder of the Stated Purchase Price, shares of Common Stock equal to the value of the vested Warrant Shares or any portion thereof by the surrender of this Warrant (or such portion of this Warrant being so exercised) together with the Net Issue Election Notice annexed hereto as Exhibit B duly executed and completed, at its principal executive offices, or at such other office as the Company may designate by notice in writing. Thereupon, the Company shall issue to the Holder such number of fully paid, validly issued and nonassessable shares of Common Stock, as is computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

where

X = the number of shares of Common Stock to be issued to the Holder (or such other person or persons as directed by the Holder) upon such exercise of the rights under this Section 2(c)

Y = the total number of vested Warrant Shares which the Holder has surrendered for cashless exercise

A = the "Fair Market Value" of one share of Common Stock on the date that the Holder delivers the Net Issue Election Notice to the Company as provided herein

B = the Stated Purchase Price in effect under this Warrant on the date that the Holder delivers the Net Issue Election Notice to the Company as provided herein

The "Fair Market Value" of a share of Common Stock as of a particular date (the "Valuation Date") shall mean the following: (y) if the Common Stock is then listed on a stock exchange or quoted on a quotation system, the closing sale price of one share of Common Stock on such exchange or system on the last trading day prior to the Valuation Date; or (z) if the Common Stock is not then listed on a stock exchange or quoted on a quotation system, the Fair Market Value of one share of Common Stock as of the Valuation Date shall be determined in good faith by the Board of Directors of the Company (the "Board"). The Board shall respond promptly in writing to an inquiry by the Holder prior to the exercise hereunder as to the Fair Market Value of a share of Common Stock.

(d) Issuance of Common Stock. Upon receipt of the documents and payments described in Section 2(b) or Section 2(c), as the case may be, the Company shall, as promptly as practicable, execute or cause to be executed, and deliver to the Holder a certificate or certificates representing the aggregate number of full Warrant Shares (or such other stock or securities that may be issuable upon exercise of the Warrant) issuable upon such exercise. The stock certificate or certificates so delivered shall be in the denomination specified in said notice and shall be registered in the name of the Holder. This Warrant shall be deemed to have been exercised and a certificate or certificates for shares of Common Stock shall be deemed to have been issued, and the Holder or any other person so designated to be named therein shall be deemed to have become a holder of record of such shares for all purposes as of the date said notice, together with this Warrant and the documents and payments described in Section 2(b) or 2(c), as the case may be, are received by the Company as aforesaid. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of said certificate or certificates, deliver to the Holder a new Warrant evidencing the rights of Holder to purchase the unpurchased shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

(e) Transfer Restriction Legend. Each certificate for Common Stock issued upon exercise of this Warrant, unless at the time of exercise the offer and sale of the Warrant Shares are registered under the Securities Act, shall bear the following legend (and any additional legend required by applicable law or rule) on the face thereof:

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY,

MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED EXCEPT (A) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR (B) PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY."

3. Reservation of Shares. The Company covenants that it will at all times until the Warrant Expiration Date reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of issue upon exercise of this Warrant, such number of Warrant Shares as shall then be issuable upon the exercise of this Warrant.

4. Loss, Theft, Destruction or Mutilation. Upon receipt of evidence satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant (including a reasonably detailed affidavit with respect to the circumstances of any loss, theft or destruction of such Warrant and a customary and reasonable indemnity and surety bond, if requested by the Company), and, in the case of any such mutilation, upon surrender and cancellation of this Warrant, the Company at its expense will execute and deliver, in lieu hereof, a new Warrant of like tenor.

5. Subdivision or Combination of Common Stock. If the Company at any time subdivides (by any stock split, stock dividend, recapitalization or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Stated Purchase Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares issuable upon exercise of this Warrant will be proportionately increased, and if the Company at any time combines (by reverse stock split, recapitalization or otherwise) its outstanding shares of Common Stock into a smaller number of shares, the Stated Purchase Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares issuable upon exercise of this Warrant will be proportionately decreased.

6. Consolidation, Merger, etc. If there shall be a merger or consolidation of the Company with or into another corporation (other than a merger or reorganization involving only a change in the state of incorporation of the Company), then as a part of such transaction, provision shall be made so that the Holder hereof shall thereafter be entitled to receive the number of shares of stock or other securities or property of the Company, or of the successor corporation resulting from the merger or consolidation, to which the Holder would have been entitled if the Holder had exercised this Warrant immediately prior thereto.

7. Notice of Adjustment of Stated Purchase Price. Upon any adjustment or other change relating to the Stated Purchase Price or the securities purchasable upon the exercise of this Warrant, then, and in each such case, the Company shall promptly prepare and deliver to Holder

notice, setting forth, in reasonable detail, the event requiring the adjustment and the method by which such adjustment was calculated.

8. Fractional Shares. The Company shall not issue fractions of shares, upon exercise of this Warrant or otherwise, or distribute certificates that evidence fractional shares. With respect to any fraction of a share called for upon any exercise hereof, such fraction shall neither be issued nor extinguished until the final exercise of this Warrant, in which event if a fraction is issuable, the Company shall pay to the Holder an amount in cash equal to such fraction multiplied by the Stated Purchase Price, as adjusted to date pursuant to Section 5 or 6.

9. Holder Not Deemed Stockholder. The Holder shall not be entitled to vote or to receive dividends or be deemed the holder of Common Stock that may at any time be issuable upon exercise of this Warrant for any purpose whatsoever, nor shall anything contained herein be construed to confer upon the Holder any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to receive dividends or subscription rights, until Holder shall have exercised this Warrant in accordance with the provisions hereof.

10. Successors and Assigns. This Warrant, and the obligations and rights of the Company hereunder, shall be binding upon and inure to the benefit of the Company, the Holder, and their respective successors and permitted assigns.

11. Waiver and Amendment. Any provision of this Warrant may be amended, waived or modified only upon the written consent of the Company and the Holder.

12. Notices. Any notice, request or other communication required or permitted hereunder shall be in writing and shall be delivered in accordance with the terms of Section 14 of the Consulting Agreement.

13. Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by the internal laws of the Commonwealth of Massachusetts, United States of America, without giving effect to any choice of law or conflict of law provision or rule (whether of the Commonwealth of Massachusetts or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the Commonwealth of Massachusetts.

14. Headings; References. All headings used herein are used for convenience only and will not be used to construe or interpret this Warrant. Except where otherwise indicated, all references herein to Sections refer to Sections hereof.

15. Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed as of January 30, 2018.

QUANTERIX CORPORATION

By: /s/Joseph Driscoll
Name: Joseph Driscoll
Title: Chief Financial Officer

EXHIBIT A

EXERCISE FORM
(To be signed only on exercise of Warrant)

Quanterix Corporation
113 Hartwell Ave
Lexington, MA 02421

The undersigned hereby irrevocably elects to exercise the right to purchase represented by the within Warrant for, and to purchase thereunder, shares of common stock, $0.001 par value per share, of Quanterix Corporatioin (the "Common Stock") at a price of $ per share of Common Stock, and herewith makes payment of $ (such payment being by check made payable to the order of Quanterix Corporation, or wire transfer of funds to a bank account designated by Quanterix Corporation, or any combination thereof), surrenders the Warrant and all right, title and interest therein to Quanterix Corporation and requests that certificates for such shares be issued in the name of:

(Please print name, address, and social security number (if applicable))

and, if said number of shares shall not be all the shares purchasable thereunder, that a new Warrant for the balance remaining of the shares purchasable under the within Warrant be registered in the name of the undersigned holder of the within Warrant or his Assignee as below indicated and delivered to the address stated below.

NAME OF HOLDER OR ASSIGNEE: _____
(Please print)

ADDRESS OF HOLDER
OR ASSIGNEE: _____

SIGNATURE OF HOLDER: _____

DATED: _____

EXHIBIT B

NET ISSUE ELECTION NOTICE
(To be signed only on exercise of Warrant)

Quanterix Corporation
113 Hartwell Ave
Lexington, MA 02421

The undersigned hereby elects under Section 2(c) of this Warrant to surrender the right to purchase shares of common stock, $0.001 par value per share, of Quanterix Corporation (the "Common Stock") pursuant to the within Warrant and hereby requests the issuance of shares of Common Stock. The undersigned requests that certificates for such shares be issued in the name of:

_____

(Please print name, address, and social security number (if applicable))

and, if said number of shares shall not be all the shares purchasable thereunder, that a new Warrant for the balance remaining of the shares purchasable under the within Warrant be registered in the name of the undersigned holder of the within Warrant or his Assignee as below indicated and delivered to the address stated below.

NAME OF HOLDER OR ASSIGNEE: _____
(Please print)

ADDRESS OF HOLDER
OR ASSIGNEE: _____

SIGNATURE OF HOLDER: _____

DATED: _____

Exhibit 10.20.1

LEASE

RAR2 — BOSTON INDUSTRIAL QRS — MA, INC.,

Landlord,

and

AUSHON BIOSYSTEMS, INC.,

Tenant

TABLE OF CONTENTS

MULTI-TENANT INDUSTRIAL NET LEASE

REFERENCE PAGES

BUILDING:	43 Manning Road, Billerica, Massachusetts 01821-3925
LANDLORD:	**RAR2 BOSTON INDUSTRIAL QRS - MA, INC.**, a Maryland corporation
LANDLORD'S ADDRESS:	c/o RREEF Management Company 600 Unicorn Park Drive, First Floor Woburn, MA 01801-3339
WIRE INSTRUCTIONS AND/OR ADDRESS FOR RENT PAYMENT:	RAR2 - BOSTON INDUSTRIAL QRS - MA, INC. 75 Remittance Drive, Suite 6730 Chicago, IL 60675-6730
LEASE REFERENCE DATE:	September 7, 2007
TENANT:	AUSHON BIOSYSTEMS, INC., a Delaware corporation
TENANT'S NOTICE ADDRESS:	
a) As of beginning of Term:	43 Manning Road, Billerica, Massachusetts 01821-3925
b) Prior to beginning of Term (if different):	25 Adams Street, Suite 1, Burlington, Massachusetts 01803
PREMISES ADDRESS:	43 Manning Road, Billerica, Massachusetts 01821-3925
PREMISES RENTABLE AREA:	Approximately 21,500 rentable sq. ft. on the first floor of the Building (for outline of Premises see Exhibit A)
USE:	Laboratory, research and development, manufacturing, and related office use, including biological development, manufacturing, testing and services, and the production, manufacture, testing and use of biotechnological equipment.
COMMENCEMENT DATE:	October 1, 2007
TERM OF LEASE:	Five (5) years and two (2) months beginning on the Commencement Date and ending on the Termination Date.

TERMINATION DATE: November 30, 2012

ANNUAL RENT and MONTHLY INSTALLMENT OF RENT(Article 3):

Period		Rentable Square	Annual Rent Per Square		Monthly Installment
from	through	Footage	Foot	Annual Rent	of Rent
10/1/2007	9/30/2008	15,000	$ 7.50	$ 112,500.00	$ 9,375.00
10/1/2008	9/30/2009	21,500	$ 7.75	$ 166,625.00	$ 13,885.42
10/1/2009	9/30/2010	21,500	$ 8.00	$ 172,000.00	$ 14,333.33
10/1/2010	9/30/2011	21.500	$ 8.25	$ 177.375.00	$ 14,781.25
10/1/2011	11/30/2012	21,500	$ 8.50	$ 182,750.00	$ 15,229.17

Provided that Tenant is not in default under his Lease beyond any applicable cure period during the first twelve months of the Term, Tenant shall pay the Monthly Installment of Rent based on only 15,000 rentable square feet for the first twelve months of the Term as the schedule above provides. If Tenant is in default beyond any applicable cure period anytime during the first twelve months of the Term, the Monthly Installment of Rent from the Commencement Date shall thereafter be $13,437.50 for such period. Rent Adjustments pursuant to Article 4 shall be based on the full 21,500 rentable square feet and due and payable from the Commencement Date of this Lease.

INITIAL ESTIMATED MONTHLY INSTALLMENT OF RENT ADJUSTMENTS (Article 4) $5,715,42

TENANT'S PROPORTIONATE SHARE: 50%

SECURITY DEPOSIT: $166,625.00 in the form of an irrevocable letter of credit per Article 5.

ASSIGNMENT/SUBLETTING FEE $1,000.00

REAL ESTATE BROKER DUE COMMISSION: Meredith & Grew, for Tenant; CB Richard Ellis, for Landlord

TENANT'S SIC CODE: 3826

AMORTIZATION RATE: 11.00%

The Reference Pages information is incorporated into and made a part of the Lease. In the event of any conflict between any Reference Pages information and the Lease, the Lease shall control. This Lease includes Exhibits A through D, all of which are made a part of this Lease.

LANDLORD:	**TENANT:**
RAR2 — BOSTON INDUSTRIAL QRS —MA, INC., a Maryland corporation	**AUSHON BIOSYSTEMS, INC.**, a Delaware corporation
By: RREEF Management Company, a Delaware corporation, Authorized Agent	
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Dated: _____	Dated: _____

LEASE

By this Lease Landlord leases to Tenant and Tenant leases from Landlord the Premises in the Building as set forth and described on the Reference Pages. The Premises arc depicted on the floor plan attached hereto as Exhibit A, and the Building is depicted on the site plan attached hereto as Exhibit A-1. The Reference Pages, including all terms defined thereon, are incorporated as part of this Lease.

1. USE AND RESTRICTIONS ON USE.

1.1 The Premises are to be used solely for the purposes set forth on the Reference Pages. Tenant shall have 24/7 access to the Premises, subject to the terms of this Lease. Tenant shall not do or permit anything to be done in or about the Premises which will in any way obstruct or interfere with the rights of other tenants or occupants of the Building or injure, annoy, or disturb them, or allow the Premises to be used for any improper, immoral, unlawful, or objectionable purpose, or commit any waste. Tenant shall not do, permit or suffer in, on, or about the Premises the sale of any alcoholic liquor without the written consent of Landlord first obtained. Tenant shall comply with all governmental laws, ordinances and regulations applicable to the use of the Premises and its occupancy and shall promptly comply with all governmental orders and directions for the correction, prevention and abatement of any violations in the Building or appurtenant land, caused or permitted by, or resulting from the specific use (as opposed to office or manufacturing use generally) by, Tenant, or in or upon, or in connection with, the Premises, all at Tenant's sole expense. Other than the permitted Uses as set forth in the Reference Pages, Tenant shall not do or permit anything to be done on or about the Premises or bring or keep anything into the Premises which will in any way increase the rate of any insurance protecting against loss or damage to the Building or any of its contents by fire or other casualty or against liability for damage to property or injury to persons in or about the Building or any part thereof (the "Building Insurance"), and Tenant shall pay as Additional Rent any increased premium for Building Insurance that is due entirely to Tenant's activities in the Premises. Tenant shall not do or permit anything to be done on or about the Premises or bring into or keep anything in the Premises which will in any way invalidate or prevent the procuring of Building Insurance.

1.2 Tenant shall not, and shall not direct, suffer or permit any of its agents, contractors, employees, licensees or invitees (collectively, the "Tenant Entities") to at any time handle, use, manufacture, store or dispose of in or about the Premises or the Building any (collectively "Hazardous Materials") flammables, explosives, radioactive materials, hazardous wastes or materials, toxic wastes or materials, or other similar substances, petroleum products or derivatives or any substance subject to regulation by or under any federal, state and local laws and ordinances relating to the protection of the environment or the keeping, use or disposition of environmentally hazardous materials, substances, or wastes, presently in effect or hereafter adopted, all amendments to any of them, and all rules and regulations issued pursuant to any of such laws or ordinances (collectively "Environmental Laws"), nor shall Tenant suffer or permit any Hazardous Materials to be used in any manner not fully in compliance with all Environmental Laws, in the Premises or the Building and appurtenant land or allow the environment to become contaminated with any Hazardous Materials. Notwithstanding the foregoing, Tenant may handle, store, use or dispose of products containing small quantities of Hazardous Materials to the extent customary and necessary for the use of the Premises for the permitted Uses; provided that Tenant shall always

handle, store, use, and dispose of any such Hazardous Materials in a safe and lawful manner and never allow such Hazardous Materials to contaminate the Premises, Building and appurtenant land or the environment. Tenant shall protect, defend, indemnify and hold each and all of the Landlord Entities (as defined in Article 30) harmless from and against any and all loss, claims, liability or costs (including court costs and attorney's fees) incurred by reason of any actual or asserted failure of Tenant to fully comply with all applicable Environmental Laws, or the presence, handling, use or disposition in or from the Premises of any Hazardous Materials by Tenant or any Tenant Entity (even though permissible under all applicable Environmental Laws or the provisions of this Lease), or by reason of any actual or asserted failure of Tenant to keep, observe, or perform any provision of this Section 1.2. Landlord represents and warrants that as of the Commencement Date, Landlord has no knowledge of the presence of Hazardous Materials in the Premises.

1.3 Tenant and the Tenant Entities will be entitled to the non-exclusive use of the common areas of the Building as they exist from time to time during the Term, including shared use of two (2) tailboard loading docks and the parking facilities, subject to Landlord's rules and regulations regarding such use. Tenant and the Tenant Entities shall be entitled to use the parking facilities located at the Building at no additional cost; however, in no event will Tenant or the Tenant Entities park more vehicles in the parking facilities than the number of spaces allocated to Tenant according to the parking ratio set forth in this Section 1.3. The foregoing shall not be deemed to provide Tenant with an exclusive right to any parking spaces or any guaranty of the availability of any particular parking spaces. The parking ratio at the Building is three (3) parking spaces per 1,000 rentable square feet and parking is available on a first-come-first-served basis.

2. TERM.

2.1 The Term of this Lease shall begin on the date ("Commencement Date') which shall be the later of the Scheduled Commencement Date as shown on the Reference Pages and the date that Landlord shall tender possession of the Premises to Tenant, and shall terminate on the date as shown on the Reference Pages ("Termination Date"), unless sooner terminated by the provisions of this Lease. Landlord shall tender possession of the Premises with all base building systems (excluding systems supporting the clean room and other specialty equipment), including the loading dock leveler, electrical, mechanical, fire detection and suppression and plumbing systems in good working order and the HVAC system (including the HVAC rooftop units servicing the Premises) in working order. Tenant shall deliver a punch list of items not completed within thirty (30) days after Landlord tenders possession of the Premises and Landlord agrees to proceed with due diligence to perform its obligations regarding such items.

2.2 Intentionally Deleted.

2.3 Tenant, or any agent, employee or contractor of Tenant, shall be permitted to enter, use or occupy the Premises prior to the Commencement Date, beginning upon complete execution of this Lease provided Tenant has complied with the provisions of this Lease, to prepare the Premises for occupancy. Such entry, use or occupancy shall be subject to all the provisions of this Lease other than the payment of rent, including, without limitation, Tenant's compliance with the insurance requirements of Article 11. Said early possession shall not advance the Commencement Date or the Termination Date. Landlord agrees to reasonably cooperate with and not interfere with Tenant's efforts to prepare the Premises for occupancy. If, as a result of any material interference

or lack of reasonable cooperation by Landlord that causes a delay in the completion of Tenant's initial alterations ("Landlord Delay"), Tenant is unable to complete Tenant's initial alterations by the Scheduled Commencement Date, the Commencement Date shall be delayed one day for each day of Landlord Delay.

3. RENT.

3.1 Tenant agrees to pay to Landlord the Annual Rent in effect from time to time by paying the Monthly Installment of Rent then in effect on or before the first day of each full calendar month during the Term, except that the first full month's rent shall be paid upon the execution of this Lease. The Monthly Installment of Rent in effect at any time shall be one-twelfth (1/12) of the Annual Rent in effect at such time. Rent for any period during the Term which is less than a full month shall be a prorated portion of the Monthly Installment of Rent based upon the number of days in such month. Said rent shall be paid to Landlord, without deduction or offset and without notice or demand, at the Rent Payment Address, as set forth on the Reference Pages, or to such other person or at such other place as Landlord may from time to time designate in writing. Unless specified in this Lease to the contrary, all amounts and sums payable by Tenant to Landlord pursuant to this Lease shall be deemed additional rent.

3.2 Tenant recognizes that late payment of any rent or other sum due under this Lease will result in administrative expense to Landlord, the extent of which additional expense is extremely difficult and economically impractical to ascertain. Tenant therefore agrees that if rent or any other sum is not paid when due and payable pursuant to this Lease on more than one (I) occasion during any calendar year, beginning with the second (2^{nd}) such late payment and for every subsequent late payment during such calendar year, a late charge shall be imposed in an amount equal to the greater of: (a) Fifty Dollars ($50.00), or (b) five percent (5%) of the unpaid rent or other payment. The amount of the late charge to be paid by Tenant shall be reassessed and added to Tenant's obligation for each successive month until paid. The provisions of this Section 3.2 in no way relieve Tenant of the obligation to pay rent or other payments on or before the date on which they are due, nor do the terms of this Section 3.2 in any way affect Landlord's remedies pursuant to Article 19 of this Lease in the event said rent or other payment is unpaid after date due.

4. RENT ADJUSTMENTS.

4.1 For the purpose of this Article 4, the following terms are defined as follows:

4.1.1 **Lease Year:** Each fiscal year (as determined by Landlord from time to time) falling partly or wholly within the Term.

4.1.2 **Expenses:** All costs of operation, maintenance, repair, replacement and management of the Building (including the amount of any credits which Landlord may grant to particular tenants of the Building in lieu of providing any standard services or paying any standard costs described in this Section 4.1.2 for similar tenants), as determined in accordance with generally accepted accounting principles, including the following costs by way of illustration, but not limitation: water and sewer charges; insurance charges of or relating to all insurance policies and endorsements deemed by Landlord to be reasonably necessary or desirable and relating in any manner to the protection, preservation, or operation of the Building or any part thereof; utility

costs, including, but not limited to, the cost of heat, light, power, steam, gas; waste disposal; the cost of janitorial services; the cost of security and alarm services (including any central station signaling system); costs of cleaning, repairing, replacing and maintaining the common areas, including parking and landscaping, window cleaning costs; labor costs; costs and expenses of managing the Building including management and/or administrative fees; air conditioning maintenance costs; elevator maintenance fees and supplies; material costs; equipment costs including the cost of maintenance, repair and service agreements and rental and leasing costs; purchase costs of equipment; current rental and leasing costs of items which would be capital items if purchased; tool costs; licenses, permits and inspection fees; wages and salaries; employee benefits and payroll taxes; accounting and legal fees; any sales, use or service taxes incurred in connection therewith. In addition, Landlord shall be entitled to recover, as additional rent (which, along with any other capital expenditures constituting Expenses, Landlord may either include in Expenses or cause to be billed to Tenant along with Expenses and Taxes but as a separate item), Tenant's Proportionate Share of: (i) an allocable portion of the cost of capital improvement items which are reasonably calculated to reduce operating expenses; (ii) the cost of fire sprinklers and suppression systems and other life safety systems; and (iii) other capital expenses which are required under any governmental laws, regulations or ordinances which were not applicable to the Building at the time it was constructed; but the costs described in this sentence shall be amortized over the reasonable life of such expenditures in accordance with such reasonable life and amortization schedules as shall be determined by Landlord in accordance with generally accepted accounting principles, with interest on the unamortized amount at one percent (1%) in excess of the Wall Street Journal prime lending rate announced from time to time. Expenses shall not include depreciation or amortization of the Building or equipment in the Building except as provided herein, loan principal payments, costs of alterations of tenants' premises, leasing commissions, interest expenses on long-term borrowings or advertising costs.

Notwithstanding anything to the contrary set forth in this Lease, Expenses shall not include the following:

4.1.2.1 any ground or underlying lease rental;

4.1.2.2 bad debt expenses and interest, principal, points and fees on debts or amortization on any mortgage or other debt instrument encumbering the Building or the lot;

4.1.2.3 costs which may be considered capital improvements, capital repairs, capital changes or any other capital costs as determined under generally accepted accounting principles except for capital improvements referred to in (i)-(iii) above and required by any laws not in existence and not in effect as of the Commencement Date, in which case such costs shall be capitalized and amortized over their useful life determined in accordance with generally accepted accounting principles;

4.1.2.4 rentals for items which if purchased, rather than rented, would constitute a capital cost;

4.1.2.5 costs incurred by Landlord to the extent that Landlord is reimbursed by insurance proceeds or is otherwise reimbursed;

4.1.2.6 depreciation, amortization and interest payments, except on equipment, materials, tools, supplies and vendor type equipment purchased by Landlord to enable Landlord to supply services Landlord might otherwise contract for with a third party where such depreciation, amortization and interest payments would otherwise have been included in the charge for such third party's services, all as determined in accordance with generally accepted accounting principles, consistently applied, and when depreciation or amortization is permitted or required, the item shall be amortized over its reasonably anticipated useful life;

4.1.2.7 advertising and promotional expenditures;

4.1.2.8 marketing costs, including leasing commissions, attorneys' fees (in connection with the negotiation and preparation of letters, deal memos, letters of intent, leases, subleases and/or assignments), space planning costs, and other costs and expenses incurred in connection with lease, sublease and/or assignment negotiations and transactions with present or prospective tenants or other occupants of the Building;

4.1.2.9 costs, including permit, license and inspection costs, incurred with respect to the installation of other tenants' or other occupants' improvements or incurred in renovating or otherwise improving, decorating, painting or redecorating vacant space for tenants or other occupants of the Building;

4.1.2.10 expenses in connection with services or other benefits which are not offered to Tenant or for which Tenant is charged for directly;

4.1.2.11 costs incurred by Landlord due to the violation by Landlord or any tenant of the terms and conditions of any lease of space in the Building;

4.1.2.12 management fees paid or charged by Landlord in connection with the management of the Building to the extent such management fee is in excess of the range of management fees for like-kind-of-buildings in the Billerica market;

4.1.2.13 salaries and other benefits paid to the employees of Landlord to the extent customarily included in or covered by a management fee, provided that in no event shall Expenses include salaries and/or benefits attributable to personnel above the level of Senior Property Manager;

4.1.2.14 intentionally omitted;

4.1.2.15 amounts paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in the Building to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third patties on a competitive basis;

4.1.2.16 Landlord's general corporate overhead and general and administrative expenses;

4.1.2.17 any compensation paid to clerks, attendants or other persons in commercial concessions operated by Landlord;

4.1.2.18 services provided, taxes, attributable to, and costs incurred in connection with the operation of any retail, restaurant and garage operations for the Building, and any replacement garages or parking facilities and any shuttle services;

4.1.2.19 costs incurred in connection with upgrading the Building to comply with laws, rules, regulations and codes in effect prior to the Commencement Date;

4.1.2.20 all assessments and premiums which are not specifically charged to Tenant because of what Tenant has done, which can be paid by Landlord in installments, shall be paid by Landlord in the maximum number of installments permitted by law and not included as Expenses except in the year in which the assessment or premium installment is actually paid;

4.1.2.21 costs arising from the negligence or willful misconduct of Landlord;

4.1.2.22 costs arising from Landlord's charitable or political contributions;

4.1.2.23 intentionally omitted;

4.1.2.24 intentionally omitted;

4.1.2.25 costs associated with the operation of the business of the entity which constitutes Landlord as the same are distinguished from the costs of operation of the Building, including accounting and legal matters, costs of defending any lawsuits with any mortgagee (except as the actions of Tenant may be in issue), costs of selling, syndicating, financing, mortgaging or hypothecating any of Landlord's interest in the Building, costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Building management, or between Landlord and other tenants or occupants; or

4.1.2.26 intentionally omitted.

4.1.3 **Taxes:** Real estate taxes and any other taxes, charges and assessments which are levied with respect to the Building or the land appurtenant to the Building, or with respect to any improvements, fixtures and equipment or other property of Landlord, real or personal, located in the Building and used in connection with the operation of the Building and said land, any payments to any ground lessor in reimbursement of tax payments made by such lessor, and all fees, expenses and costs incurred by Landlord in investigating, protesting, contesting or in any way seeking to reduce or avoid increase in any assessments, levies or the tax rate pertaining to any Taxes to be paid by Landlord in any Lease Year. Taxes shall not include any corporate franchise, estate, succession, transfer, gift, capital stock tax, inheritance or net income tax, or tax imposed upon any transfer by Landlord of its interest in this Lease or the Building or any taxes to be paid by Tenant pursuant to Article 28.

4.2 Tenant shall pay as additional rent for each Lease Year Tenant's Proportionate Share of Expenses and Taxes incurred for such Lease Year.

4.3 The annual determination of Expenses shall be made by Landlord and shall be binding upon Landlord and Tenant, subject to the provisions of this Section 4.3. During the Term, Tenant may review, at Tenant's sole cost and expense, the books and records supporting such determination in an office of Landlord, or Landlord's agent, during normal business hours, upon giving Landlord five (5) days advance written notice within sixty (60) days after receipt of such determination, but in no event more often than once in any one (1) year period, subject to execution of a confidentiality agreement acceptable to Landlord, and provided that if Tenant utilizes an independent accountant to perform such review it shall be one of national standing which is reasonably acceptable to Landlord, is not compensated on a contingency basis and is also subject to such confidentiality agreement. If Tenant fails to object to Landlord's determination of Expenses within ninety (90) days after receipt, or if any such objection fails to state with specificity the reason for the objection, Tenant shall be deemed to have approved such determination and shall have no further right to object to or contest such determination. If the audit discloses any overpayment on the part of Tenant, then Tenant shall be entitled to a credit on the next succeeding installment of rent for an amount equal to the overcharge plus interest on the amount of such overcharge from the date on which same was paid by Tenant until the date refunded by Landlord at the prime rate then published in The Wall Street Journal, and such credit shall be extended to succeeding installments of rent in the event such overcharge exceeds the amount of the next succeeding such installment and, in the event the Term of this Lease has expired or been earlier terminated, then Tenant shall be entitled to a refund of such excess from Landlord within thirty (30) days after such date or expiration or earlier termination. In addition, in the event such audit by Tenant discloses such an overcharge in excess of seven percent (7%) of the amount of Expenses payable in accordance with this Article 4, then Landlord shall pay to Tenant the reasonable costs and expenses of such audit. In the event that during all or any portion of any Lease Year or Base Year, the Building is not fully rented and occupied Landlord shall make an appropriate adjustment in occupancy-related Expenses for such year for the purpose of avoiding distortion of the amount of such Expenses to be attributed to Tenant by reason of variation in total occupancy of the Building, by employing consistent and sound accounting and management principles to determine Expenses that would have been paid or incurred by Landlord had the Building been at least ninety-five percent (95%) rented and occupied, and the amount so determined shall be deemed to have been Expenses for such Lease Year.

4.4 Prior to the actual determination thereof for a Lease Year, Landlord may from time to time estimate Tenant's liability for Expenses and/or Taxes under Section 4.2, Article 6 and Article 28 for the Lease Year or portion thereof. Landlord will give Tenant written notification of the amount of such estimate and Tenant agrees that it will pay, by increase of its Monthly Installments of Rent due in such Lease Year, additional rent in the amount of such estimate. Any such increased rate of Monthly Installments of Rent pursuant to this Section 4.4 shall remain in effect until further written notification to Tenant pursuant hereto.

4.5 When the above mentioned actual determination of Tenant's liability for Expenses and/or Taxes is made for any Lease Year and when Tenant is so notified in writing, then:

4.5.1 If the total additional rent Tenant actually paid pursuant to Section 4.3 on account of Expenses and/or Taxes for the Lease Year is less than Tenant's liability for Expenses and/or Taxes, then Tenant shall pay such deficiency to Landlord as additional rent in one lump sum within thirty (30) days of receipt of Landlord's bill therefor; and

4.5.2 If the total additional rent Tenant actually paid pursuant to Section 4.3 on account of Expenses and/or Taxes for the Lease Year is more than Tenant's liability for Expenses and/or Taxes, then Landlord shall credit the difference against the then next due payments to be made by Tenant under this Article 4, or, if the Lease has terminated, refund the difference in cash.

4.6 If the Commencement Date is other than January 1 or if the Termination Date is other than December 31, Tenant's liability for Expenses and Taxes for the Lease Year in which said Date occurs shall be prorated based upon a three hundred sixty-five (365) day year.

5. SECURITY DEPOSIT.

5.1 Tenant shall deposit the Security Deposit with Landlord upon the execution of this Lease. Said sum shall be held by Landlord as security for the faithful performance by Tenant of all the terms, covenants and conditions of this Lease to be kept and performed by Tenant and not as an advance rental deposit or as a measure of Landlord's damage in case of Tenant's default. If Tenant defaults with respect to any provision of this Lease, Landlord may use any part of the Security Deposit for the payment of any rent or any other sum in default, or for the payment of any amount which Landlord may spend or become obligated to spend by reason of Tenant's default, or to compensate Landlord for any other loss or damage which Landlord may suffer by reason of Tenant's default. If any portion is so used, Tenant shall within five (5) days after written demand therefor, deposit with Landlord an amount sufficient to restore the Security Deposit to its original amount and Tenant's failure to do so shall be a material breach of this Lease. Except to such extent, if any, as shall be required by law, Landlord shall not be required to keep the Security Deposit separate from its general funds, and Tenant shall not be entitled to interest on such deposit. If Tenant shall fully and faithfully perform every provision of this Lease to be performed by it, the Security Deposit or any balance thereof shall be returned to Tenant at such time after termination of this Lease when Landlord shall have determined that all of Tenant's obligations under this Lease have been fulfilled.

5.2 The required Security Deposit shall be in the form of an Irrevocable Standby Letter of Credit in favor of Landlord (the "letter of credit") in the amount set forth on the Reference Pages. Under any circumstance under which Landlord is entitled the use of all or a part of the Security Deposit, then, Landlord, in addition to all other rights and remedies provided under the Lease, shall have the right to draw down the full balance of the letter of credit and retain the proceeds. The following terms and conditions shall govern the letter of credit:

5.2.1 Upon expiration of the Term, the letter of credit shall be returned to Tenant when Tenant is entitled to return of its Security Deposit.

5.2.2 The letter of credit shall be in favor of Landlord, shall be issued by a commercial bank reasonably acceptable to Landlord having a Standard & Poors rating of "A" or better, shall comply with all of the terms and conditions of this Section 5.2 and shall otherwise be in form reasonably acceptable to Landlord. The initial letter of credit shall have an expiration date not earlier than fifteen (15) months after the Commencement Date. A draft of the form of letter of credit must be submitted to Landlord for its approval prior to issuance. Landlord hereby consents to the use of either Citizens Bank and Silicon Valley Bank for the issuance of the letter of credit pursuant to this Article 5.

5.2.3 The letter of credit or any replacement letter of credit shall be irrevocable for the term thereof and shall automatically renew on a year to year basis until a period ending not earlier than three (3) months after the Termination Date ("End Date") without any action whatsoever on the part of Landlord; provided that the issuing bank shall have the right not to renew the letter of credit by giving written notice to Landlord not less than sixty (60) days prior to the expiration of the then current term of the letter of credit that it does not intend to renew the letter of credit. Tenant understands that the election by the issuing bank not to renew the letter of credit shall not, in any event, diminish the obligation of Tenant to maintain such an irrevocable letter of credit in favor of Landlord through such date.

5.2.4 Landlord, or its then managing agent, shall have the right from time to time to make one or more draws on the letter of credit at any time that an Event of Default has occurred. The letter of credit must state that it can be presented for payment at the office of the issuer or an approved correspondent in the metropolitan Boston, Massachusetts area. Funds may be drawn down on the letter of credit upon presentation to the issuing or corresponding bank of Landlord's (or Landlord's then managing agent's) certificate stating as follows:

> "Beneficiary is entitled to draw on this credit pursuant to that certain Lease dated for reference September 7, 2007 between **RAR2 BOSTON INDUSTRIAL QRS — MA, INC.**, a Maryland corporation, as Landlord and **AUSHON BIOSYSTEMS, INC.**, a Delaware corporation, as Tenant, as amended from time to time."

It is understood that if Landlord or its managing agent be a corporation, partnership or other entity, then such statement shall be signed by an officer (if a corporation), a general partner (if a partnership), or any authorized party (if another entity).

5.2.5 Tenant acknowledges and agrees (and the letter of credit shall so state) that the letter of credit shall be honored by the issuing bank without inquiry as to the truth of the statements set forth in such draw request and regardless of whether the Tenant disputes the content of such statement.

5.2.6 In the event of a transfer of Landlord's interest in the Premises, Landlord shall have the right to transfer the letter of credit to the transferee and thereupon the Landlord shall, without any further agreement between the parties, be released by Tenant from all liability therefor, and it is agreed that the provisions hereof shall apply to every transfer or assignment of said letter of credit to a new landlord; and Tenant shall pay all fees to the issuer necessary to effect and evidence such transfer.

5.2.7 Without limiting the generality of the foregoing, if the letter of credit expires earlier than the End Date, or the issuing bank notifies Landlord that it will not renew the letter of credit, Landlord shall accept a renewal thereof or substitute letter credit (such renewal or substitute letter of credit to be in effect not later than thirty (30) days prior to the expiration of the expiring letter of credit), irrevocable and automatically renewable as above provided to the End Date upon the same terms as the expiring letter of credit or upon such other terms as may be acceptable to Landlord. However, if (i) the letter of credit is not timely renewed, or (ii) a substitute letter of credit, complying with all of the terms and conditions of this Section is not timely received, then

Landlord may present the expiring letter of credit to the issuing bank, and the entire sum so obtained shall be paid to Landlord, to be held by Landlord until Tenant would otherwise be entitled to the return of the letter of credit, and to be retained by Landlord if a default occurs.

5.2.8 In the event Tenant (i) demonstrates to Landlord's reasonable satisfaction that it has secured no less than $5,000,000.00 of equity infusion and (ii) is not then in default beyond any applicable cure period, Landlord shall permit the amount of the letter of credit to be reduced by fifty percent (50%).

6. ALTERATIONS.

6.1 Except for those, if any, specifically provided for in Exhibit B to this Lease, Tenant shall not make or suffer to be made any alterations, additions, or improvements, including, but not limited to, the attachment of any fixtures or equipment in, on, or to the Premises or any part thereof or the making of any improvements as required by Article 7, without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. When applying for such consent, Tenant shall, if requested by Landlord, famish complete plans and specifications for such alterations, additions and improvements. Landlord's consent shall not be required with respect to alterations which (i) are not structural in nature, (ii) are not visible from the exterior of the Building, (iii) do not affect or require modification of the Building's electrical, mechanical, plumbing, HVAC or other systems, and (iv) in aggregate for any particular project do not cost more than the greater of (i) $25,000 and (ii) $5.00 per rentable square foot of that portion of the Premises affected by the alterations in question.

6.2 In the event Landlord consents to the making of any such alteration, addition or improvement by Tenant, the same shall be made by using either Landlord's contractor or a contractor reasonably approved by Landlord, in either event at Tenant's sole cost and expense. If Tenant shall employ any contractor other than Landlord's contractor and such other contractor or any subcontractor of such other contractor shall employ any non-union labor or supplier, Tenant shall be responsible for and hold Landlord harmless from any and all delays, damages and extra costs suffered by Landlord as a result of any dispute with any labor unions concerning the wage, hours, terms or conditions of the employment of any such labor. In any event Landlord may charge Tenant a construction management fee not to exceed three percent (3%) of the cost of such work to cover its overhead as it relates to such proposed work, plus third-party costs actually incurred by Landlord in connection with the proposed work and the design thereof, with all such amounts being due ten (10) business days after Landlord's demand.

6.3 All alterations, additions or improvements proposed by Tenant shall be constructed in accordance with all government laws, ordinances, rules and regulations, using Building standard materials where applicable, and Tenant shall, prior to construction, provide the additional insurance required under Article II in such case, and also all such assurances to Landlord as Landlord shall reasonably require to assure payment of the costs thereof, including but not limited to, notices of non-responsibility, waivers of lien, surety company performance bonds and funded construction escrows and to protect Landlord and the Building and appurtenant land against any loss from any mechanic's, materialmen's or other liens. Tenant shall pay in addition to any sums due pursuant to Article 4, any increase in real estate taxes attributable to any such alteration, addition or improvement for so long, during the Term, as such increase is ascertainable; at

Landlord's election said sums shall be paid in the same way as sums due under Article 4. Landlord may, as a condition to its consent to any particular alterations or improvements, require Tenant to deposit with Landlord the amount reasonably estimated by Landlord as sufficient to cover the cost of removing such alterations or improvements and restoring the Premises, to the extent required under Section 26.2.

7. REPAIR.

7.1 Landlord shall have no obligation to alter, remodel, improve, repair, decorate or paint the Premises, except as specified in Exhibit B if attached to this Lease and except that Landlord shall repair and maintain the structural portions of the roof, foundation and walls of the Building. By taking possession of the Premises, Tenant accepts them as being in good order, condition and repair and in the condition in which Landlord is obligated to deliver them, including the work to be performed by Landlord pursuant to Section 2.1 and Exhibit B, except as set forth in the punch list to be delivered pursuant to Section 2.1. It is hereby understood and agreed that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant, except as specifically set forth in this Lease. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after written notice of the need of such repairs or maintenance is given to Landlord by Tenant.

7.2 Tenant shall at its own cost and expense keep and maintain all parts of the Premises and such portion of the Building and improvements as are within the exclusive control of Tenant in good condition, promptly making all necessary repairs and replacements, whether ordinary or extraordinary, with materials and workmanship of the same character, kind and quality as the original (including, but not limited to, repair and replacement of all fixtures installed by Tenant, water heaters serving the Premises, windows, glass and plate glass, doors, skylights, any special office entries, interior walls and finish work, floors and floor coverings, heating and air conditioning systems exclusively serving the Premises, electrical systems and fixtures, sprinkler systems, dock boards, truck doors, dock bumpers, plumbing work and fixtures, and performance of regular removal of trash and debris). Tenant as part of its obligations hereunder shall keep the Premises in a clean and sanitary condition. Tenant will, as far as possible, keep all such parts of the Premises from falling out of repair, and upon termination of this Lease in any way Tenant will yield up the Premises to Landlord in as good a condition as on the Commencement date, reasonable wear and tear and loss by fire or other casualty excepted (but not excepting any damage to glass). Tenant shall, at its own cost and expense, repair any damage to the Premises or the Building resulting from and/or caused in whole or in part by the negligence or misconduct of Tenant, its agents, employees, contractors, invitees, or any other person entering upon the Premises as a result of Tenant's business activities or caused by Tenant's default hereunder.

7.3 Except as provided in Article 22, there shall be no abatement of rent and no liability of Landlord by reason of any injury to or interference with Tenant's business arising from the making of any repairs, alterations or improvements in or to any portion of the Building or the Premises or to fixtures, appurtenances and equipment in the Building. Except to the extent, if any, prohibited by law, Tenant waives the right to make repairs at Landlord's expense under any law, statute or ordinance now or hereafter in effect.

7.4 Tenant shall, at its own cost and expense, enter into a regularly scheduled preventive maintenance/service contract with a maintenance contractor approved by Landlord for servicing all heating and air conditioning systems and equipment exclusively serving the Premises (and a copy thereof shall be furnished to Landlord). The service contract must include all services suggested by the equipment manufacturer in the operation/maintenance manual and must become effective within thirty (30) days of the date Tenant takes possession of the Premises. Should Tenant fail to do so, Landlord may, upon notice to Tenant, enter into such a maintenance/ service contract on behalf of Tenant or perform the work and in either case, charge Tenant the cost thereof along with a reasonable amount for Landlord's overhead.

7.5 Landlord and Tenant acknowledge and agree that as a material inducement to enter into this Lease, Landlord has agreed to replace the base-building HVAC roof top units that service the Premises ("HVAC Replacement Units") with two (30 ton) gas-fired units and Landlord will place the VAV boxes within the Premises in good working order. Landlord shall complete its HVAC work within one hundred twenty (120) days from the complete execution of this Lease, subject to any force majeure and any Tenant-caused delay. Notwithstanding any provision to the contrary, for the period from the Commencement Date until twelve (12) months after completion of the installation of the HVAC Replacement Units, Landlord shall be responsible for repair of the HVAC roof top units which service the Premises and the cost for such repair shall not be charged-back to the Tenant unless the need for such repair was due to Tenant's failure to properly complete the preventive maintenance on such units or resulted from damage caused by the Tenant. Tenant shall be responsible for preventive maintenance also on the HVAC Replacement Units once installed. After the aforesaid twelve month period, Tenant shall also be responsible for repair and replacement of the HVAC Replacement Units to the extent required under this Lease. After such twelve month period, Landlord shall assign to Tenant, if it is able to do so, any warranties that exist relating to the HVAC Replacement Units and, if it is unable to assign any such warranties, Landlord will, upon Tenant's written request, enforce any such warranties as needed. Following twelve months after Landlord's installation of the HVAC Replacement Units, any replacement or maintenance and repair in excess of 510,000.00 of the base building HVAC units serving the Premises shall be deem a capital expenditure and shall be performed by Landlord and, in such event, the costs to the Landlord shall be amortized over the reasonable life of such expenditures in accordance with generally accepted accounting principles, with interest on the unamortized amount at one percent (1%) in excess of the Wall Street Journal prime lending rate announced from time to time and Tenant shall be responsible to pay as additional rent equal monthly installments of such amortized cost but not beyond the expiration of the Term and any extension thereof.

8. LIENS. Tenant shall keep the Premises, the Building and appurtenant land and Tenant's leasehold interest in the Premises free from any liens arising out of any services, work or materials performed, furnished, or contracted for by Tenant, or obligations incurred by Tenant. In the event that Tenant fails, within ten (10) days following the imposition of any such lien, to either cause the same to be released of record or provide Landlord with insurance against the same issued by a major title insurance company or such other protection against the same as Landlord shall accept (such failure to constitute an Event of Default), Landlord shall have the right to cause the same to be released by such means as it shall deem proper, including payment of the claim giving rise to such lien. All such sums paid by Landlord and all expenses incurred by it in connection therewith shall be payable to it by Tenant within five (5) days of Landlord's demand.

9. ASSIGNMENT AND SUBLETTING.

9.1 Tenant shall not have the right to assign or pledge this Lease or to sublet the whole or any part of the Premises whether voluntarily or by operation of law, or permit the use or occupancy of the Premises by anyone other than Tenant, and shall not make, suffer or permit such assignment, subleasing or occupancy without the prior written consent of Landlord, such consent not to be unreasonably withheld, and said restrictions shall be binding upon any and all assignees of the Lease and subtenants of the Premises. In the event Tenant desires to sublet, or permit such occupancy of, the Premises, or any portion thereof, or assign this Lease, Tenant shall give written notice thereof to Landlord at least sixty (60) days but no more than one hundred twenty (120) days prior to the proposed commencement date of such subletting or assignment, which notice shall set forth the name of the proposed subtenant or assignee, the relevant terms of any sublease or assignment and copies of financial reports and other relevant financial information of the proposed subtenant or assignee.

9.2 Notwithstanding any assignment or subletting, permitted or otherwise, Tenant shall at all times remain directly, primarily and fully responsible and liable for the payment of the rent specified in this Lease and for compliance with all of its other obligations under the terms, provisions and covenants of this Lease. Upon the occurrence of an Event of Default, if the Premises or any part of them are then assigned or sublet, Landlord, in addition to any other remedies provided in this Lease or provided by law, may, at its option, collect directly from such assignee or subtenant all rents due and becoming due to Tenant under such assignment or sublease and apply such rent against any sums due to Landlord from Tenant under this Lease, and no such collection shall be construed to constitute a novation or release of Tenant from the further performance of Tenant's obligations under this Lease.

9.3 In addition to Landlord's right to approve of any subtenant or assignee, Landlord shall have the option, in its sole discretion, in the event of any proposed subletting of the entire Premises or assignment of this Lease, to terminate this Lease, or in the case of a proposed subletting of less than the entire Premises, to recapture the portion of the Premises to be sublet, as of the date the subletting or assignment is to be effective. The option shall be exercised, if at all, by Landlord giving Tenant written notice given by Landlord to Tenant within thirty (30) days following Landlord's receipt of Tenant's written notice as required above. However, if Tenant notifies Landlord, within five (5) days after receipt of Landlord's termination notice, that Tenant is rescinding its proposed assignment or sublease, the termination notice shall be void and the Lease shall continue in full force and effect. If this Lease shall be terminated with respect to the entire Premises pursuant to this Section, the Term of this Lease shall end on the date stated in Tenant's notice as the effective date of the sublease or assignment as if that date had been originally fixed in this Lease for the expiration of the Term. If Landlord recaptures under this Section only a portion of the Premises, the rent (including all additional rent) to be paid from time to time during the unexpired Term shall abate proportionately based on the proportion by which the approximate square footage of the remaining portion of the Premises shall be less than that of the Premises as of the date immediately prior to such recapture. Tenant shall, at Tenant's own cost and expense, discharge in full any outstanding commission obligation which may be due and owing as a result of any proposed assignment or subletting, whether or not the Premises are recaptured pursuant to this Section 9.3 and rented by Landlord to the proposed tenant or any other tenant.

9.4 In the event that Tenant sells, sublets, assigns or transfers this Lease, Tenant shall pay to Landlord as additional rent an amount equal to fifty percent (50%) of any Increased Rent (as defined below), less the Costs Component (as defined below), when and as such Increased Rent is received by Tenant. As used in this Section, "Increased Rent" shall mean the excess of (i) all rent and other consideration which Tenant is entitled to receive by reason of any sale, sublease, assignment or other transfer of this Lease, over (ii) the rent otherwise payable by Tenant under this Lease at such time. For purposes of the foregoing, any consideration received by Tenant in form other than cash shall be valued at its fair market value as determined by Landlord in good faith. The "Costs Component- is that amount which, if paid monthly, would fully amortize on a straight-line basis, over the entire period for which Tenant is to receive Increased Rent, the reasonable costs incurred by Tenant for leasing commissions, tenant improvements, advertising costs and all other costs incurred by Tenant in connection with such sublease, assignment or other transfer.

9.5 Notwithstanding any other provision hereof, it shall be considered reasonable for Landlord to withhold its consent to any assignment of this Lease or sublease of any portion of the Premises if at the time of either Tenant's notice of the proposed assignment or sublease or the proposed commencement date thereof, there shall exist any uncured default of Tenant or matter which will become a default of Tenant with passage of time unless cured, or if the proposed assignee or sublessee is an entity: (a) with which Landlord is already in negotiation; (b) is already an occupant of the Building unless Landlord is unable to provide the amount of space required by such occupant; (c) is a governmental agency; (d) is incompatible with the character of occupancy of the Building; (e) with which the payment for the sublease or assignment is determined in whole or in part based upon its net income or profits; or (f) would subject the Premises to a use which would: (i) violate any exclusive right granted to another tenant of the Building; (ii) require any addition to or modification of the Premises or the Building in order to comply with building code or other governmental requirements; or, (iii) involve a violation of Section 1.2. Tenant expressly agrees that for the purposes of any statutory or other requirement of reasonableness on the part of Landlord, Landlord's refusal to consent to any assignment or sublease for any of the reasons described in this Section 9.5, shall be conclusively deemed to be reasonable.

9.6 Upon any request to assign or sublet, Tenant will pay to Landlord the Assignment/Subletting Fee plus, on demand, a sum equal to all of Landlord's costs (not to exceed $5,000), including reasonable attorney's fees, incurred in investigating and considering any proposed or purported assignment or pledge of this Lease or sublease of any of the Premises, regardless of whether Landlord shall consent to, refuse consent, or determine that Landlord's consent is not required for, such assignment, pledge or sublease. Any purported sale, assignment, mortgage, transfer of this Lease or subletting which does not comply with the provisions of this Article 9 shall be void.

9.7 Except as provided in Section 9.8, if Tenant is a corporation, limited liability company, partnership or trust, any transfer or transfers of or change or changes within any twelve (12) month period in the number of the outstanding voting shares of the corporation or limited liability company, the general partnership interests in the partnership or the identity of the persons or entities controlling the activities of such partnership or trust resulting in the persons or entities owning or controlling a majority of such shares, partnership interests or activities of such partnership or trust at the beginning of such period no longer having such ownership or control shall be regarded as equivalent to an assignment of this Lease to the persons or entities acquiring

such ownership or control and shall be subject to all the provisions of this Article 9 to the same extent and for all intents and purposes as though such an assignment

9.8 Notwithstanding the foregoing provisions of this Article to the contrary, Tenant shall be permitted to assign this Lease, or sublet all or a portion of the Premises, to an Affiliate of Tenant without the prior consent of Landlord, if all of the following conditions are first satisfied:

9.8.1 Tenant shall not then be in default under this Lease;

9.8.2 a fully executed copy of such assignment or sublease, the assumption of this Lease by the assignee or acceptance of the sublease by the sublessee, and such other information regarding the assignment or sublease as Landlord may reasonably request, shall have been delivered to Landlord;

9.8.3 the Premises shall continue to be operated solely for the use specified in the Reference Page or other use acceptable to Landlord in its sole discretion;

9.8.4 any guarantor of this Lease reaffirms that its Guaranty remains in full force and effect; and

9.8.5 Tenant shall pay all costs reasonably incurred by Landlord in connection with such assignment or subletting, including without limitation attorneys' fees (not to exceed $1,000.00).

Tenant acknowledges (and, at Landlord's request. at the time of such assignment or subletting shall confirm) that in each instance Tenant shall remain liable for performance of the terms and conditions of the Lease despite such assignment or subletting. As used herein the term "Affiliate" shall mean an entity which (i) directly or indirectly controls Tenant or (ii) is under the direct or indirect control of Tenant or (iii) is under common direct or indirect control with Tenant, (iv) is the successor in interest to Tenant by way of merger or consolidation, or by sale of all of the stock of Tenant or of all of the assets of Tenant, so long as the tangible net worth of the surviving or successor entity following such transaction is at least as much as the tangible net worth of Tenant immediately preceding the transaction or at the Commencement Date, whichever is higher. Control shall mean ownership of fifty-one percent (51%) or more of the voting securities or rights of the controlled entity.

10. INDEMNIFICATION.

10.1 None of the Landlord Entities shall be liable and Tenant hereby waives all claims against them for any damage to any property or any injury to any person in or about the Premises or the Building by or from any cause whatsoever (including without limiting the foregoing, rain or water leakage of any character from the roof, windows, walls, basement, pipes, plumbing works or appliances, the Building not being in good condition or repair, gas, fire, oil, electricity or theft), except to the extent caused by or arising from the gross negligence or willful misconduct of Landlord or its agents, employees or contractors. Tenant shall protect, indemnify and hold the Landlord Entities harmless from and against any and all loss, claims, liability or costs (including court costs and attorney's fees) incurred by reason of (a) any damage to any property (including but not limited to property of any Landlord Entity) or any injury (including but not limited to

death) to any person occurring in, on or about the Premises or the Building to the extent that such injury or damage shall be caused by or arise from any actual or alleged act, neglect, fault, or omission by or of Tenant or any Tenant Entity to meet any standards imposed by any duty with respect to the injury or damage; (b) the conduct or management of any work or thing whatsoever done by the Tenant in or about the Premises or from transactions of the Tenant concerning the Premises; (c) Tenant's failure to comply with any and all governmental laws, ordinances and regulations applicable to the condition or use of the Premises or its occupancy; or (d) any breach or default on the part of Tenant in the performance of any covenant or agreement on the part of the Tenant to be performed pursuant to this Lease. The provisions of this Article shall survive the termination of this Lease with respect to any claims or liability accruing prior to such termination.

10.2 Landlord shall protect, indemnify and hold the Tenant harmless from and against any and all loss, claims, liability or reasonable costs (including court costs and reasonable attorney's fees) incurred by reason of (a) any damage to any property (including but not limited to property of Tenant) or any injury (including but not limited to death) to any person in or about the Premises or the Building to the extent such injury or damage shall be caused by or arise from any gross negligence or willful misconduct by Landlord; or (b) any breach or default on the part of Landlord in the performance of any covenant or agreement on the part of the Landlord to be performed pursuant to this Lease. The provisions of this Article shall survive the termination of this Lease with respect to any claims or liability accruing prior to such termination.

11. INSURANCE.

11.1 Tenant shall keep in force throughout the Term: (a) a Commercial General Liability insurance policy or policies to protect the Landlord Entities against any liability to the public or to any invitee of Tenant or a Landlord Entity incidental to the use of or resulting from any accident occurring in or upon the Premises with a limit of not less than $1,000,000 per occurrence and not less than $2,000,000 in the annual aggregate, or such larger amount as Landlord may prudently require from time to time to the extent not outside of the range of coverage required in like-kind of buildings in the Billerica market area, covering bodily injury and property damage liability and $1,000,000 products/completed operations aggregate; (b) Business Auto Liability covering owned, non-owned and hired vehicles with a limit of not less than $1,000,000 per accident; (c) Worker's Compensation Insurance with limits as required by statute and Employers Liability with limits of $500,000 each accident, $500,000 disease policy limit, $500,000 disease—each employee; (d) All Risk or Special Form coverage protecting Tenant against loss of or damage to Tenant's alterations, additions, improvements, carpeting, floor coverings, panelings, decorations, fixtures, inventory and other business personal property situated in or about the Premises to the full replacement value of the property so insured.

11.2 The aforesaid policies shall (a) be provided at Tenant's expense; (b) name the Landlord Entities as additional insureds (General Liability) and loss payee (Property—Special Form); (c) be issued by an insurance company with a minimum Best's rating of "A-:VII" during the Term; and (d) provide that said insurance shall not be canceled unless thirty (30) days prior written notice (ten days for non-payment of premium) shall have been given to Landlord; a certificate of Liability insurance on ACORD Form 25 and a certificate of Property insurance on ACORD Form 27 shall be delivered to Landlord by Tenant upon the Commencement Date and at least thirty (30) days prior to each renewal of said insurance.

11.3 Whenever Tenant shall undertake any alterations, additions or improvements in, to or about the Premises ("Work") the aforesaid insurance protection must extend to and include injuries to persons and damage to property arising in connection with such Work, without limitation including liability under any applicable structural work act, and such other insurance as Landlord shall require; and the policies of or certificates evidencing such insurance must be delivered to Landlord prior to the commencement of any such Work.

12. WAIVER OF SUBROGATION. So long as their respective insurers so permit, Tenant and Landlord hereby mutually waive their respective rights of recovery against each other for any loss insured by fire, extended coverage, All Risks or other insurance now or hereafter existing for the benefit of the respective party but only to the extent of the net insurance proceeds payable under such policies. Each party shall obtain any special endorsements required by their insurer to evidence compliance with the aforementioned waiver.

13. SERVICES AND UTILITIES. Tenant shall pay for all water, gas, heat, light, power, telephone, sewer, sprinkler system charges and other utilities and services used on or from the Premises, together with any taxes, penalties, and surcharges or the like pertaining thereto and any maintenance charges for utilities. Tenant shall furnish all electric light bulbs, tubes and ballasts, battery packs for emergency lighting and fire extinguishers. If any such services are not separately metered to Tenant, Tenant shall pay such proportion of all charges jointly metered with other premises as determined by Landlord, in its sole discretion, to be reasonable. Any such charges paid by Landlord and assessed against Tenant shall be immediately payable to Landlord without mark-up on demand and shall be additional rent hereunder. Tenant will not, without the written consent of Landlord, contract with a utility provider to service the Premises with any utility, including, but not limited to, telecommunications, electricity, water, sewer or gas, which is not previously providing such service to other tenants in the Building. Landlord shall in no event be liable for any interruption or failure of utility services on or to the Premises.

14. HOLDING OVER. Tenant shall pay Landlord for each day Tenant retains possession of the Premises or part of them after termination of this Lease by lapse of time or otherwise at the rate ("Holdover Rate") which shall be One Hundred Fifty Percent (150%) of the greater of (a) the amount of the Annual Rent for the last period prior to the date of such termination plus all Rent Adjustments under Article 4; and (b) the then market rental value of the Premises as determined by Landlord assuming a new lease of the Premises of the then usual duration and other terms, in either case, prorated on a daily basis, and also pay all damages (excluding consequential damages) sustained by Landlord by reason of such retention. If Landlord gives notice to Tenant of Landlord's election to such effect, such holding over shall constitute renewal of this Lease for a period from month to month or one (1) year, whichever shall be specified in such notice, in either case at the Holdover Rate, but if the Landlord does not so elect, no such renewal shall result notwithstanding acceptance by Landlord of any sums due hereunder after such termination; and instead, a tenancy at sufferance at the Holdover Rate shall be deemed to have been created. In any event, no provision of this Article 14 shall be deemed to waive Landlord's right of reentry or any other right under this Lease or at law.

15. SUBORDINATION. This Lease shall be subject and subordinate at all times to ground or underlying leases and to the lien of any mortgages or deeds of trust now or hereafter placed on, against or affecting the Building, Landlord's interest or estate in the Building, or any ground or

underlying lease; provided, however, that if the lessor, mortgagee, trustee, or holder of any such mortgage or deed of trust elects to have Tenant's interest in this Lease be superior to any such instrument, then, by notice to Tenant, this Lease shall be deemed superior, whether this Lease was executed before or after said instrument. Notwithstanding the foregoing, Tenant covenants and agrees to execute and deliver within ten (10) days of Landlord's request such further instruments evidencing such subordination or superiority of this Lease as may be required by Landlord. At Tenant's request and at Tenant's sole expense, Landlord shall use commercially reasonable efforts to obtain from its current (if any) and any future mortgagee a non-disturbance agreement in favor of Tenant, but the failure to obtain such non-disturbance agreement shall not be a failure of condition of this Lease. Tenant shall reimburse Landlord for any fees and charges imposed by said mortgagee in connection with the non-disturbance agreement, as well as for reasonable attorneys' fees and costs incurred by Landlord.

16. RULES AND REGULATIONS. Tenant shall faithfully observe and comply with all the rules and regulations as set forth in Exhibit D to this Lease and all reasonable and non-discriminatory modifications of and additions to them from time to time put into effect by Landlord. Landlord shall not be responsible to Tenant for the non-performance by any other tenant or occupant of the Building of any such rules and regulations.

17. REENTRY BY LANDLORD.

17.1 Landlord reserves and shall at all times have the right to re-enter the Premises to inspect the same, to show said Premises to prospective purchasers, mortgagees or tenants, and to alter, improve or repair the Premises and any portion of the Building, without abatement of rent, and may for that purpose erect, use and maintain scaffolding, pipes, conduits and other necessary structures and open any wall, ceiling or floor in and through the Building and Premises where reasonably required by the character of the work to be performed, provided entrance to the Premises shall not be blocked thereby, and further provided that the business of Tenant shall not be interfered with unreasonably. Landlord shall have the right at any time to change the arrangement and/or locations of entrances, or passageways, doors and doorways, and corridors, windows, elevators, stairs, toilets or other public parts of the Building and to change the name, number or designation by which the Building is commonly known. In the event that Landlord damages any portion of any wall or wall covering, ceiling, or floor or floor covering within the Premises, Landlord shall repair or replace the damaged portion to match the original as nearly as commercially reasonable but shall not be required to repair or replace more than the portion actually damaged. Tenant hereby waives any claim for damages for any injury or inconvenience to or interference with Tenant's business, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned by any action of Landlord authorized by this Article 17. Notwithstanding anything to the contrary contained herein, except for an emergency, Landlord agrees to comply with any reasonable security procedures imposed by Tenant, provided such procedures have been communicated to Landlord, prior to entering the Premises, including the execution of a reasonable non-disclosure agreement, and use commercially reasonable efforts to cause any third party entering the Premises with Landlord or on Landlord's behalf to comply with such procedures.

17.2 For each of the aforesaid purposes, Landlord shall at all times have and retain a key with which to unlock all of the doors in the Premises, excluding Tenant's vaults and safes or special

security areas (designated in advance), and Landlord shall have the right to use any and all means which Landlord may deem proper to open said doors in an emergency to obtain entry to any portion of the Premises. As to any portion to which access cannot be had by means of a key or keys in Landlord's possession and to which Tenant does not permit access on no less than one (1) business days' written notice from Landlord (except in the case of an emergency, in which case no such notice shall be required), Landlord is authorized to gain access by such means as Landlord shall elect and the cost of repairing any damage occurring in doing so shall be borne by Tenant and paid to Landlord within five (5) days of Landlord's demand.

18. DEFAULT.

18.1 Except as otherwise provided in Article 20, the following events shall be deemed to be Events of Default under this Lease:

18.1.1 Tenant shall fail to pay when due any sum of money becoming due to be paid to Landlord under this Lease, whether such sum be any installment of the rent reserved by this Lease, any other amount treated as additional rent under this Lease, or any other payment or reimbursement to Landlord required by this Lease, whether or not treated as additional rent under this Lease, and such failure shall continue for a period of ten (10) days after written notice that such payment was not made when due, but if any such notice shall be given twice in any twelve (12) month period, for the twelve (12) month period commencing with the date of the second such notice, the failure to pay within ten (10) business days after due any additional sum of money becoming due to be paid to Landlord under this Lease during such period shall be an Event of Default, without notice.

18.1.2 Tenant shall fail to comply with any term, provision or covenant of this Lease which is not provided for in another Section of this Article and shall not cure such failure within twenty (20) business days (forthwith, if the failure involves a hazardous condition) after written notice of such failure to Tenant provided, however, that such failure shall not be an event of default if such failure could not reasonably be cured during such twenty (20) business day period, Tenant has commenced the cure within such twenty (20) business day period and thereafter is diligently pursuing such cure to completion, but the total aggregate cure period shall not exceed one hundred twenty (120) days.

18.1.3 Tenant shall fail to vacate the Premises immediately upon termination of this Lease, by lapse of time or otherwise, or upon termination of Tenant's right to possession only.

18.1.4 Tenant shall become insolvent, admit in writing its inability to pay its debts generally as they become due, file a petition in bankruptcy or a petition to take advantage of any insolvency statute, make an assignment for the benefit of creditors, make a transfer in fraud of creditors, apply for or consent to the appointment of a receiver of itself or of the whole or any substantial part of its property, or file a petition or answer seeking reorganization or arrangement under the federal bankruptcy laws, as now in effect or hereafter amended, or any other applicable law or statute of the United States or any state thereof.

18.1.5 A court of competent jurisdiction shall enter an order, judgment or decree adjudicating Tenant bankrupt, or appointing a receiver of Tenant, or of the whole or any substantial

part of its property, without the consent of Tenant, or approving a petition filed against Tenant seeking reorganization or arrangement of Tenant under the bankruptcy laws of the United States, as now in effect or hereafter amended, or any state thereof, and such order, judgment or decree shall not be vacated or set aside or stayed within sixty (60) days from the date of entry thereof.

19. REMEDIES.

19.1 Except as otherwise provided in Article 20, upon the occurrence of any of the Events of Default described or referred to in Article 18, Landlord shall have the option to pursue any one or more of the following remedies without any notice or demand whatsoever, concurrently or consecutively and not alternatively:

19.1.1 Landlord may, at its election, terminate this Lease or terminate Tenant's right to possession only, without terminating the Lease.

19.1.2 Upon any termination of this Lease, whether by lapse of time or otherwise, or upon any termination of Tenant's right to possession without termination of the Lease, Tenant shall surrender possession and vacate the Premises immediately, and deliver possession thereof to Landlord, and Tenant hereby grants to Landlord full and free license to enter into and upon the Premises in such event and to repossess Landlord of the Premises as of Landlord's former estate and to expel or remove Tenant and any others who may be occupying or be within the Premises and to remove Tenant's signs and other evidence of tenancy and all other property of Tenant therefrom without being deemed in any manner guilty of trespass, eviction or forcible entry or detainer, and without incurring any liability for any damage resulting therefrom, Tenant waiving any right to claim damages for such re-entry and expulsion, and without relinquishing Landlord's right to rent or any other right given to Landlord under this Lease or by operation of law.

19.1.3 Upon any termination of this Lease, whether by lapse of time or otherwise, Landlord shall be entitled to recover as damages, all rent, including any amounts treated as additional rent under this Lease, and other sums due and payable by Tenant on the date of termination, plus as liquidated damages and not as a penalty, an amount equal to the sum of: (a) an amount equal to the then present value of the rent reserved in this Lease for the residue of the stated Term of this Lease including any amounts treated as additional rent under this Lease and all other sums provided in this Lease to be paid by Tenant, minus the fair rental value of the Premises for such residue; (b) the value of the time and expense necessary to obtain a replacement tenant or tenants, and the estimated expenses described in Section 19.1.4 relating to recovery of the Premises, preparation for reletting and for reletting itself; and (c) the cost of performing any other covenants which would have otherwise been performed by Tenant.

19.1.4 Upon any termination of Tenant's right to possession only without termination of the Lease:

19.1.4.1 Neither such termination of Tenant's right to possession nor Landlord's taking and holding possession thereof as provided in Section 19.1.2 shall terminate the Lease or release Tenant, in whole or in part, from any obligation, including Tenant's obligation to pay the rent, including any amounts treated as additional rent, under this Lease for the full Term, and if Landlord so elects Tenant shall continue to pay to Landlord the entire amount of the rent as

and when it becomes due, including any amounts treated as additional rent under this Lease, for the remainder of the Term plus any other sums provided in this Lease to be paid by Tenant for the remainder of the Term.

19.1.4.2 Landlord shall use commercially reasonable efforts to relet the Premises or portions thereof to the extent required by applicable law. Landlord and Tenant agree that nevertheless Landlord shall at most be required to use only the same efforts Landlord then uses to lease premises in the Building generally and that in any case that Landlord shall not be required to give any preference or priority to the showing or leasing of the Premises or portions thereof over any other space that Landlord may be leasing or have available and may place a suitable prospective tenant in any such other space regardless of when such other space becomes available and that Landlord shall have the right to relet the Premises for a greater or lesser term than that remaining under this Lease, the right to relet only a portion of the Premises, or a portion of the Premises or the entire Premises as a part of a larger area, and the right to change the character or use of the Premises. In connection with or in preparation for any reletting, Landlord may, but shall not be required to, make repairs, alterations and additions in or to the Premises and redecorate the same to the extent Landlord deems necessary or desirable, and Tenant shall pay the cost thereof, together with Landlord's expenses of retching, including, without limitation, any commission incurred by Landlord, within five (5) days of Landlord's demand. Landlord shall not be required to observe any instruction given by Tenant about any reletting or accept any tenant offered by Tenant unless such offered tenant has a credit-worthiness acceptable to Landlord and leases the entire Premises upon terms and conditions including a rate of rent (after giving effect to all expenditures by Landlord for tenant improvements, broker's commissions and other leasing costs) all no less favorable to Landlord than as called for in this Lease, nor shall Landlord be required to make or permit any assignment or sublease for more than the current term or which Landlord would not be required to permit under the provisions of Article 9.

19.1.4.3 Until such time as Landlord shall elect to terminate the Lease and shall thereupon be entitled to recover the amounts specified in such case in Section 19.1.3, Tenant shall pay to Landlord upon demand the full amount of all rent, including any amounts treated as additional rent under this Lease and other sums reserved in this Lease for the remaining Term, together with the costs of repairs, alterations, additions, redecorating and Landlord's expenses of reletting and the collection of the rent accruing therefrom (including reasonable attorney's fees and broker's commissions), as the same shall then be due or become due from time to time, less only such consideration as Landlord may have received from any reletting of the Premises; and Tenant agrees that Landlord may file suits from time to time to recover any sums falling due under this Article 19 as they become due. Any proceeds of reletting by Landlord in excess of the amount then owed by Tenant to Landlord from time to time shall be credited against Tenant's future obligations under this Lease but shall not otherwise be refunded to Tenant or inure to Tenant's benefit.

19.2 Upon the occurrence of an Event of Default, Landlord may (but shall not be obligated to) cure such default at Tenant's sole expense. Without limiting the generality of the foregoing, Landlord may, at Landlord's option, enter into and upon the Premises if Landlord determines in its sole discretion that Tenant is not acting within a commercially reasonable time to maintain, repair or replace anything for which Tenant is responsible under this Lease or to otherwise effect compliance with its obligations under this Lease and correct the same, without

being deemed in any manner guilty of trespass, eviction or forcible entry and detainer and without incurring any liability for any damage or interruption of Tenant's business resulting therefrom and Tenant agrees to reimburse Landlord within five (5) days of Landlord's demand as additional rent, for any expenses which Landlord may incur in thus effecting compliance with Tenant's obligations under this Lease, plus interest from the date of expenditure by Landlord at the Wall Street Journal prime rate.

19.3 Tenant understands and agrees that in entering into this Lease, Landlord is relying upon receipt of all the Annual and Monthly Installments of Rent to become due with respect to all the Premises originally leased hereunder over the full Initial Term of this Lease for amortization, including interest at the Amortization Rate. For purposes hereof, the "Concession Amount" shall be defined as the aggregate of all amounts forgone or expended by Landlord as free rent under the lease, under Exhibit B hereof for construction allowances (excluding therefrom any amounts expended by Landlord for Landlord's Work, as defined in Exhibit B), and for brokers' commissions payable by reason of this Lease. Accordingly, Tenant agrees that if this Lease or Tenant's right to possession of the Premises leased hereunder shall be terminated as of any date ("Default Termination Date") prior to the expiration of the full Initial Term hereof by reason of a default of Tenant, there shall be due and owing to Landlord as of the day prior to the Default Termination Date, as rent in addition to all other amounts owed by Tenant as of such Date, the amount ("Unamortized Amount") of the Concession Amount determined as set forth below; provided, however, that in the event that such amounts are recovered by Landlord pursuant to any other provision of this Article 19, Landlord agrees that it shall not attempt to recover such amounts pursuant to this Paragraph 19.3. For the purposes hereof, the Unamortized Amount shall be determined in the same manner as the remaining principal balance of a mortgage with interest at the Amortization Rate payable in level payments over the same length of time as from the effectuation of the Concession concerned to the end of the full Initial Term of this Lease would be determined. The foregoing provisions shall also apply to and upon any reduction of space in the Premises, as though such reduction were a termination for Tenant's default, except that (i) the Unamortized Amount shall be reduced by any amounts paid by Tenant to Landlord to effectuate such reduction and (ii) the manner of application shall be that the Unamortized Amount shall first be determined as though for a full termination as of the Effective Date of the elimination of the portion, but then the amount so determined shall be multiplied by the fraction of which the numerator is the rentable square footage of the eliminated portion and the denominator is the rentable square footage of the Premises originally leased hereunder; and the amount thus obtained shall be the Unamortized Amount.

19.4 If, on account of any breach or default of any obligation under the terms and conditions of this Lease, it shall become necessary or appropriate for either party hereto to employ or consult with an attorney or collection agency concerning or to enforce or defend any of such party's rights or remedies arising under this Lease or to collect any sums due under this Lease, the other party agrees to pay all costs and fees so incurred, including, without limitation, reasonable attorneys' fees and costs. **THE PARTIES HERETO EXPRESSLY WAIVES ANY RIGHT TO: (A) TRIAL BY JURY; AND (B) SERVICE OF ANY NOTICE REQUIRED BY ANY PRESENT OR FUTURE LAW OR ORDINANCE APPLICABLE TO LANDLORDS OR TENANTS BUT NOT REQUIRED BY THE TERMS OF THIS LEASE.**

19.5 Pursuit of any of the foregoing remedies shall not preclude pursuit of any of the other remedies provided in this Lease or any other remedies provided by law (all such remedies being cumulative), nor shall pursuit of any remedy provided in this Lease constitute a forfeiture or waiver of any rent due to Landlord under this Lease or of any damages accruing to Landlord by reason of the violation of any of the terms, provisions and covenants contained in this Lease.

19.6 No act or thing done by Landlord or its agents during the Term shall be deemed a termination of this Lease or an acceptance of the surrender of the Premises, and no agreement to terminate this Lease or accept a surrender of said Premises shall be valid, unless in writing signed by Landlord. No waiver by Landlord of any violation or breach of any of the terms, provisions and covenants contained in this Lease shall be deemed or construed to constitute a waiver of any other violation or breach of any of the terms, provisions and covenants contained in this Lease. Landlord's acceptance of the payment of rental or other payments after the occurrence of an Event of Default shall not be construed as a waiver of such Default, unless Landlord so notifies Tenant in writing. Forbearance by Landlord in enforcing one or more of the remedies provided in this Lease upon an Event of Default shall not be deemed or construed to constitute a waiver of such Default or of Landlord's right to enforce any such remedies with respect to such Default or any subsequent Default.

19.7 Intentionally Deleted.

19.8 Any and all property which may be removed from the Premises by Landlord pursuant to the authority of this Lease or of law, to which Tenant is or may be entitled, may be handled, removed and/or stored, as the case may be, by or at the direction of Landlord but at the risk, cost and expense of Tenant, and Landlord shall in no event be responsible for the value, preservation or safekeeping thereof. Tenant shall pay to Landlord, upon demand, any and all expenses incurred in such removal and all storage charges against such property so long as the same shall be in Landlord's possession or under Landlord's control. Any such property of Tenant not retaken by Tenant from storage within thirty (30) days after removal from the Premises shall, at Landlord's option, be deemed conveyed by Tenant to Landlord under this Lease as by a bill of sale without further payment or credit by Landlord to Tenant.

20. TENANT'S BANKRUPTCY OR INSOLVENCY.

20.1 If at any time and for so long as Tenant shall be subjected to the provisions of the United States Bankruptcy Code or other law of the United States or any state thereof for the protection of debtors as in effect at such time (each a "Debtor's Law"):

20.1.1 Tenant, Tenant as debtor-in-possession, and any trustee or receiver of Tenant's assets (each a "Tenant's Representative") shall have no greater right to assume or assign this Lease or any interest in this Lease, or to sublease any of the Premises than accorded to Tenant in Article 9, except to the extent Landlord shall be required to permit such assumption, assignment or sublease by the provisions of such Debtor's Law. Without limitation of the generality of the foregoing, any right of any Tenant's Representative to assume or assign this Lease or to sublease any of the Premises shall be subject to die conditions that:

20.1.1.1 Such Debtor's Law shall provide to Tenant's Representative a right of assumption of this Lease which Tenant's Representative shall have timely exercised and Tenant's Representative shall have fully cured any default of Tenant under this Lease.

20.1.1.2 Tenant's Representative or the proposed assignee, as the case shall be, shall have deposited with Landlord as security for the timely payment of rent an amount equal to the larger of: (a) three (3) months' rent and other monetary charges accruing under this Lease; and (b) any sum specified in Article 5; and shall have provided Landlord with adequate other assurance of the future performance of the obligations of the Tenant under this Lease. Without limitation, such assurances shall include, at least, in the case of assumption of this Lease, demonstration to the satisfaction of the Landlord that Tenant's Representative has and will continue to have sufficient unencumbered assets after the payment of all secured obligations and administrative expenses to assure Landlord that Tenant's Representative will have sufficient funds to fulfill the obligations of Tenant under this Lease; and, in the case of assignment, submission of current financial statements of the proposed assignee, audited by an independent certified public accountant reasonably acceptable to Landlord and showing a net worth and working capital in amounts determined by Landlord to be sufficient to assure the future performance by such assignee of all of the Tenant's obligations under this Lease.

20.1.1.3 The assumption or any contemplated assignment of this Lease or subleasing any part of the Premises, as shall be the case, will not breach any provision in any other lease, mortgage, financing agreement or other agreement by which Landlord is bound.

20.1.1.4 Landlord shall have, or would have had absent the Debtor's Law, no right under Article 9 to refuse consent to the proposed assignment or sublease by reason of the identity or nature of the proposed assignee or sublessee or the proposed use of the Premises concerned.

21. QUIET ENJOYMENT. Landlord represents and warrants that it has MI right and authority to enter into this Lease and that Tenant, while paying the rental and performing its other covenants and agreements contained in this Lease, shall peaceably and quietly have, hold and enjoy the Premises for the Term without hindrance or molestation from Landlord subject to the terms and provisions of this Lease. Landlord shall not be liable for any interference or disturbance by other tenants or third persons, nor shall Tenant be released from any of the obligations of this Lease because of such interference or disturbance.

22. CASUALTY.

22.1 In the event the Premises or the Building are damaged by fire or other cause and in Landlord's reasonable estimation such damage can be materially restored within one hundred eighty (180) days, Landlord shall forthwith repair the same and this Lease shall remain in full force and effect, except that Tenant shall be entitled to a proportionate abatement in rent from the date of such damage. Such abatement of rent shall be made pro rata in accordance with the extent to which the damage and the making of such repairs shall interfere with the use and occupancy by Tenant of the Premises from time to time. Within forty-five (45) days from the date of such damage, Landlord shall notify Tenant, in writing, of Landlord's reasonable estimation of the length of time within which material restoration can be made, and Landlord's determination shall be

binding on Tenant. For purposes of this Lease, the Building or Premises shall be deemed "materially restored" if they are in such condition as would not prevent or materially interfere with Tenant's use of the Premises for the purpose for which it was being used immediately before such damage.

22.2 If such repairs cannot, in Landlord's reasonable estimation, be made within one hundred eighty (180) days, Landlord and Tenant shall each have the option of giving the other, at any time within ninety (90) days after such damage, notice terminating this Lease as of the date of such damage. In the event of the giving of such notice, this Lease shall expire and all interest of the Tenant in the Premises shall terminate as of the date of such damage as if such date had been originally fixed in this Lease for the expiration of the Term. In the event that neither Landlord nor Tenant exercises its option to terminate this Lease, then Landlord shall repair or restore such damage, this Lease continuing in full force and effect, and the rent hereunder shall be proportionately abated as provided in Section 22.1.

22.3 Landlord shall not be required to repair or replace any damage or loss by or from fire or other cause to any panelings, decorations, partitions, additions, railings, ceilings, floor coverings, office fixtures or any other property or improvements installed on the Premises by, or belonging to, Tenant. Any insurance which may be carried by Landlord or Tenant against loss or damage to the Building or Premises shall be for the sole benefit of the party carrying such insurance and under its sole control.

22.4 In the event that Landlord should fail to complete such repairs and material restoration within sixty (60) days after the date estimated by Landlord therefor as extended by this Section 22.4, Tenant may at its option and as its sole remedy terminate this Lease by delivering written notice to Landlord, within fifteen (15) days after the expiration of said period of time, whereupon the Lease shall end on the date of such notice or such later date fixed in such notice as if the date of such notice was the date originally fixed in this Lease for the expiration of the Term; provided, however, that if construction is delayed because of changes, deletions or additions in construction requested by Tenant, strikes, lockouts, casualties, Acts of God, war, material or labor shortages, government regulation or control or other causes beyond the reasonable control of Landlord, the period for restoration, repair or rebuilding shall be extended for the amount of time Landlord is so delayed.

22.5 Notwithstanding anything to the contrary contained in this Article: (a) Landlord shall not have any obligation whatsoever to repair, reconstruct, or restore the Premises when the damages resulting from any casualty covered by the provisions of this Article 22 occur during the last twelve (12) months of the Term or any extension thereof, but if Landlord determines not to repair such damages Landlord shall notify Tenant and if such damages shall render any material portion of the Premises untenantable Tenant shall have the right to terminate this Lease by notice to Landlord within fifteen (15) days after receipt of Landlord's notice; and (b) in the event the holder of any indebtedness secured by a mortgage or deed of trust covering the Premises or Building requires that any insurance proceeds be applied to such indebtedness, then Landlord shall have the right to terminate this Lease by delivering written notice of termination to Tenant within fifteen (15) days after such requirement is made by any such holder, whereupon this Lease shall end on the date of such damage as if the date of such damage were the date originally fixed in this Lease for the expiration of the Term.

22.6 In the event of any damage or destruction to the Building or Premises by any peril covered by the provisions of this Article 22, it shall be Tenant's responsibility to properly secure the Premises and upon notice from Landlord to remove forthwith, at its sole cost and expense, such portion of all of the property belonging to Tenant or its licensees from such portion or all of the Building or Premises as Landlord shall request.

23. EMINENT DOMAIN. If all or any substantial part of the Premises shall be taken or appropriated by any public or quasi-public authority under the power of eminent domain, or conveyance in lieu of such appropriation, either party to this Lease shall have the right, at its option, of giving the other, at any time within thirty (30) days after such taking, notice terminating this Lease, except that Tenant may only terminate this Lease by reason of taking or appropriation, if such taking or appropriation shall be so substantial as to materially interfere with Tenant's use and occupancy of the Premises. If neither party to this Lease shall so elect to terminate this Lease, the rental thereafter to be paid shall be adjusted on a fair and equitable basis under the circumstances. In addition to the rights of Landlord above, if any substantial part of the Building shall be taken or appropriated by any public or quasi-public authority under the power of eminent domain or conveyance in lieu thereof, and regardless of whether the Premises or any part thereof are so taken or appropriated, Landlord shall have the right, at its sole option, to terminate this Lease. Landlord shall be entitled to any and all income, rent, award, or any interest whatsoever in or upon any such sum, which may be paid or made in connection with any such public or quasi-public use or purpose, and Tenant hereby assigns to Landlord any interest it may have in or claim to all or any part of such sums, other than any separate award which may be made with respect to Tenant's trade fixtures and moving expenses; Tenant shall make no claim for the value of any unexpired Term.

24. SALE BY LANDLORD. In event of a sale or conveyance by Landlord of the Building, the same shall operate to release Landlord from any future liability upon any of the covenants or conditions, expressed or implied, contained in this Lease in favor of Tenant, and in such event Tenant agrees to look solely to the responsibility of the successor in interest of Landlord in and to this Lease. Except as set forth in this Article 24, this Lease shall not be affected by any such sale and Tenant agrees to attorn to the purchaser or assignee. If any security has been given by Tenant to secure the faithful performance of any of the covenants of this Lease, Landlord may transfer or deliver said security, as such, to Landlord's successor in interest and thereupon Landlord shall be discharged from any further liability with regard to said security.

25. ESTOPPEL CERTIFICATES. Within ten (10) days following any written request which Landlord may make from time to time, Tenant shall execute and deliver to Landlord or mortgagee or prospective mortgagee a sworn statement certifying: (a) the date of commencement of this Lease; (b) the fact that this Lease is unmodified and in full force and effect (or, if there have been modifications to this Lease, that this Lease is in full force and effect, as modified, and stating the date and nature of such modifications); (c) the date to which the rent and other sums payable under this Lease have been paid; (d) the fact that there are no current defaults under this Lease by either Landlord or Tenant except as specified in Tenant's statement; and (e) such other matters as may be requested by Landlord. Landlord and Tenant intend that any statement delivered pursuant to this Article 25 may be relied upon by any mortgagee, beneficiary or purchaser.

26. SURRENDER OP PREMISES.

26.1 Tenant shall arrange to meet Landlord for two (2) joint inspections of the Premises, the first to occur at least thirty (30) days (but no more than sixty (60) days) before the last day of the Term, and the second to occur not later than forty-eight (48) hours after Tenant has vacated the Premises. In the event of Tenant's failure to arrange such joint inspections and/or participate in either such inspection, Landlord's inspection at or after Tenant's vacating the Premises shall be conclusively deemed correct for purposes of determining Tenant's responsibility for repairs and restoration.

26.2 All alterations, additions, and improvements in, on, or to the Premises made or installed by or for Tenant, including, without limitation, carpeting (collectively, "Alterations"), shall be and remain the property of Tenant during the Term. Upon the expiration or sooner termination of the Term, all Alterations shall become a part of the realty and shall belong to Landlord without compensation, and title shall pass to Landlord under this Lease as by a bill of sale. At the end of the Term or any renewal of the Term or other sooner termination of this Lease, Tenant will peaceably deliver up to Landlord possession of the Premises, together with all Alterations by whomsoever made, in the same conditions received or first installed, broom clean and free of all debris, excepting only ordinary wear and tear and damage by fire or other casualty. Notwithstanding the foregoing, if Landlord elects by notice given to Tenant at least ten (10) days prior to expiration of the Term, Tenant shall, at Tenant's sole cost, remove any Alterations, including carpeting, so designated by Landlord's notice, and repair any damage caused by such removal. Tenant must, at Tenant's sole cost, remove upon termination of this Lease, any and all of Tenant's furniture, furnishings, equipment, movable partitions of less than full height from floor to ceiling and other trade fixtures and personal property, as well as all data/telecommunications cabling and wiring installed by or on behalf of Tenant, whether inside walls, under any raised floor or above any ceiling (collectively, "Personalty"). Personalty not so removed shall be deemed abandoned by the Tenant and title to the same shall thereupon pass to Landlord under this Lease as by a bill of sale, but Tenant shall remain responsible for the cost of removal and disposal of such Personalty, as well as any damage caused by such removal. In lieu of requiring Tenant to remove Alterations and Personalty and repair the Premises as aforesaid, Landlord may, by written notice to Tenant delivered at least thirty (30) days before the Termination Date, require Tenant to pay to Landlord, as additional rent hereunder, the cost of such removal and repair in an amount reasonably estimated by Landlord.

26.3 All obligations of Tenant under this Lease not fully performed as of the expiration or earlier termination of the Term shall survive the expiration or earlier termination of the Term Upon the expiration or earlier termination of the Term, Tenant shall pay to Landlord the amount, as estimated by Landlord, necessary to repair and restore the Premises as provided in this Lease and/or to discharge Tenant's obligation for unpaid amounts due or to become due to Landlord. All such amounts shall be used and held by Landlord for payment of such obligations of Tenant, with Tenant being liable for any additional costs upon demand by Landlord, or with any excess to be returned to Tenant after all such obligations have been determined and satisfied. Any otherwise unused Security Deposit shall be credited against the amount payable by Tenant under this Lease.

27. NOTICES. Any notice or document required or permitted to be delivered under this Lease shall be addressed to the intended recipient, by fully prepaid registered or certified United States

Mail return receipt requested, or by reputable independent contract delivery service furnishing a written record of attempted or actual delivery, and shall be deemed to be delivered when tendered for delivery to the addressee at its address set forth on the Reference Pages, or at such other address as it has then last specified by written notice delivered in accordance with this Article 27, or if to Tenant at either its aforesaid address or its last known registered office or home of a general partner or individual owner, whether or not actually accepted or received by the addressee. Any such notice or document may also be personally delivered if a receipt is signed by and received from, the individual, if any, named in Tenant's Notice Address.

28. TAXES PAYABLE BY TENANT. Subject to the provisions of Section 4.1.3, in addition to rent and other charges to be paid by Tenant under this Lease, Tenant shall reimburse to Landlord, upon demand, any and all taxes payable by Landlord (other than net income taxes) whether or not now customary or within the contemplation of the parties to this Lease: (a) upon, allocable to, or measured by or on the gross or net rent payable under this Lease, including without limitation any gross income tax or excise tax levied by the State, any political subdivision thereof, or the Federal Government with respect to the receipt of such rent; (b) upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy of the Premises or any portion thereof, including any sales, use or service tax imposed as a result thereof; (c) upon or measured by the Tenant's gross receipts or payroll or the value of Tenant's equipment, furniture, fixtures and other personal property of Tenant or leasehold improvements, alterations or additions located in the Premises; or (d) upon this transaction or any document to which Tenant is a party creating or transferring any interest of Tenant in this Lease or the Premises. In addition to the foregoing, Tenant agrees to pay, before delinquency, any and all taxes levied or assessed against Tenant and which become payable during the term hereof upon Tenant's equipment, furniture, fixtures and other personal property of Tenant located in the Premises.

29. INTENTIONALLY OMITTED.

30. DEFINED TERMS AND HEADINGS. The Article headings shown in this Lease are for convenience of reference and shall in no way define, increase, limit or describe the scope or intent of any provision of this Lease. Any indemnification or insurance of Landlord shall apply to and inure to the benefit of all the following "Landlord Entities", being Landlord, Landlord's investment manager, and the trustees, boards of directors, officers, general partners, beneficiaries, stockholders, employees and agents of each of them. Any option granted to Landlord shall also include or be exercisable by Landlord's trustee, beneficiary, agents and employees, as the case may be. In any case where this Lease is signed by more than one person, the obligations under this Lease shall be joint and several. The terms "Tenant" and "Landlord" or any pronoun used in place thereof shall indicate and include the masculine or feminine, the singular or plural number, individuals, firms or corporations, and their and each of their respective successors, executors, administrators and permitted assigns, according to the context hereof. The term "rentable area" shall mean the rentable area of the Premises or the Building as calculated by the Landlord on the basis of the plans and specifications of the Building including a proportionate share of any common areas. Tenant hereby accepts and agrees to be bound by the figures for the rentable square footage of the Premises and Tenant's Proportionate Share shown on the Reference Pages; however, Landlord may adjust either or both figures if there is manifest error, addition or subtraction to the Building or any business park or complex of which the Building is a part, remeasurement or other circumstance reasonably justifying adjustment. The term "Building" refers to the structure in

which the Premises are located and the common areas (parking lots, sidewalks, landscaping, etc.) appurtenant thereto. If the Building is part of a larger complex of structures, the term "Building" may include the entire complex, where appropriate (such as shared Expenses or Taxes) and subject to Landlord's reasonable discretion.

31. TENANT'S AUTHORITY. If Tenant signs as a corporation, partnership, trust or other legal entity each of the persons executing this Lease on behalf of Tenant represents and warrants that Tenant has been and is qualified to do business in the state in which the Building is located, that the entity has full right and authority to enter into this Lease, and that all persons signing on behalf of the entity were authorized to do so by appropriate actions. Tenant agrees to deliver to Landlord, simultaneously with the delivery of this Lease, a corporate resolution, proof of due authorization by partners, opinion of counsel or other appropriate documentation reasonably acceptable to Landlord evidencing the due authorization of Tenant to enter into this Lease.

Tenant hereby represents and warrants, to the best of its knowledge, that neither Tenant, nor any persons or entities holding any legal or beneficial interest whatsoever in Tenant, arc (i) the target of any sanctions program that is established by Executive Order of the President or published by the Office of Foreign Assets Control, U.S. Department of the Treasury ("OFAC"); (ii) designated by the President or OFAC pursuant to the Trading with the Enemy Act, 50 U.S.C. App. § 5, the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701.06, the Patriot Act, Public Law 107-56, Executive Order 13224 (September 23, 2001) or any Executive Order of the President issued pursuant to such statutes; or (iii) named on the following list that is published by OFAC: "List of Specially Designated Nationals and Blocked Persons." If the foregoing representation is untrue at any time during the Term, an Event of Default will be deemed to have occurred, without the necessity of notice to Tenant.

32. FINANCIAL STATEMENTS AND CREDIT REPORTS. At Landlord's request, but not more than once during any calendar year. Tenant shall deliver to Landlord a copy, certified by an officer of Tenant as being a true and correct copy, of Tenant's most recent audited financial statement, or, if unaudited, certified by Tenant's chief financial officer as being true, complete and correct in all material respects. Tenant hereby authorizes Landlord to obtain one or more credit reports on Tenant at any time, and shall execute such further authorizations as Landlord may reasonably require in order to obtain a credit report. Landlord agrees that all financial information submitted by Tenant to Landlord shall be strictly confidential, and Landlord shall comply with Tenant's reasonable confidentiality procedures, including the execution of a non-disclosure agreement if requested by Tenant.

33. COMMISSIONS. Each of the parties represents and warrants to the other that it has not dealt with any broker or finder in connection with this Lease, except the Brokers as described on the Reference Pages which Brokers shall be compensated by the Landlord per separate agreement, and each party agrees to indemnify the other against any losses incurred as a result of a breach of the foregoing representation.

34. TIME AND APPLICABLE LAW. Time is of the essence of this Lease and all of its provisions. This Lease shall in all respects be governed by the laws of the state in which the Building is located.

35. SUCCESSORS AND ASSIGNS. Subject to the provisions of Article 9, the terms, covenants and conditions contained in this Lease shall be binding upon and inure to the benefit of the heirs, successors, executors, administrators and assigns of the parties to this Lease.

36. RENEWAL OPTION. Tenant shall, provided the Lease is in full force and effect and Tenant is not in default under any of the other terms and conditions of the Lease beyond the applicable cure period at the time of notification, have two (2) options to renew this Lease for terms of three (3) years each, for the portion of the Premises being leased by Tenant as of the date the renewal term is to commence, on the same terms and conditions set forth in the Lease, except as modified by the terms, covenants and conditions as set forth below:

36.1 If Tenant elects to exercise said option, then Tenant shall provide Landlord with written notice no earlier than the date which is twelve (12) months prior to the expiration of the then current term of the Lease but no later than the date which is nine (9) months prior to the expiration of the then current term of this Lease. If Tenant fails to provide such notice, Tenant shall have no further or additional right to extend or renew the term of the Lease.

36.2 The Annual Rent and Monthly Installment in effect at the expiration of the then current term of the Lease shall be increased to reflect the current fair market rental for comparable space in the Building and in other similar buildings in the same rental market as of the date the renewal term is to commence, taking into account the specific provisions of the Lease which will remain constant. Landlord shall advise Tenant of the new Annual Rent and Monthly Installment for the Premises no later than thirty (30) days after receipt of Tenant's written request therefor. Said request shall be made no earlier than thirty (30) days prior to the first date on which Tenant may exercise its option under this Paragraph. If Tenant and Landlord are unable to agree on a mutually acceptable rental rate not later than sixty (60) days prior to the expiration of the then current term, then Landlord and Tenant shall each appoint a qualified MAI appraiser doing business in the area, in turn those two independent MAI appraisers shall appoint a third MAI appraiser and the majority shall decide upon the fair market rental for the Premises as of the expiration of the then current term. Landlord and Tenant shall equally share in the expense of this appraisal except that in the event the Annual Rent and Monthly Installment is found to be within ten percent (10%) of the original rate quoted by Landlord, then Tenant shall bear the full cost of all the appraisal process. In no event shall the Annual Rent and Monthly Installment for any option period be less than the Annual Rent and Monthly Installment in the preceding period.

36.3 This option is not transferable; the parties hereto acknowledge and agree that they intend that the aforesaid option to renew this Lease shall be "personal" to Tenant and its Affiliates (as defined in Section 9.8) as set forth above and that in no event will any assignee or sublessee (other than an Affiliate of Tenant) have any rights to exercise the aforesaid option to renew.

36.4 As each renewal option provided for above is exercised, the number of renewal options remaining to be exercised is reduced by one and upon exercise of the last remaining renewal option Tenant shall have no further right to extend the term of the Lease.

37. ENTIRE AGREEMENT. This Lease, together with its exhibits, contains all agreements of the parties to this Lease and supersedes any previous negotiations. There have been no representations made by the Landlord or any of its representatives or understandings made between

the parties other than those set forth in this Lease and its exhibits. This Lease may not be modified except by a written instrument duly executed by the parties to this Lease.

38. EXAMINATION NOT OPTION. Submission of this Lease shall not be deemed to be a reservation of the Premises. Landlord shall not be bound by this Lease until it has received a copy of this Lease duly executed by Tenant and has delivered to Tenant a copy of this Lease duly executed by Landlord, and until such delivery Landlord reserves the right to exhibit and lease the Premises to other prospective tenants. Notwithstanding anything contained in this Lease to the contrary, Landlord may withhold delivery of possession of the Premises from Tenant until such time as Tenant has paid to Landlord any security deposit required by Article 5, the first month's rent as set forth in Article 3 and any sum owed pursuant to this Lease.

39. RECORDATION. Tenant shall not record or register this Lease without the prior written consent of Landlord, and then shall pay all charges and taxes incident to such recording or registration. Notwithstanding the foregoing, Tenant may record a short-form memorandum of this Lease at its sole cost and expense. If Tenant records a short-form memorandum of this Lease, Tenant shall simultaneously deposit with Landlord an executed and acknowledged discharge in recordable form of such memorandum, which discharge shall be held in escrow by Landlord until the expiration or earlier termination of this Lease, at which time it may be released and recorded by Landlord.

40. LIMITATION OF LANDLORD'S LIABILITY. Redress for any claim against Landlord under this Lease shall be limited to and enforceable only against and to the extent of Landlord's interest in the Building. The obligations of Landlord under this Lease are not intended to be and shall not be personally binding on, nor shall any resort be had to the private properties of, any of its or its investment manager's trustees, directors, officers, partners, beneficiaries, members, stockholders, employees, or agents, and in no case shall Landlord be liable to Tenant hereunder for any lost profits, damage to business, or any form of special, indirect or consequential damages.

41. RIGHT OF FIRST OFFER. Provided Tenant is not then in default beyond any applicable cure period under the terms, covenants and conditions of the Leases, Tenant shall have the one-time-only right to lease, as and when it becomes available (as defined below), any available space on the second (2nd) floor of the Building (any such space, as and when becoming available and subject to this Article, referred to as the "Expansion Premises"). Space is "available" for purposes of this Article when (i) it is vacated by the prior tenant, such tenant's lease having expired or been terminated by Landlord; and (ii) Landlord intends to market such space for lease. Nothing herein shall be construed so as to limit Landlord's absolute right to renew or extend the lease of any existing or future tenant. In the event that Expansion Premises becomes available, Landlord shall give written notice to Tenant of the availability of the Expansion Premises and the terms and conditions on which Landlord intends to offer it to the public and Tenant shall have a period of fifteen (15) days in which to exercise Tenant's right to lease the Expansion Premises pursuant to the terms and conditions contained in Landlord's notice, failing which Landlord may for a period of six (6) months offer to lease the Expansion Premises to any third party and if Landlord is unsuccessful in so leasing the Expansion Premises within such six month period of time, Tenant's right of first offer shall revive. If Landlord leases the Expansion Premises on no less than 90% of the economic terms as offered to Tenant, Tenant shall have no further rights with respect to the

Expansion Premises; provided that if Landlord intends to offer the Expansion Premises to a third party on less than 90% of the economic terms as offered to Tenant, Tenant's rights under this Article 41 shall be revived and Landlord must first offer the Expansion Premises to Tenant, in accordance with the procedure set forth above, on the terms of the offer made or to be made to such third party. If Tenant exercises an expansion option hereunder, effective as of the date Landlord delivers the Expansion Premises (the "Delivery Date"), the Expansion Premises shall automatically be included within the Premises and subject to all the terms and conditions of the Lease, except as set forth in Landlord's notice and as follows:

41.1 Tenant's Proportionate Share shall be recalculated, using the total square footage of the Premises, as increased by the Expansion Premises.

41.2 The Expansion Premises shall be leased on an "as is" basis and Landlord shall have no obligation to improve the Expansion Premises or grant Tenant any improvement allowance thereon.

41.3 If requested by Landlord, Tenant shall, prior to the beginning of the term for the Expansion Premises, execute a written memorandum confirming the inclusion of the Expansion Premises and the Annual Rent for the Expansion Premises.

41.4 Notwithstanding the foregoing, Tenant shall have no right to lease Expansion Premises if the Termination Date under this Lease is prior to the date on which the term of the lease of the Expansion Premises would expire under the terms under which Landlord intends to offer the Expansion Premises to the public ("Expansion Termination Date") (e.g., if only one year remains in the term of this Lease but Landlord requires a minimum term of three years for the Expansion Premises, Tenant would have no right to lease the Expansion Premises). However, if Tenant has a remaining renewal option which, if properly exercised, would extend the Termination Date of this Lease to or beyond the Expansion Termination Date, Tenant shall have the right to lease the Expansion Premises if, concurrently with its exercise of that right, it also exercises such renewal option.

42. SATELLITE DISH. Landlord agrees that Tenant may install, at Tenant's expense and for its own internal business use (and not for the purpose of granting access to others whether or not for profit), a satellite dish system on the roof of the Building at a location chosen by Landlord. so long as Tenant executes, and complies with all of the terms and conditions of, Landlord's then standard form of license agreement (which may provide for the payment of fees and reimbursement of costs). Without limiting the generality of the foregoing, the installation, size and location of such system must comply with all governmental requirements (local, state and federal). Prior to installation of such system, Tenant shall furnish plans and specifications for such system and its location and installation (which installation shall not involve any penetration of the roof) to Landlord for its approval, which approval shall not be unreasonably withheld or delayed. In addition, prior to installation of such system, Tenant shall obtain all necessary governmental permits and approvals and deliver copies thereof to Landlord. All costs related to such system shall be paid by Tenant, including all costs of installation, screening (if required by Landlord or any governmental entity), maintenance, repair, restoration and removal. If requested by Landlord, Tenant will, at Tenant's expense, move the system to another location on the roof selected by Landlord and reasonably acceptable to Tenant. Tenant acknowledges that Landlord may also

install or grant to others the right to install microwave, satellite or other antenna communications systems on the roof.

43. GENERATOR. Tenant will be permitted to install and maintain a generator, at its sole expense, for use for emergency backup power, on Landlord's property outside of the Building or on the roof, if Landlord permits, subject to the following tents and conditions:

43.1 The location of the generator must be acceptable to both Landlord and Tenant.

43.2 Landlord must have the opportunity to review and approve the specifications for the generator itself and for its installation, including mounting, screening and landscaping, if applicable.

43.3 The generator must be screened and, if applicable, landscaped as required by governmental authorities. Tenant at its sole expense is responsible for obtaining any and all permits and other approvals required from governmental authorities.

43.4 Tenant, at its sole expense, shall at all times maintain and keep the generator in good condition and repair, and, without limiting any other provisions of the Lease, shall indemnify, defend and hold Landlord harmless from and against any and all claims, liabilities, judgments, costs and expenses (including reasonable attorneys fees and costs) arising out of or in any way related to Tenant's installation, use, maintenance, repair and removal of the generator and related equipment, including, without limitation, fuel leaks and electrical problems.

43.5 The generator shall be and remain the property of Tenant during the Term. Upon the expiration or sooner termination of the Term, the generator shall belong to Landlord without compensation, and title shall pass to Landlord under this Lease as by a bill of sale. However, if Landlord elects by notice given to Tenant at least ten (10) days prior to expiration of the Term, Tenant shall, at Tenant's sole cost, remove the generator and all appurtenances and repair any damage caused by such removal, including removal of screening and re-landscaping, if applicable, as reasonably required by Landlord.

IN WITNESS WHEREOF, the undersigned have set their hands as of the date first above written.

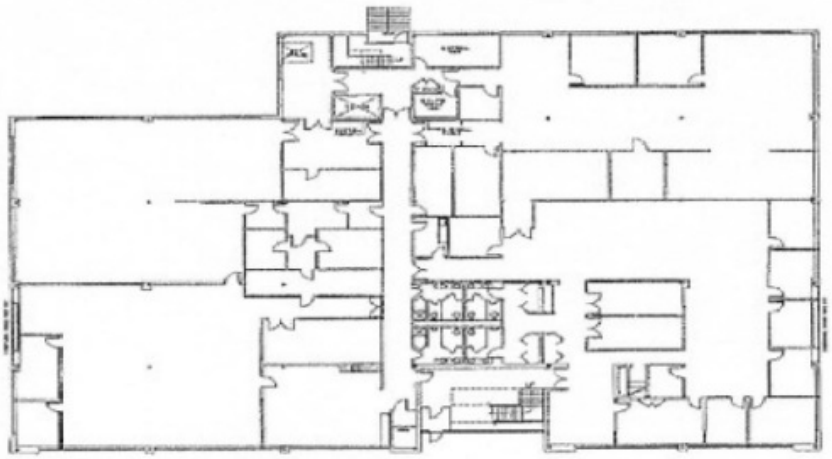
LANDLORD:	**TENANT:**
RAR2 — BOSTON INDUSTRIAL QRS —MA, INC., a Maryland corporation	**AUSHON BIOSYSTEMS, INC.**, a Delaware corporation
By: RREEF Management Company, a Delaware corporation, Authorized Agent	
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____
Dated: _____	Dated: _____

EXHIBIT A — FLOOR PLAN DEPICTING THE PREMISES

attached to and made a part of Lease bearing the
Lease Reference Date of September 7, 2007 between
RAR2 — BOSTON INDUSTRIAL QRS — MA, INC., as Landlord and
AUSHON BIOSYSTEMS, INC., as Tenant

43 Manning Road, Billerica, MA

Exhibit A is intended only to show the general layout of the Premises as of the beginning of the Term of this Lease. It does not in any way supersede any of Landlord's rights set forth in Article 17 with respect to arrangements and/or locations of public parts of the Building and changes in such arrangements and/or locations. It is not to be scaled; any measurements or distances shown should be taken as approximate.



EXISTING FIRST
FLOOR PLAN
43 MANNING ROAD
BILLERICA, MASSACHUSETTS

0' 20' 75'
5' 40'

RREEF

EXHIBIT A-1 — SITE PLAN

attached to and made a part of Lease bearing the
Lease Reference Date of September 7, 2007 between
RAR2 — BOSTON INDUSTRIAL QRS — MA, INC., as Landlord and
AUSHON BIOSYSTEMS, INC., as Tenant

43 Manning Road, Billerica, MA

Exhibit A-1 is intended only to show the general layout of the property as of the beginning of the Term of this Lease. It does not in any way supersede any of Landlord's rights set forth in Article 17 with respect to arrangements and/or locations of public parts of the Building and changes in such arrangements and/or locations. It is not to be scaled; any measurements or distances shown should be taken as approximate.

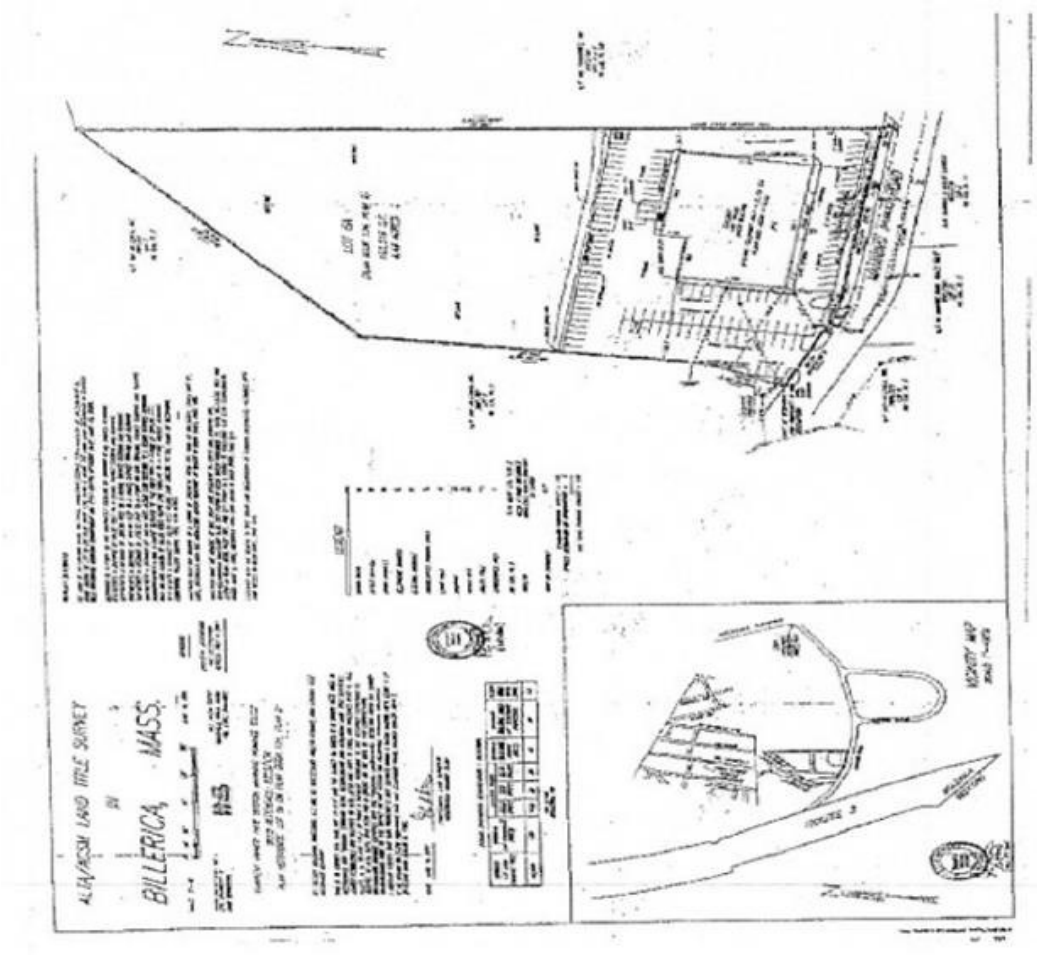


EXHIBIT B — INITIAL ALTERATIONS

attached to and made a part of Lease bearing the
Lease Reference Date of September 7, 2007 between
RAR2 — BOSTON INDUSTRIAL QRS — MA, INC., as Landlord and
AUSHON BIOSYSTEMS, INC., as Tenant

43 Manning Road, Billerica, MA

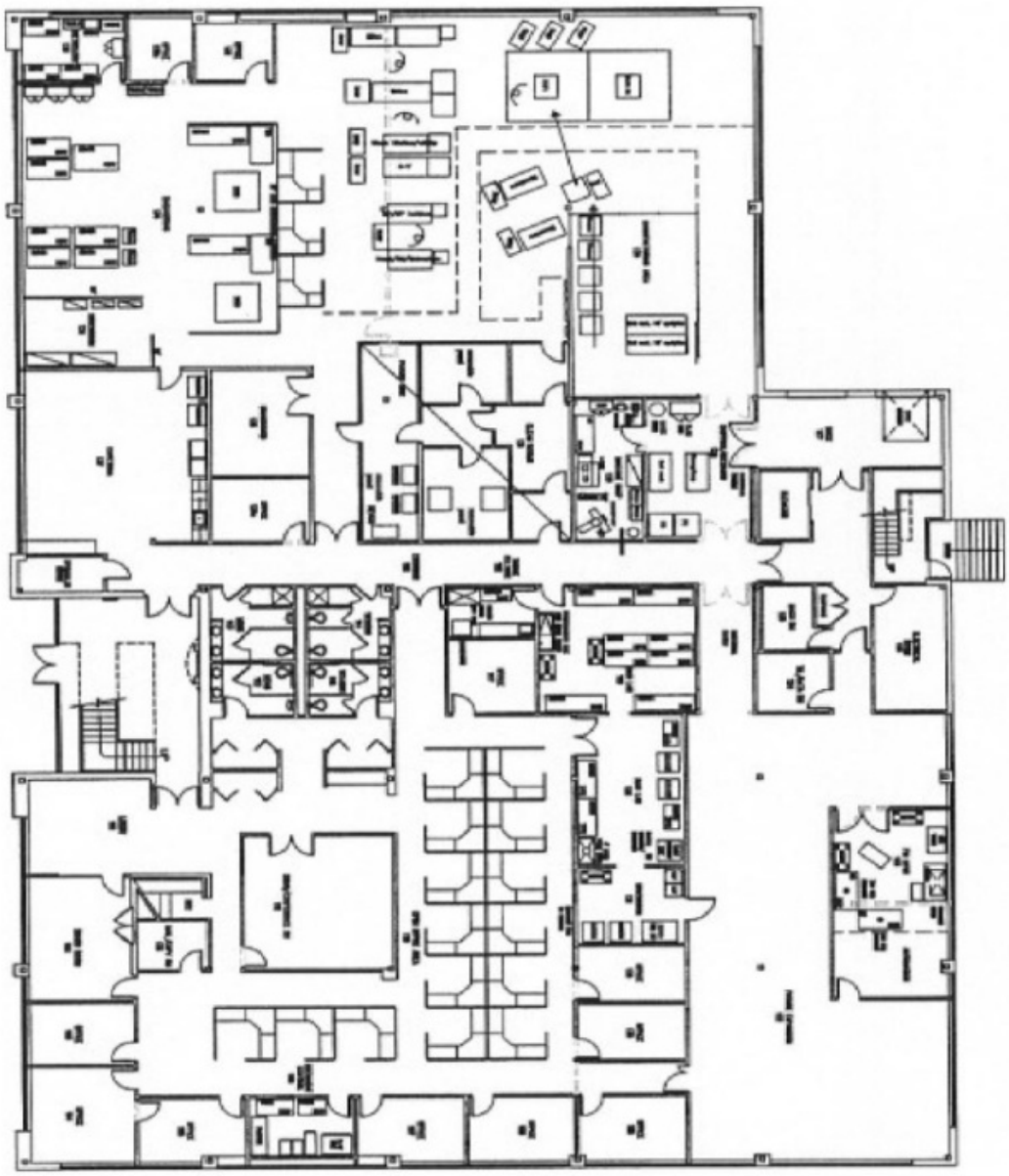
A. Tenant is taking the Premises in its "AS IS" condition, with no obligation of Landlord to construct any alterations, additions or improvements except as otherwise set forth in Sections 2.1 and 7.5 of the Lease. Tenant shall be entitled to an improvement allowance from Landlord in the amount of $258,000 ("Allowance"), due and payable by Landlord not later than thirty (30) days after Tenant has satisfied all of the conditions in paragraph (C) below. Tenant must comply with all of the terms and conditions of Article 6 of the Lease in connection with any proposed alterations, additions and improvements. Any unused Allowance after Tenant's improvements are completed may be credited towards Tenant's rent obligation. The Term and rent shall in any event shall commence October 1, 2007, except as set forth in the Lease.

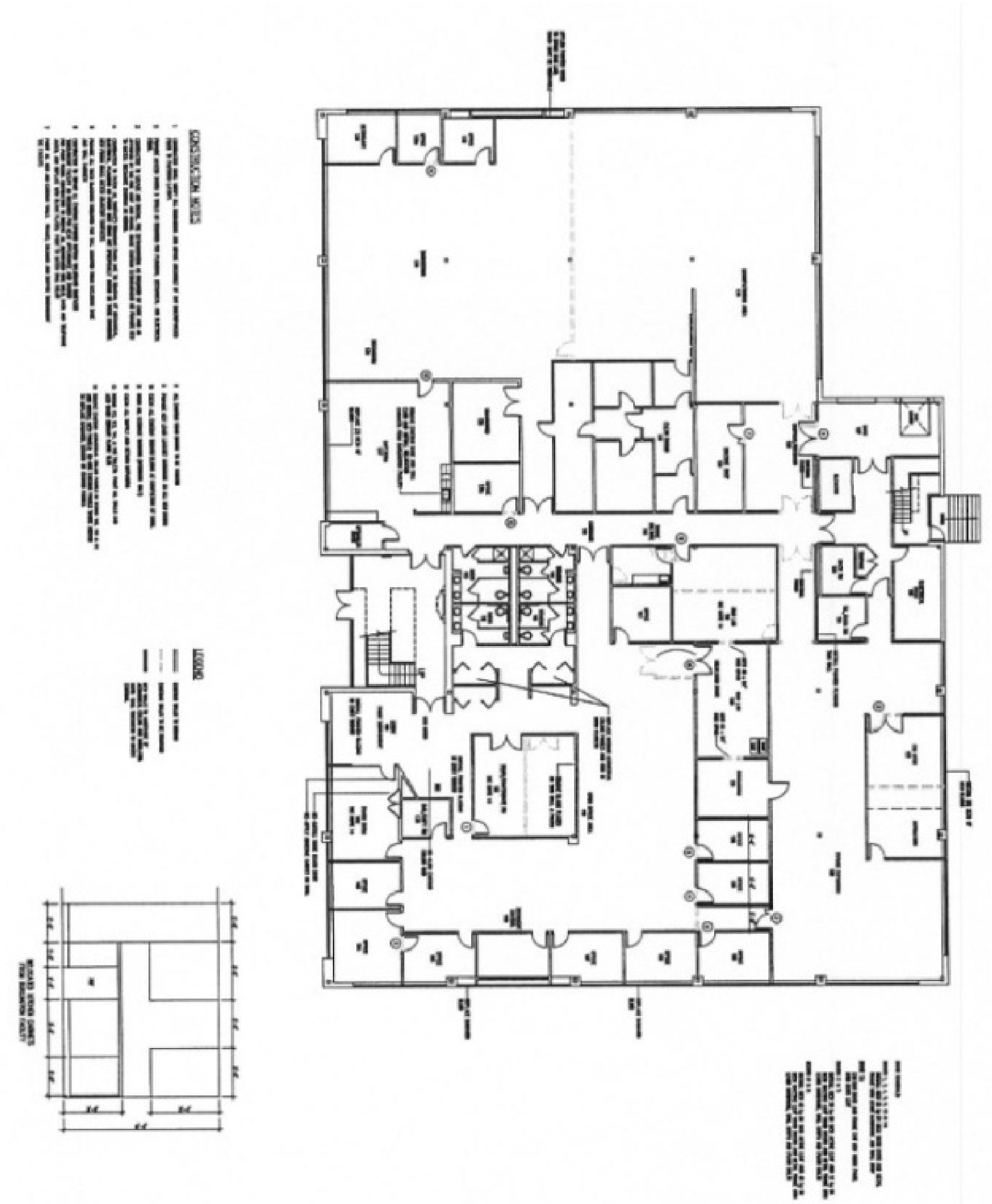
B. Attached hereto as Exhibit B-1 are a floor plan, description of Tenant's initial alterations with specifications and Landlord's letter relating to same (collectively, the "Plans"). Landlord hereby consents to the alterations and work described in the Plans; provided, however, if the specifications are not provided as part of the Plans, the specifications are subject to Landlord's reasonable review and approval before the commencement of such alterations and work.

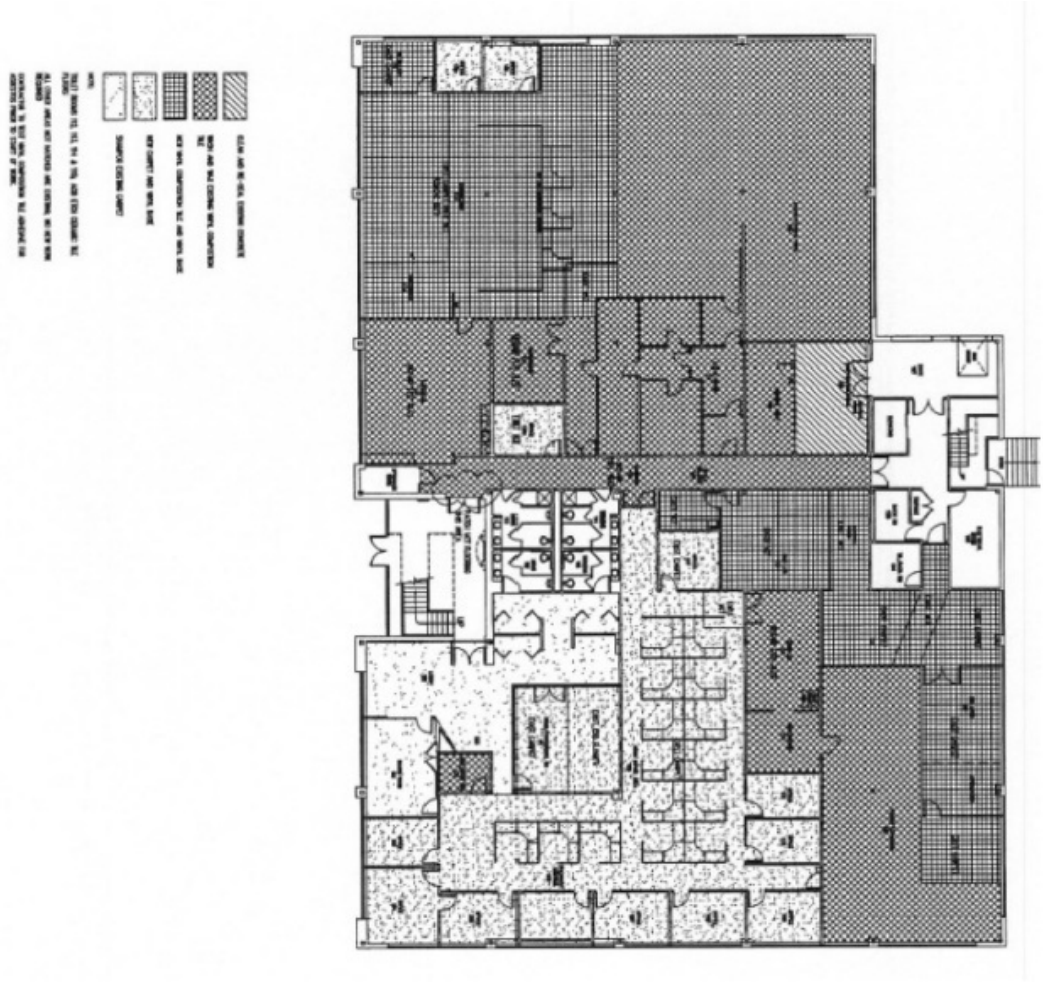
C. Upon completion of Tenant's work, Tenant shall provide to Landlord: (i) certificate of final completion from the architect or professional engineer; (ii) copies of all necessary governmental permits, including, but not limited to, a temporary or permanent certificate of occupancy; (iii) the sworn statement of the general contractor; (iv) final lien waivers from all contractors, subcontractors and materialmen; and (v) any other information or documentation reasonably requested by Landlord to evidence lien-free completion of construction and payment of all of the cost thereof. Landlord shall disburse the Allowance with thirty (30) days after receipt of the foregoing items from Tenant.

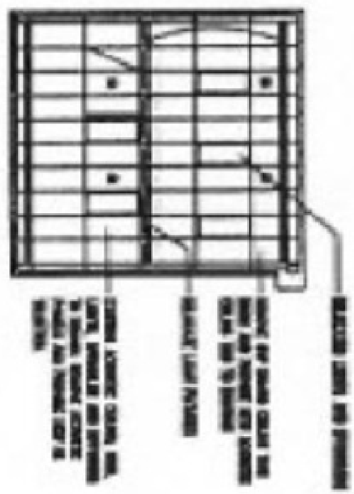
AUSHON BIOSYSTEMS

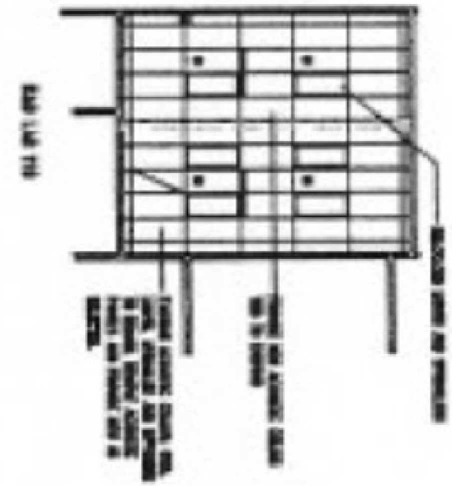
BUILDING IMPROVEMENTS
for
43 MANNING PARK
BILLERICA, MASSACHUSETTS

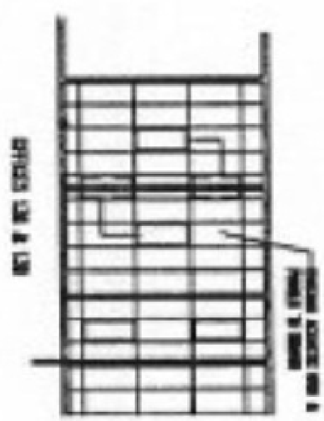












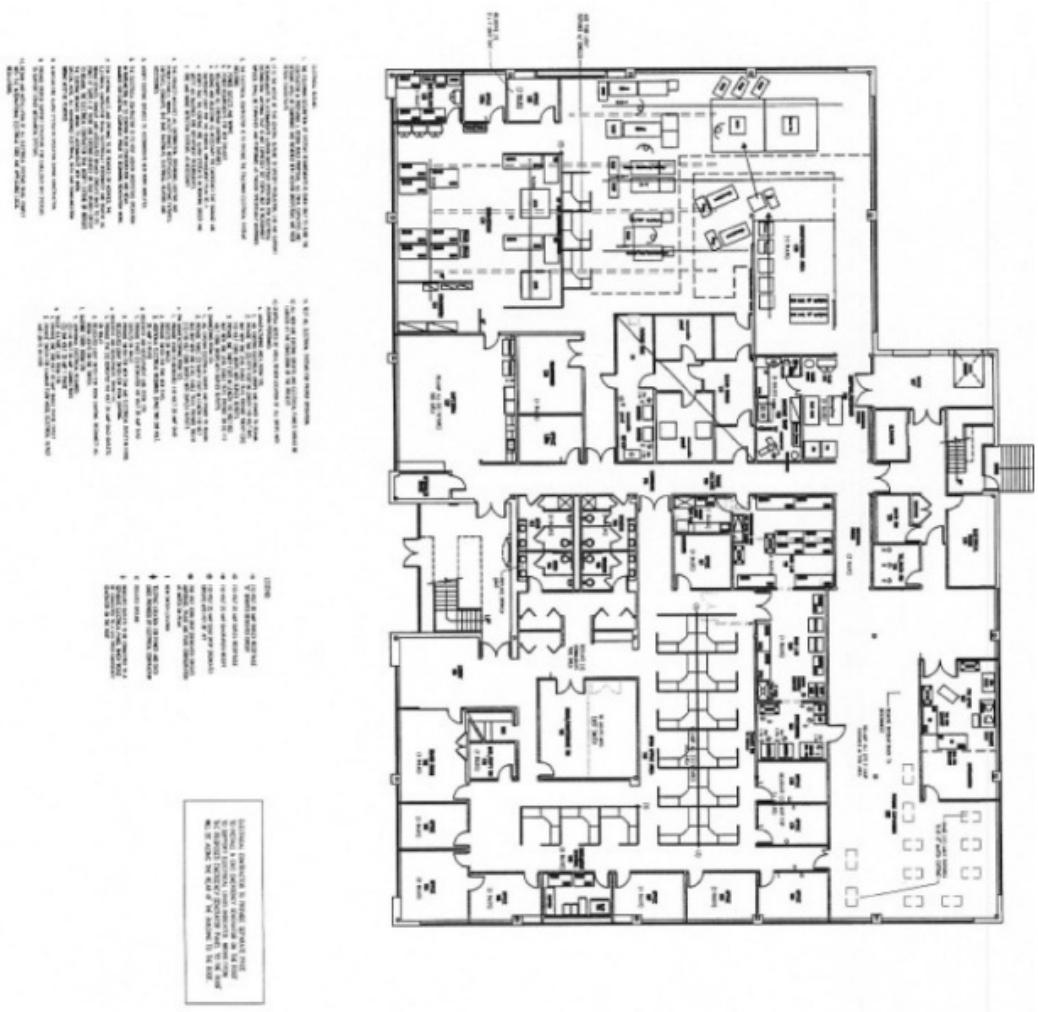


EXHIBIT B-1
Attached to and made a part of Lease bearing
the Lease Reference Date of September 7, 2007
between RAR2-BOSTON INDUSTRIAL QRS
— MA, INC., as Landlord and AUSHON
BIOSYSTEMS, INC., as Tenant

RREEF Alternative Investments
600 Unicorn Park Drive
Woburn, MA 01801
T 781 938 1733
F 781 938 1278
www.rreef.com

September 14, 2007

Mr. Kevin Oliver
Aushon BioSystems
25 Adams St
Burlington, MA 01803

Dear Kevin,

We have reviewed the plans dated 9/5/07 prepared for Aushon BioSystems by Facility Planning & Management, Inc. and generally approve of them. However, please note the following comments and respond as necessary. RREEF reserves the right to make additional comments as the work progresses.

GENERAL COMMENTS

- No work that requires a building permit shall begin until a copy of the Billerica Building Permit is submitted to RREEF.
- No work shall begin until the General Contractor's Certificate of Insurance (sample attached) is submitted to RREEF.

- Upon completion, please provide RREEF with the original Certificate of Occupancy from the Town of Billerica.
- Complete set of As Built plans must be submitted upon completion of work in Auto Cad.
- It is the Architect's responsibility to ensure that all building and life-safety codes are met as they relate to the Aushon BioSystems Tenant Improvements.
- All loud work, including floor coring, must be done after hours to minimize disruption to other tenants.
- All debris must be removed from the site and properly disposed. The building's dumpster cannot be used for any construction materials. We will show the GC where to place the construction dumpster.
- Plywood in Tel/Data room 124 and at gas piping area must he fire rated.

- Upon final installation of any equipment and making of alterations, RREEF reserves the right to require any modifications needed to eliminate noise and /or odor that affects or may affect other tenants in the Building.

MACHINE SHOP 129

- Please describe the type of air compressor and how the condensate and exhaust is handled.
- Please describe what will go in the waste drum and how it will be disposed.

R & D LAB 120

- Please describe how the chemicals will be stored and in what quantities.
- Please describe Aushon BioSystem's chemical management and spill contingency plans.
- Location of the exhaust duct on the roof shall be located in accordance with all local, state and federal laws and recommendations, including Indoor Air Quality Standards and Guidelines. The exhaust opening shall be a minimum of 10 feet above the height of the fresh air intakes on the roof top units.
- RREEF reserves the right to request that Aushon BioSystems perform additional work, such as installing carbon filters, in the event odors re-enter the building.
- Please confirm the location (in the ceiling plenum of the 1st floor or on the roof) of the 1,000 elm exhaust fan for R & D Lab 120. Regardless of location, proper vibration eliminators and anchors must be installed.
- We understand the exhaust duct to be an 8 inch round duct. Please confirm.
- If the chemicals used are corrosive to metal, the exhaust ductwork needs to be made out of PVC. Please confirm.
- All joints in the exhaust duct must be properly sealed per SMACNA Standards for the intended use.
- The exterior portion of the exhaust duct must be properly prepared and painted to match the window mullion color. All supports (including brackets and anchors) shall be made of non-corrosive materials to minimize staining to the building's facade.
- Upon demolition of the existing Liebert Unit, Landlord will install base building air into the room. Demolition includes the removal of all ductwork, equipment and the condenser unit on the roof. Refrigerant lines shall be evacuated and capped in the ceiling of R & D Lab 120 and above the roof.

ELECTRIC

- All electrical work shall meet or exceed the requirements of the most recent Massachusetts State Electric Code and the Massachusetts State Energy Code.
- All unused cabling (tel/data and electrical) must be completely removed.
- All telephone and data cabling must be plenum rated.

HVAC

- Please provide mechanical drawings to show cfm design at air diffusers based on furniture layout.
- A Certified air balance report must be furnished upon completion of the work. An As-Built drawing showing the location of all diffusers, design and actual cfm readings must be furnished.

September 14, 2007

John Harris
RREEF Alternative Investments
600 Unicorn Park
Woburn, MA 01801
T 781.938.1733
F 781.938.1278

Dear John;

I response to your questions and comments in your letter dates September 12, 2007:

1. We are working to obtain a building permit by Sept 17, but in the event that is delayed, we would like to begin work in the space that does not require a building permit (paint, tile, etc.)

2. We understand that we will be allowed to locate our demo dumpster at the loading dock door that does not have the lift system (unless this interferes with current tenant's operations).

3. Air compressor system

    a. The compressor will be an oil-less low maintenance unit, similar to what you'd put in a residential basement. It will be 3.5 hp in size, and will be used only for blow off air, not to run air tools for extended periods of time. Heat dissipation, exhaust, and condensate/drain concerns are minimal since the unit will have a very low duty cycle.

4. Waste drum

    a. The waste drum will contain residual material from our electropolish and rinse process. MSDS attached (ESMA E972 electropolish solution and #222 Ultrasonic Cleaner fluid). Profiles will be generated and we are signed on with Clean Harbors for regular disposal. We will not have more than 5-10 gallons of each of the used materials on hand at any time. The drums will be proper DOT labeled containers suitable for transportation to the waste facility.

5. Chemical Storage and Quantities in Lab

    a. Hazardous chemicals will be stored in either lab safety cabinets, refrigerators, or flammable cabinets as appropriate. Small quantities (less than a half pint) of solvents such as ethanol and acetone may be used in plastic dispensers in lab areas. Quantities of other chemicals range from grams of material for most lab materials up to gallon containers for some solvents such as Isopropanol or Ethanol.

6. Chemical Management and spill contingency

    a. Hazardous chemicals will be stored in either lab safety cabinets, refrigerators, or flammable materials cabinets and shall be labeled. These cabinets will be appropriately marked with warning labels. MSDS sheets will be filed for materials as appropriate. Waste materials will be stored in approved containers with containment measures should a spill occur. Spill kits will be available at the storage locations and will have a capacity larger than the quantity of material stored at one time. Employees will be trained in proper storage and handling of potentially hazardous materials. Clean Harbors is our supplier for waste removal, and should any spill beyond a trivial level occur, will be called to handle clean-up.

7. Ductwork

    a. Size of exhaust duct will be 10-12”, based on the long nm to the rear of the building. This will be finalized in the next few days based on mechanical plans.
    b. The chemicals are not corrosive, so PVC or Stainless ductwork is not needed.

Regards,

Kevin Oliver

Cc: Ken Titlebaum
John Austin

Aushon BioSystems, Inc.
Proposed Work Tasks for 43 Manning Road

Will need final plans for all work

General and mechanical:

- Repair and paint walls
- Install new or clean existing carpet in office area and all offices
- Repair/replace/strip and re-wax floor tile as required
- Replace tile with carpet (or vice versa) in certain areas
- Add privacy coating to glass partitions
- Repair/replace ceiling tiles as required, and hang dropped ceilings where needed
- Modify offices for personnel and conference room requirements
- Repair/replace/remove cabinets in kitchen area
- Lab space being fitted with casework, sinks/drains (including related plumbing) and exhaust (including fume hoods and related ducting to exterior and/or root)). Need specifics, where will fumes exhaust too, where will you penetrate roof, how will you go through second floor.
- Install exhaust and ventilation for manufacturing and engineering areas (to exhaust outside rear of building) Need specifics, where will fumes exhaust too, where will you penetrate roof, how will you go through second floor
- Lighting upgrades (re-lamp office space, add light fixtures in manufacturing and engineering spaces) and adjust existing lighting (heights to correspond with nature of space use)
- Install/repair window treatments where needed for privacy or shade Use building standard
- Install access card system install for 5 doors entering the Aushon space (including related wiring)
- Install openings (including replacement of certain doors with taller cased openings) in existing partition walls (as reflected on plan)
- Install new/remove existing partition walls (as reflected on plan)
- Install equipment and machine tools (including fixation to walls or floors as needed), Should not be load issue as on grade. How are they affixing to floors and walls? restore to original upon termination of lease.
- HVAC ducting adjustments (to balance changes in partition walls and/or work areas)
- Move/adjust sprinkler heads (resulting from changes to partition walls or equipment installation)
- Repair/replace HVAC system supporting clean room area
- Modify clean room to accommodate equipment installation
- Install exhaust duct to roof More specific
- Install small gas-driven generator on roof (and wire to new automatic switch-over panel on 1st floor) I recommend we have them put it on grade outside of building, properly enclosed. WE do need more specifics on size of generator, subject to RREEF license agreements on both.

Electrical

- Add busway in manufacturing and engineering area
- Add power outlets as necessary

- Provide data/voice drops throughout all areas (as per attached plan) teledata wiring must be plenum, rated
- Install, or prepare for installation of (e.g., wiring), roof-mounted backup generator (to support certain key instruments)
- Provide alarm wiring as needed

EXHIBIT C — INTENTIONALLY DELETED

attached to and made a part of Lease bearing the
Lease Reference Date of September 7, 2007 between
RAR2 — BOSTON INDUSTRIAL QRS — MA, INC., as Landlord and
AUSHON BIOSYSTEMS, INC., as Tenant

43 Manning Road, Billerica, MA

EXHIBIT D — RULES AND REGULATIONS

attached to and made a part of Lease bearing the
Lease Reference Date of September 7, 2007 between
RAR2 — BOSTON INDUSTRIAL QRS — MA, INC., as Landlord and
AUSHON BIOSYSTEMS, INC., as Tenant

43 Manning Road, Billerica, MA

1. No sign, placard, picture, advertisement, name or notice (collectively referred to as "Signs") shall be installed or displayed on any part of the outside of the Building without the prior written consent of the Landlord which consent shall be in Landlord's reasonable discretion. All approved Signs shall be printed, painted, affixed or inscribed at Tenant's expense by a person or vendor approved by Landlord and shall be removed by Tenant at Tenant's expense upon vacating the Premises. Landlord shall have the right to remove any Sign installed or displayed in violation of this rule at Tenant's expense and without notice. Notwithstanding the foregoing, Tenant shall have the right to install, at its own costs, building signage provided its plans, specifications and location are first approved by Landlord, such approval not to be unreasonably withheld, conditioned or delayed, and such signage complies with all governmental requirements and Tenant receives all applicable governmental approvals.

2. If Landlord objects in writing to any curtains, blinds, shades or screens attached to or hung in or used in connection with any window or door of the Premises or Building, Tenant shall immediately discontinue such use. No awning shall be permitted on any part of the Premises. Tenant shall not place anything or allow anything to be placed against or near any glass partitions or doors or windows which may appear unsightly, in the reasonable opinion of Landlord, from outside the Premises.

3. Tenant shall not alter any lock or other access device or install a new or additional lock or access device or bolt on any door of its Premises without the prior written consent of Landlord, which consent shall not be unreasonably withheld, delayed or conditioned. Tenant, upon the termination of its tenancy, shall deliver to Landlord the keys or other means of access to all doors.

4. If Tenant requires telephone, data, burglar alarm or similar service, the cost of purchasing, installing and maintaining such service shall be borne solely by Tenant. No boring or cutting for wires will be allowed without the prior written consent of Landlord, which consent shall not be unreasonably withheld, delayed or conditioned. Landlord shall direct electricians as to where and how telephone, data, and electrical wires are to be introduced or installed. The location of burglar alarms, telephones, call boxes or other office equipment affixed to the Premises shall be subject to the prior written approval of Landlord, which consent shall not be unreasonably withheld, delayed or conditioned.

5. Tenant shall not place a load upon any floor of its Premises, including mezzanine area, if any, which exceeds the load per square foot that such floor was designed to carry and that is allowed by law. Heavy objects shall stand on such platforms as determined by Landlord to be necessary to properly distribute the weight. Landlord will not be responsible for loss of or damage

to any such equipment or other property from any cause, and all damage done to the Building by maintaining or moving such equipment or other property shall be repaired at the expense of Tenant.

6. Tenant shall not install any radio or television antenna, satellite dish, loudspeaker or other device on the roof or exterior walls of the Building without Landlord's prior written consent which consent shall be in Landlord's sole discretion.

7. Tenant shall not mark, drive nails, screw or drill into the partitions, woodwork, plaster or drywall (except for pictures and general office uses) or in any way deface the Premises or any part thereof. Tenant shall not affix any floor covering to the floor of the Premises or paint or seal any floors in any manner except as approved by Landlord. Tenant shall repair any damage resulting from noncompliance with this rule.

8. No cooking shall be done or permitted on the Premises, except that Underwriters' Laboratory approved microwave ovens and toaster ovens or equipment for brewing coffee, tea, hot chocolate and similar beverages shall be permitted, provided that such equipment and use is in accordance with all applicable federal, state and city laws, codes, ordinances, rules and regulations.

9. Tenant shall not use any hand trucks except those equipped with the rubber tires and side guards, and may use such other material-handling equipment as Landlord may approve. Tenant shall not bring any other vehicles of any kind into the Building. Forklifts which operate on asphalt areas shall only use tires that do not damage the asphalt.

10. Landlord shall have the right, exercisable without notice and without liability to any tenant, to change the name and address of the Building.

11. All trash and refuse shall be contained in suitable receptacles at locations approved by Landlord. Tenant shall not place in the trash receptacles any personal trash or material that cannot be disposed of in the ordinary and customary manner of removing such trash without violation of any law or ordinance governing such disposal.

12. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any governing authority.

13. Tenant assumes all responsibility for securing and protecting its Premises and its contents including keeping doors locked and other means of entry to the Premises closed.

14. Intentionally Omitted.

15. No person shall go on the roof without Landlord's permission.

16. Tenant shall not permit any animals, other than seeing-eye dogs, to be brought or kept in or about the Premises or any common area of the property, except for those used in connection with lab work in Tenant's ordinary course of business, in compliance with all applicable laws and regulations.

17. Tenant shall not permit any motor vehicles to be washed or mechanical work or maintenance of motor vehicles to be performed on any portion of the Premises or parking lot.

18. These Rules and Regulations are in addition to, and shall not be construed to in any way modify or amend, in whole or in pan, the terms, covenants, agreements and conditions of any lease of any premises in the Building. Landlord may waive any one or more of these Rules and Regulations for the benefit of any tenant or tenants, and any such waiver by Landlord shall not be construed as a waiver of such Rules and Regulations for any or all tenants.

19. Landlord reserves the right to make such other and reasonable rules and regulations as in its judgment may from time to time be needed for safety and security, for care and cleanliness of the Building and for the preservation of good order in and about the Building, provided such rules and regulations are uniformly applied and enforced with regard to all tenants in the Building. Tenant agrees to abide by all such rules and regulations herein stated and any additional rules and regulations which are adopted. Tenant shall be responsible for the observance of all of the foregoing rules by Tenant's employees, agents, clients, customers, invitees and guests.

20. Any toilet rooms, toilets, urinals, wash bowls and other apparatus shall not be used for any purpose other than that for which they were constructed and no foreign substance of any kind whatsoever shall be thrown into them. The expense of any breakage, stoppage or damage resulting from the violation of this rule shall be home by the Tenant who, or whose employees or invitees, shall have caused it.

21. Tenant shall not permit smoking or carrying of lighted cigarettes or cigars in areas reasonably designated by Landlord or any applicable governmental agencies as non-smoking areas.

22. Any directory of the Building or project of which the Building is a part ("Project Area"), if provided, will be exclusively for the display of the name and location of tenants only.

23. Canvassing, soliciting, distribution of handbills or any other written material in the Building or Project Area is prohibited and each tenant shall cooperate to prevent the same. No tenant shall solicit business from other tenants or permit the sale of any goods or merchandise in the Building or Project Area without the written consent of Landlord.

24. Any equipment belonging to Tenant which causes noise or vibration that may be transmitted to the structure of the Building or to any space therein to such a degree as to be objectionable to Landlord or to any tenants in the Building shall be placed and maintained by Tenant, at Tenant's expense, on vibration eliminators or other devices sufficient to eliminate the noise or vibration.

25. Driveways, sidewalks, halls, passages, exits, entrances and stairways ("Access Areas") shall not be obstructed by tenants or used by tenants for any purpose other than for ingress to and egress from their respective premises. Access areas are not for the use of the general public and Landlord shall in all cases retain the right to control and prevent access thereto by all persons whose presence, in the judgment of Landlord, shall be prejudicial to the safety, character, reputation and interests of the Building or its tenants.

26. Landlord reserves the right to designate the use of parking areas and spaces. Tenant shall not park in visitor, reserved, or unauthorized parking areas. Tenant and Tenant's guests shall park between designated parking lines only and shall not park motor vehicles in those areas designated

by Landlord for loading and unloading. Vehicles in violation of the above shall be subject to being towed at the vehicle owner's expense. Vehicles parked overnight without prior written consent of the Landlord shall be deemed abandoned and shall be subject to being towed at vehicle owner's expense. Tenant will from time to time, upon the request of Landlord, supply Landlord with a list of license plate numbers of vehicles owned or operated by its employees or agents.

27. No trucks, tractors or similar vehicles can be parked anywhere other than in Tenant's own truck dock area. Tractor-trailers which must be unhooked or parked with dolly wheels beyond the concrete loading areas must use steel plates or wood blocks under the dolly wheels to prevent damage to the asphalt paving surfaces. No parking or storing of such trailers will be permitted in the parking areas or on streets adjacent thereto.

28. During periods of loading and unloading, Tenant shall not unreasonably interfere with traffic flow and loading and unloading areas of other tenants. All products, materials or goods must be stored within the Tenant's Premises and not in any exterior areas, including, but not limited to, exterior dock platforms, against the exterior of the Building, parking areas and driveway areas. Tenant agrees to keep the exterior of the Premises clean and free of nails, wood, pallets, packing materials, barrels and any other debris produced from their operation.

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Exhibit 10.20.2

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE, dated as of October 28, 2009 (this "Amendment"), between **RAR2 BOSTON INDUSTRIAL QRS — MA, INC.**, a Maryland corporation ("Landlord") and **AUSHON BIOSYSTEMS, INC.**, a Delaware corporation ("Tenant"), for certain premises located in the building at 43 Manning Road, Billerica, Massachusetts (the "Building").

RECITALS:

A. Landlord and Tenant entered into that certain Multi-Tenant Industrial Net Lease dated for reference as of September 7, 2007 (the "Lease") for approximately 21,500 rentable square feet on the first floor of the Building (the "Premises").

B. Tenant and Landlord wish to adjust the Annual and Monthly Installments of Rent (the "Rent") and extend the Term of the Lease, now scheduled to expire on November 30, 2012, on terms and conditions as hereinafter set forth.

C. All terms, covenants and conditions contained in this Amendment shall have the same meaning as in the Lease, and, shall govern should a conflict exist with previous terms and conditions.

AGREEMENT:

NOW, THEREFORE, in consideration of the foregoing recitals and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. Term. The term of the Lease is hereby extended for a period of three (3) years commencing December 1, 2012 and ending November 30, 2015 ("Extension Period").

2. Rent. From and after November 1, 2009 through the remainder of the Lease Term as hereby extended, Rent shall be payable in the following amounts, all of which are net of Tenant electricity:

Period		Rentable Square	Annual Rent		Monthly Installment
from	to	Footage	Per Square Foot	Annual Rent	of Rent
11/1/2009	9/30/2010	21,500	$ 7.75	$ 166,625.00	$ 13,885.42
10/1/2010	9/30/2011	21,500	$ 8.00	$ 172,000.00	$ 14,333.33
10/1/2011	9/30/2012	21,500	$ 8.25	$ 177,375.00	$ 14,781.25
10/1/2012	9/30/2013	21,500	$ 8.50	$ 182,750.00	$ 15,229.17
10/1/2013	9/30/2014	21,500	$ 8.75	$ 188,125.00	$ 15,677.08
10/1/2014	11/30/2015	21,500	$ 9.00	$ 193,500.00	$ 16,125.00

Provided that Tenant is not then in default, the Monthly Installments of Rent will be abated for the period of November 1, 2009 through January 31, 2010. Abatement to be implemented by Tenant's deduction of $13,885.42 from each of the 1st three monthly rent payments due after the date this Amendment is executed.

3. Additional Rent. Tenant shall continue to pay in equal monthly installments its proportionate share of Taxes and Expenses.

4. Condition of Premises. Tenant acknowledges that Landlord shall have no obligation to perform any construction or make any additional improvements or alterations, or to afford any allowance (except as hereinafter provided) to Tenant for improvements or alterations, in connection with this Amendment. Tenant acknowledges and agrees that all construction and improvements obligations of Landlord under the Lease through the date of this Amendment, have been performed in full and accepted. Tenant takes the Premises during the Extension Period in its "as is" condition. Landlord acknowledges that nothing in this Amendment shall relieve Landlord of any other of its obligations under the Lease, including but not limited to those obligations detailed in Article 7 of the Lease. Tenant shall be entitled to an improvement allowance from Landlord towards the cost of Tenant's recently made improvements to the Premises in the amount up to $40,000.00 ("Allowance"), due and payable by Landlord not later than thirty (30) days after Tenant has provided to Landlord all of the following: (i) copies of all necessary governmental permits, if any; (ii) final lien waivers for all work done to the Premises; and (iii) paid invoices for work done by Tenant to the Premises.

5. Brokers. Landlord and Tenant each (i) represents and warrants to the other that it has not dealt with any broker or finder in connection with this Amendment other than Colliers Meredith & Grew, for the Tenant, and CB Richard Ellis, for the Landlord, which brokers shall be compensated by the Landlord per separate agreement, and (ii) agrees to defend, indemnify and hold the other harmless from and against any losses, damages, costs or expenses (including reasonable attorneys' fees) incurred by such other party due to a breach of the foregoing warranty by the indemnifying party.

6. Right of First Offer. Article 41 of the Lease is hereby amended as follows:

(a) The fifth sentence of Article 41 is hereby amended to read as follows: "If Landlord leases the Expansion Premises on no less than 90% of the economic terms as offered to Tenant, Tenant shall have no further rights with respect to the Expansion Premises; provided that if Landlord intends to offer the Expansion Premises to a third party on less than 90% of the economic terms as offered to Tenant, Tenant's rights under this Article 41 shall be revived and Landlord must first offer the Expansion Premises to Tenant on the terms of the offer made or to be made to such third party, and Tenant shall have a period of five (5) business days in which to exercise Tenant's right to lease the Expansion Premises pursuant to the terms and conditions contained in such notice."

(b) The following shall be added to the end of Article 41.2: "unless otherwise provided for in Landlord's notice (described in the 4th sentence of Article 41)".

(c) Article 41.4 is deleted in its entirety and the following is substituted in its place: "41.4 Notwithstanding any provisions to the contrary, (i) Tenant shall have no right to exercise the right of First Offer if there remains at the time of the commencement of the leasing of the Expansion Premises less than two (2) years in the Term of this Lease; provided, however, if Tenant has a remaining renewal option, Tenant shall have the right to lease the Expansion Premises if, concurrently with its exercise of that right, it also exercises such renewal option; (ii) in the event

pursuant to Article 41 Tenant exercises its right of First Option to lease the Expansion Premises, the term of the lease of the Expansion Premises shall be co-terminous with the Term of the Lease of the Premises; and (iii) if Landlord provides for an allowance for Tenant improvements in the notice as referenced in Article 41 ("Notice") and Tenant exercises its right of First Offer for a term less than the term as specified in the Notice, Tenant shall only be entitled to a proportionate amount of the allowance to correspond to the length of the term of its leasing of the Expansion Premises (by way of example, if Landlord's Notice provides for a five-year term with $15.00 per rentable square feet of Expansion Premises as allowance for Tenant improvements and Tenant only has three years remaining in its Lease Term or extension thereof, the allowance for Tenant, should it exercise its right of First Option, would be $9.00 per rentable square feet of the Expansion Premises [i.e. $15/rsf for 5 years = $3/rsf/yr. x 3 years = $9.00/rsf].

7. Incorporation. Except as modified herein, all other terms and conditions of the Lease shall continue in full force and effect and Tenant hereby ratifies and confirms its obligations thereunder. Tenant acknowledges that as of the date of the Amendment, Tenant (i) is not in default under the terms of the Lease; (ii) has no defense, set off or counterclaim to the enforcement by Landlord of the terms of the Lease; and (iii) is not aware of any action or inaction by Landlord that would constitute a default by Landlord under the Lease.

8. Tenant's Authority. If Tenant signs as a corporation, Tenant represents and warrants that Tenant has been and is qualified to do business in the state in which the Building is located, that the corporation has full right and authority to enter into this Amendment, and that all persons signing on behalf of the corporation were authorized to do so by appropriate corporate actions. If Tenant signs as a partnership, trust or other legal entity, each of the persons executing this Amendment on behalf of Tenant represents and warrants that Tenant has complied with all applicable laws, rules and governmental regulations relative to its right to do business in the state and that such entity on behalf of the Tenant was authorized to do so by any and all appropriate partnership, trust or other actions. Tenant agrees to furnish promptly upon request a corporate resolution, proof of due authorization by partners, or other appropriate documentation evidencing the due authorization of Tenant to enter into this Amendment.

Tenant hereby represents and warrants that neither Tenant, nor any persons or entities holding any legal or beneficial interest whatsoever in Tenant, are (i) the target of any sanctions program that is established by Executive Order of the President or published by the Office of Foreign Assets Control, U.S. Department of the Treasury ("OFAC"); (ii) designated by the President or OFAC pursuant to the Trading with the Enemy Act, 50 U.S.C. App. § 5, the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701-06, the Patriot Act, Public Law 107-56, Executive Order 13224 (September 23, 2001) or any Executive Order of the President issued pursuant to such statutes; or (iii) named on the following list that is published by OFAC: "List of Specially Designated Nationals and Blocked Persons." If the foregoing representation is untrue at any time during the Term, an Event of Default will be deemed to have occurred, without the necessity of notice to Tenant.

9. Limitation of Landlord Liability. Redress for any claim against Landlord under this Amendment shall be limited to and enforceable only against and to the extent of Landlord's interest in the Building. The obligations of Landlord under this Amendment are not intended to be and shall not be personally binding on, nor shall any resort be had to the private properties of,

any of its or its investment manager's trustees, directors, officers, partners, beneficiaries, members, stockholders, employees, or agents, and in no case shall Landlord be liable to Tenant hereunder for any lost profits, damage to business, or any form of special, indirect or consequential damages.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the day and year first written above.

LANDLORD:		**TENANT:**	
RAR2 — BOSTON INDUSTRIAL QRS —MA, INC., a Maryland corporation		**AUSHON BIOSYSTEMS, INC.**, a Delaware corporation	
By: RREEF Management Company, a Delaware corporation, Authorized Agent			
By:	_____	By:	_____
Name:	_____	Name:	_____
Title:	_____	Title:	_____
Dated:	_____	Dated:	_____

Exhibit 10.20.3

SECOND AMENDMENT TO LEASE

This Second Amendment to Lease ("Amendment") is made effective as of September 23, 2015, by and between **GIJV MA 2, LLC**, a Delaware limited liability company ("Landlord") and **AUSHON BIOSYSTEMS, INC.**, a Delaware corporation ("Tenant") with reference to the following facts and circumstances.

A. Landlord is the owner of that certain building located at 43 Manning Road, Billerica, Massachusetts (the "Building").

B. RAR2 Boston Industrial QRS — MA, Inc., a Maryland corporation, predecessor in interest to Landlord, and Tenant entered into that certain Lease dated September 24, 2007, as amended by that certain First Amendment to Lease dated October 28, 2009 (collectively, the "Lease") for certain premises containing approximately 21,500 rentable square feet (the "Premises") located in the Building.

C. Landlord and Tenant desire to amend the Lease upon terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the foregoing facts and circumstances, the mutual covenants and promises contained herein and after good and valuable consideration, the receipt and sufficiency of which is acknowledged by each of the parties, the parties do hereby agree to the following:

1. Definitions. Each capitalized term used in this Amendment shall have the same meaning as is ascribed to such capitalized term in the Lease, unless otherwise provided for herein.

2. Term. The term of the Lease is hereby extended for a term commencing on December 1, 2015 and ending on February 28, 2021 (the "Extended Term"). Except as specifically set forth in Section 5 below, Tenant shall have no option to renew the Lease following the expiration of the Extended Term and as of the full execution of this Amendment the renewal option set forth in Section 36 of the Lease is hereby deleted and of no further force and effect.

3. Annual Rent. Annual Rent for the Extended Term shall be as follows:

Months	Monthly Installment	Annual
12/1/2015 — 2/28/2017	$ 15,677.08*	$ 188,125.00*
3/1/2017 — 2/28/2018	$ 16,125.00	$ 193,500.00
3/1/2018 — 2/28/2019	$ 16,572.92	$ 198,875.00
3/1/2019 — 2/29/2020	$ 17,020.83	$ 204,250.00
3/1/2020 — 2/28/2021	$ 17,468.75	$ 209,625.00

*Provided that no Event of Default has occurred under the Lease which remains uncured beyond applicable notice and cure periods, Landlord agrees to abate Tenant's obligation to pay Annual Rent for the months of December 2015 and January and February 2016 (the "Conditional Rent"). Upon Landlord's termination of the Lease as a result of the occurrence of an Event of a Default at any time during the Extended Term which remains uncured beyond applicable notice and cure periods, in addition to any other remedies to which Landlord may be entitled, Landlord shall be entitled to recover the unamortized portion of the Conditional Rent, amortized on a straight line basis over the final sixty (60) months of the Extended Term (i.e., the Conditional Rent shall not be deemed to have been abated, but the unamortized portion thereof shall become immediately due and payable as unpaid rent earned, but due at the time of such Event of Default).

4. Landlord's Work. Landlord shall, at Landlord's sole cost, complete the following items of work to the HVAC system serving the Premises: (i) install 13 new fan powered boxes; (ii) install 8 new VAV boxes; (iii) install new controls; (iv) install new time controls for the rooftop HVAC units; and (v) install new heater stacks for the rooftop HVAC units (collectively, the "Landlord's Work"). Tenant hereby acknowledges that the Landlord's Work may be performed while Tenant is occupying the Premises. Tenant hereby acknowledges and agrees that Landlord shall not be liable for any inconvenience to Tenant or for interference with Tenant's business or use of the Premises during the performance of the Landlord's Work, provided that Landlord shall utilize commercially reasonable efforts not to disrupt the operation of Tenant's business. Tenant and its employees, invitees, agents and contractors may use the Premises during the performance of the Landlord's Work at their own risk, and Landlord shall not be responsible for injury or damage to property occasioned by the performance of the Landlord's Work unless same is due to Landlord's negligence or willful misconduct. The provisions of Section 7.5 of the Lease (other than the first two sentences) shall apply to the Landlord's Work as though all references therein to the HVAC Replacement Units were to the Landlord's Work as defined above. Landlord shall commence the Landlord's Work within fifteen (15) days following the full execution of this Amendment and shall make commercially reasonable efforts to complete the Landlord's Work by the date which is ninety (90) days following the full execution of this Amendment. In addition, Landlord shall construct the Tenant Improvements in accordance with Exhibit A attached hereto.

5. Renewal Option. Tenant shall have a personal and non-transferable option (other than to an Affiliate) to renew the term of the Lease for one (1) term of five (5) years. Such renewal term shall begin the first day following the expiration of the Extended Term. Tenant shall have the right to exercise the renewal option conferred herein by giving Landlord notice at least three hundred (300) days prior to the expiration of the Extended Term; provided that, at the time of exercise and as of the commencement of the renewal term (a) no Event of Default is then existing; (b) Tenant has not assigned this Lease (other than to an Affiliate) or (c) Tenant has not sublet more than 8,600 rentable square feet of the Premises (other than to an Affiliate).

The renewal option shall be subject to all of the terms and conditions contained in the Lease, except that Annual Rent during the renewal term shall be at Market Rent, but in no event less than the Annual Rent in effect immediately preceding the renewal term. "Market Rent" shall be the anticipated rate in effect for the Premises as of the commencement of the renewal term, together with any market rate increases during the renewal term, based upon the rents generally in effect for leases of space in the area in which the Building is located of equivalent quality, size, utility and location, and taking into account all relevant factors. Landlord shall lease the Premises to

Tenant in their then-current condition, and Landlord shall not provide to Tenant any allowances (e.g., moving allowance, construction allowance, free rent or the like) or other tenant inducements and such shall be taken into account in determining Market Rent. In the event that Tenant shall exercise an option to renew the Lease, then the parties shall endeavor to agree upon Market Rent at least ninety (90) days prior to the expiration of the Extended Term. If the parties are able to agree on an amount of Market Rent that is mutually satisfactory, then such agreements shall be placed in writing and shall be signed by the parties hereto and shall thereupon become a part of the Lease.

If the parties hereto are unable to agree upon the Market Rent at least ninety (90) days prior to the expiration of the Extended Term, then the disagreement shall be promptly submitted to arbitration. In such event, each party shall select an independent arbitrator having not less than ten (10) years' actual experience in the commercial real estate brokerage business at least sixty (60) days prior to the expiration of the Extended Term, and the arbitrators so selected shall immediately meet for the purpose of determining Market Rent for the renewal option. If the two arbitrators selected agree on Market Rent, their decision shall be binding on both parties. If the two arbitrators selected cannot agree on the Market Rent within ten (10) business days after appointment (the "Initial Review Period"), but the rates differ by less than five percent (5%), the Market Rent shall be the average of the two rates. If the rates differ by more than five percent (5%), no later than five (5) business days following the expiration of the Initial Review Period, the two arbitrators shall select a third arbitrator with qualifications similar to their own. Within ten (10) business days following appointment, the third arbitrator shall select one of the two rental rates promulgated by the first two arbitrators which such third arbitrator believes most accurately reflects the Market Rent. If the arbitrators cannot agree on the third arbitrator, they shall request the Boston Bar Association (or such organization as may succeed to the Boston Bar Association) to designate the third arbitrator willing so to act and the arbitrator so appointed shall, for all purposes, have the same standing and powers as though he or she had been seasonably appointed by the brokers first appointed. The decision of the third arbitrator shall be binding on both parties. Landlord and Tenant shall each be responsible to pay their respective arbitrators and will share equally the cost of the third arbitrator.

Failure of Tenant to properly exercise the rights herein granted in this Section 5 shall be construed as a waiver of the rights herein granted in this Section 5, and the Lease shall then terminate at the expiration of the Extended Term.

6. Termination Option. Provided no Event of Default exists at the time of such election, Tenant shall have a one-time right to terminate the Lease effective as of September 1, 2019. To exercise such option:

(a) Tenant must deliver Landlord written notice no later than September 1, 2018 stating that Tenant elects to exercise the Termination Option ("Tenant's Termination Notice"); and

(b) Not later than July 1, 2019, Tenant shall pay to Landlord a termination fee equal to $75,933.00 (the "Termination Fee"), such amount representing the unamortized portion of $221,475.00 (the "Landlord's Second Amendment Costs") as of August 31, 2019 for costs incurred by Landlord with respect to this Amendment for the Allowance ($100,000.00) and

commissions paid to the Brokers ($121,475.00), which amortization is based upon a sixty (60) month term at an annual rate of interest of eight percent (8%). In the event the entire Allowance is not used for Tenant Improvements or a credit against Annual Rent, as set forth in the Work Letter attached hereto as Exhibit A, Landlord's Second Amendment Costs shall be recalculated using the actual amount of the Allowance so used and the $121,475.00 paid as commissions to the Brokers and the Termination Fee shall be recalculated based on the amortization of such recalculated Landlord's Second Amendment Costs over a term of sixty (60) months using an annual rate of interest of eight percent (8%).

7. Security Deposit. Section 5 of the Lease shall expressly remain in full force and effect with regard to the Extended Term (and any renewal term), except that (i) the term End Date, as defined in Section 5.2.3 of the Lease shall mean the date which is three (3) months following the expiration of the Extended Term (or any renewal term), and (ii) the Security Deposit shall be reduced to $31,354.16. Landlord shall reasonably cooperate, at no cost to Landlord, with Tenant and the issuer of the letter of credit presently held by Landlord in amending such letter of credit to reflect the amount of the Security Deposit as reduced hereby.

8. No Defenses. Tenant affirms that, as of the date of execution of this Amendment: (a) all tenant improvements to be constructed by Landlord prior to the date of this Amendment, if any, are complete and Tenant has accepted the Premises in "as is, where is" condition as of the date of this Amendment; and (b) Landlord has fully funded or Tenant has waived any unfunded tenant improvement allowances payable under the Lease.

9. Broker. (a) Tenant represents to Landlord that except for CBRE, Inc. representing Landlord and Cushman & Wakefield representing Tenant (collectively, the "Brokers"), Tenant has not dealt with any real estate broker, salesperson or finder in connection with this Amendment, and no other such person initiated or participated in the negotiation of this Amendment or is entitled to any commission in connection herewith. Tenant hereby agrees to indemnify, defend and hold Landlord, its property manager and their respective employees harmless from and against any and all liabilities, claims, demands, actions, damages, costs and expenses (including attorneys fees) arising from either (a) a claim for a fee or commission made by any broker, other than the Brokers, claiming to have acted by or on behalf of Tenant in connection with this Amendment, or (b) a claim of, or right to lien under the statutes of the state in which the Premises are located relating to real estate broker liens with respect to any such broker retained by Tenant (other than the Brokers).

(b) Landlord represents to Tenant that except for the Brokers, Landlord has not dealt with any real estate broker, salesperson or finder in connection with this Amendment, and no other such person initiated or participated in the negotiation of this Amendment or is entitled to any commission in connection herewith. Landlord hereby agrees to indemnify, defend and hold Tenant and its respective employees harmless from and against any and all liabilities, claims, demands, actions, damages, costs and expenses (including attorneys' fees) arising from either (a) a claim for a fee or commission made by any broker, other than the Brokers, claiming to have acted by or on behalf of Landlord in connection with this Amendment, or (b) a claim of, or right to lien under the statutes of the state in which the Premises are located relating to real estate broker liens with respect to any such broker retained by Landlord. Landlord shall be responsible for fees and commissions due to the Brokers in connection with this Amendment.

10. Submission. Submission of this Amendment by Landlord to Tenant for examination and/or execution shall not in any manner bind Landlord and no obligations on Landlord shall arise under this Amendment unless and until this Amendment is fully signed and delivered by Landlord and Tenant; provided, however, the execution and delivery by Tenant of this Amendment to Landlord shall constitute an irrevocable offer by Tenant of the terms and conditions herein contained, which offer may not be revoked for ten (10) days after such delivery.

11. Signage. Tenant shall be permitted, at Tenant's expense, to erect one (1) exterior sign on the front façade of the Building containing Tenant's name and/or logo subject to Landlord's prior approval of size, location, design and method of installation, which approval shall not be unreasonably withheld, conditioned or delayed. Such right shall be non-exclusive. Tenant shall be responsible for obtaining all necessary permits and approvals therefor, and Landlord agrees to reasonably cooperate with Tenant's efforts in seeking the same, at no cost to Landlord. Upon the expiration or earlier termination of the term of the Lease, Tenant shall, at its sole cost and expense, remove such façade signage and repair any damage caused by such removal.

12. Miscellaneous.

(a) Time of Essence. Time is of the essence of this Amendment and each and every term and provision hereof.

(b) Modification. A modification of any provision herein contained, or any other amendment to this Amendment, shall be effective only if the modification or amendment is in writing and signed by both Landlord and Tenant.

(c) Successors and Assigns. This Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

(d) Number and Gender. As used in this Amendment, the neuter includes masculine and feminine, and the singular includes the plural.

(e) Construction. Headings at the beginning of each Section and subsection are solely for the convenience of the parties and are not a part of this Amendment. Except as otherwise provided in this Amendment, all exhibits referred to herein are attached hereto and are incorporated herein by this reference. Unless otherwise indicated, all references herein to Articles, Section, subsections, paragraphs, subparagraphs or provisions are to those in this Amendment. Any reference to a paragraph or Section herein includes all subparagraphs or subsections thereof. This Amendment shall not be construed as if it had been prepared by only Landlord or Tenant, but rather as if both Landlord and Tenant had prepared the same. In the event any portion of this Amendment shall be declared by any court of competent jurisdiction to be invalid, illegal or unenforceable, such portion shall be deemed severed from this Amendment, and the remaining parts hereof shall remain in full force and effect, as fully as though such invalid, illegal or unenforceable portion had never been part of this Amendment.

(f) Integration of Other Agreements. This Amendment, the Lease and prior amendments set forth the entire agreement and understanding of the parties with respect to the matters set forth herein and supersedes all previous written or oral understandings, agreements,

contracts, correspondence and documentation with respect thereto. Any oral representation or modifications concerning this Amendment shall be of no force or effect.

(g) Duplicate Originals; Counterparts. This Amendment may be executed in any number of duplicate originals, all of which shall be of equal legal force and effect. Additionally, this Amendment may be executed in counterparts, but shall become effective only after a counterpart hereof has been executed by each party; all said counterparts shall, when taken together, constitute the entire single agreement between parties.

(h) No Waiver. No failure or delay of either party in the exercise of any right given to such party hereunder shall constitute a waiver thereof unless the time specified herein for exercise of such right has expired, nor shall any single or partial exercise of any right preclude other or further exercise thereof or of any other right. No waiver by any party hereto of any breach or default shall be considered to be a waiver of any other breach or default. The waiver of any condition shall not constitute a waiver of any breach or default with respect to any covenant, representation or warranty.

(i) Further Assurances. Landlord and Tenant each agree to execute any and all other documents and to take any further actions reasonably necessary to consummate the transactions contemplated hereby.

(j) No Third Party Beneficiaries. Except as otherwise provided herein, no person or entity shall be deemed to be a third party beneficiary hereof, and nothing in this Amendment, (either expressed or implied) is intended to confer upon any person or entity, other than Landlord and/or Tenant (and their respective nominees, successors and assigns), any rights, remedies, obligations or liabilities under or by reason of this Amendment.

(k) Full Force and Effect. The Lease, as amended hereby, shall continue in full force and effect, subject to the terms and provisions thereof and hereof. In the event of any conflict between the terms of the Lease and the terms of this Amendment, the terms of this Amendment shall control.

IN WITNESS WHEREOF, this Amendment is executed as of the day and year aforesaid.

LANDLORD:

GIJV MA 2, LLC

By: _____
Barry P. Marcus, Senior Vice President

Date: _____

TENANT:

AUSHON BIOSYSTEMS, INC.

By: _____

Printed Name: _____

Title: _____

Date: _____

EXHIBIT A

WORK LETTER

This Work Letter (this "Work Letter") is attached to and made a part of that certain Second Amendment to Lease (the "Amendment"), between **GIJV MA 2, LLC** ("Landlord"), and **AUSHON BIOSYSTEMS, INC.** ("Tenant"). The terms used in this Work Letter that are defined in the Amendment shall have the same meanings as provided in the Amendment.

1. Definitions.

(a) "Allowance" shall mean a one-time tenant improvement allowance in an amount not to exceed $100,000.00.

(b) "Approved Working Drawings" shall mean the plans attached hereto as Exhibit A-1.

(c) "Excess Costs" shall mean the Total Construction Costs (as defined below) in excess of the Allowance.

(d) "Substantial Completion" of the Premises shall occur upon the completion of construction of the Tenant Improvements in the Premises pursuant to the Approved Working Drawings, with the exception of any punchlist items and any tenant fixtures, work-stations, built-in furniture, or equipment to be installed by Tenant. Substantial Completion shall have occurred even though (a) minor details of construction, decoration, landscaping or mechanical adjustments remain to be completed and/or b) there is a delay in the Substantial Completion of the Premises due to a "Tenant Delay" as defined below.

(e) "Tenant Delay" shall mean each day of delay in the performance of the work that occurs because of (i) Tenant's failure to timely deliver or approve any required documentation; (ii) any change by Tenant to the Approved Working Drawings; (iii) any specification by Tenant of materials or installations in addition to or other than Landlord's standard finish-out materials or Tenant's requirement for materials, components, finishes or improvements that are not available in a commercially reasonable time; (iv) postponement of any work at the request of Tenant; (v) the failure by Tenant's architect, space planner or other agent or contractor, to timely prepare plans, pull permits, provide approvals or perform any other act required hereunder; (vi) the failure of Tenant to pay, when due, any amounts required to be paid by Tenant; (vii) Tenant's failure to attend any meeting with Landlord, any architect, design professional, or any contractor, or their respective employees or representatives, as may be required or scheduled hereunder or otherwise necessary in connection with the preparation or completion of any construction documents, such as the Approved Working Drawings, or in connection with the performance of any work; (viii) a breach by Tenant of this Exhibit or the Lease; (ix) changes in any of the Approved Working Drawings because the same do not comply with Laws (if the same were prepared by Tenant); and (x) any other acts or omissions of Tenant.

(f) "Tenant Improvements" shall mean the improvements to the Premises shown on Exhibit A-1 and described on Exhibit A-2, as well as the Bathroom Work, if any, as described below.

(g) "Tenant's Representative" shall mean Susan Keefe, who Tenant has appointed as its representative with full power and authority to bind Tenant for all actions taken with regard to the Tenant Improvements. Tenant hereby ratifies all actions and decisions with regard to the Tenant Improvements that the Tenant's Representative may have taken or made prior to the execution of this Work Letter. Landlord shall not be obligated to respond to or act upon any plan, drawing, change order or approval or other matter relating to the Tenant Improvements until it has been executed by Tenant's Representative or a senior officer of Tenant. Neither Tenant nor Tenant's Representative shall be authorized to direct Landlord's general contractor with respect to the Tenant Improvements, unless otherwise agreed to in writing by Landlord.

(h) "Total Construction Costs" shall mean the entire cost of constructing the Tenant Improvements, including space planning and preparation of the Approved Working Drawings, labor and materials, electrical and other utility usage during construction, additional janitorial services, trash removal, general tenant signage, related taxes and insurance costs, the fees of any construction managers and an administrative fee to Landlord in the amount of 3% of Total Construction Costs. If applicable, the costs of the Bathroom Work shall be included in Total Construction Costs.

2. Allowance and Excess Costs Deposit.

(a) Provided no Event of Default has occurred, Landlord shall provide an amount up to the Allowance to be applied toward Total Construction Costs. The Allowance must be used within fifteen (15) months following the date of full execution of this Amendment or shall be deemed forfeited with no further obligation by Landlord with respect thereto. All Tenant Improvements for which the Allowance has been made available shall be deemed Landlord's property. Tenant shall not be entitled to use any portion of the Allowance for anything other than Tenant Improvements, except that Tenant may apply an unused portion of the Allowance up to $20,000.00 as a credit against Annual Rent, as such amount come due.

(b) In no event shall Landlord be obligated to make disbursements with respect to the Tenant Improvements in an amount that exceeds the Allowance. The Allowance shall not be disbursed to Tenant, but shall be applied by Landlord to the payment of the Total Construction Costs, if, as, and when the cost of the Tenant Improvements is actually incurred.

(c) To the extent the Excess Costs have been determined and approved as provided herein, then within fifteen (15) days after Landlord notifies Tenant that the entire Allowance has been disbursed, Tenant shall deliver to Landlord cash in the amount equal the Excess Costs (the "Excess Costs Deposit"). In the event that after such deposit by Tenant, any revisions, changes, or substitutions shall be made to the Tenant Improvements at the request of Tenant ("Tenant Change Orders"), Tenant shall pay any additional costs that arise in connection with such revisions, changes or substitutions to Landlord within ten (10) days of Landlord's request as an addition to the Excess Costs Deposit. Landlord may not use the Excess Costs Deposit for any purpose other than funding the Excess Costs.

(d) Landlord shall disburse the Allowance prior to the Excess Costs Deposit.

3. Punchlist. Landlord will notify Tenant when Landlord considers Substantial Completion to have occurred. Within three (3) business days thereafter, Landlord's representative and Tenant's representative shall conduct a walk-through of the Premises and identify any necessary touch-up work, repairs and minor completion items that are necessary for final completion of the Tenant Improvements (the "Punchlist Items"). Neither Landlord's representative nor Tenant's representative shall unreasonably withhold his or her agreement on Punchlist Items. Landlord shall use reasonable efforts to complete all Punchlist Items within thirty (30) days after agreement thereon; however, Landlord shall not be obligated to engage overtime labor in order to complete such items. Landlord hereby acknowledges and agree that Landlord shall be responsible, at its sole cost and expense, for the repair or replacement of any defects in the original construction of the Landlord's Work, the Tenant Improvements or the Bathroom Work which are discovered within one (1) year of the Substantial Completion of such respective work.

4. Miscellaneous.

(a) Unless otherwise indicated, all references herein to a "number of days" shall mean and refer to calendar days. If any item requiring approval is timely disapproved by Landlord, the procedure for preparation of the document and approval thereof shall be repeated until Landlord approves the document.

(b) Notwithstanding any provision to the contrary contained in this Amendment, if an Event of Default has occurred at any time prior to Substantial Completion, then (i) in addition to all other rights and remedies granted to Landlord pursuant to the Lease, Landlord shall have the right to cause the contractor to cease the construction of the Premises (in which case, Tenant shall be responsible for any delay in Substantial Completion caused by such work stoppage); and (ii) all other obligations of Landlord under the terms of this Exhibit shall be suspended until such time, if any, as such Event of Default may be cured.

5. Bathroom Work.

(a) Landlord agrees to perform certain cosmetic improvements to the bathrooms serving the Premises (the "Bathroom Work") as requested by Tenant, at Tenant's sole cost and expense (but subject to application of any remaining portion of the Allowance).

6. Cost Proposal. Landlord shall provide Tenant with a reasonably detailed cost proposal in accordance with the Approved Working Drawings, which cost proposal shall include, as nearly as possible, the cost of the Total Construction Costs to be incurred in connection with the Tenant Improvements ("Cost Proposal"). Tenant shall notify Landlord whether it approves the Cost Proposal within seven (7) business days after Landlord's submission thereof. If Tenant disapproves of the Cost Proposal, then Tenant shall notify Landlord thereof specifying in reasonable detail the revisions to the Approved Working Drawings to achieve the necessary cost savings. If Tenant fails to notify Landlord that it disapproves of the Cost Proposal within seven (7) business days after the submission thereof, then Tenant shall be deemed to have approved the Cost Proposal as submitted.

7. Construction. Landlord shall construct the Tenant Improvements in accordance with the Approved Working Drawings and in compliance with all applicable laws, ordinances and

regulations. Landlord shall use commercially reasonable efforts to achieve Substantial Completion of the Tenant Improvements and the Bathroom Work within ninety (90) days of the date of this Amendment. Tenant shall have no obligation to remove the Tenant Improvements at the expiration of the Term of the Lease. In the event Landlord fails to substantially complete the Landlord's Work, Tenant Improvements and the Bathroom Work by the date which is one hundred twenty (120) days following the date of full execution of this Amendment (the "Outside Date") and such delay is not caused by Tenant Delay or an event of force majeure, Tenant shall be entitled to have one (1) day of 50% abatement of daily Annual Rent for each day between the Outside Date and the date upon which the Landlord Work, Tenant Improvements and Bathroom Work are substantially completed. Such abatement shall commence after the expiration of the period for which the Conditional Rent is applicable (December 1, 2015 through February 29, 2016).

8. Occupancy During Tenant Improvements. Tenant hereby acknowledges that the Tenant Improvements may be performed while Tenant is occupying the Premises. Tenant hereby acknowledges and agrees that Landlord shall not be liable for any inconvenience to Tenant or for interference with Tenant's business or use of the Premises during the performance of the Tenant Improvements, provided that Landlord shall utilize commercially reasonable efforts not to disrupt the operation of Tenant's business. Landlord shall provide reasonable advance notice of the date of performance of any elements of the Tenant Improvement requiring Tenant to temporarily vacate a portion of the Premises and the expected duration of such temporary vacation. Landlord shall coordinate and schedule the performance of the Tenant Improvements with the input of Tenant so as to minimize the disruption of Tenant's business operations, provided that in no event shall Landlord be required to perform the Tenant Improvements outside of normal business hours. Tenant and its employees, invitees, agents and contractors may use the Premises during the performance of the Tenant Improvement at their own risk, and Landlord shall not be responsible for injury or damage to property occasioned by the performance of the Tenant Improvements unless same is due to Landlord's negligence or willful misconduct. During the performance of the Bathroom Work, Landlord shall endeavor to maintain at least one men's restroom and one's women's restroom in full operating condition.

EXHIBIT A-1

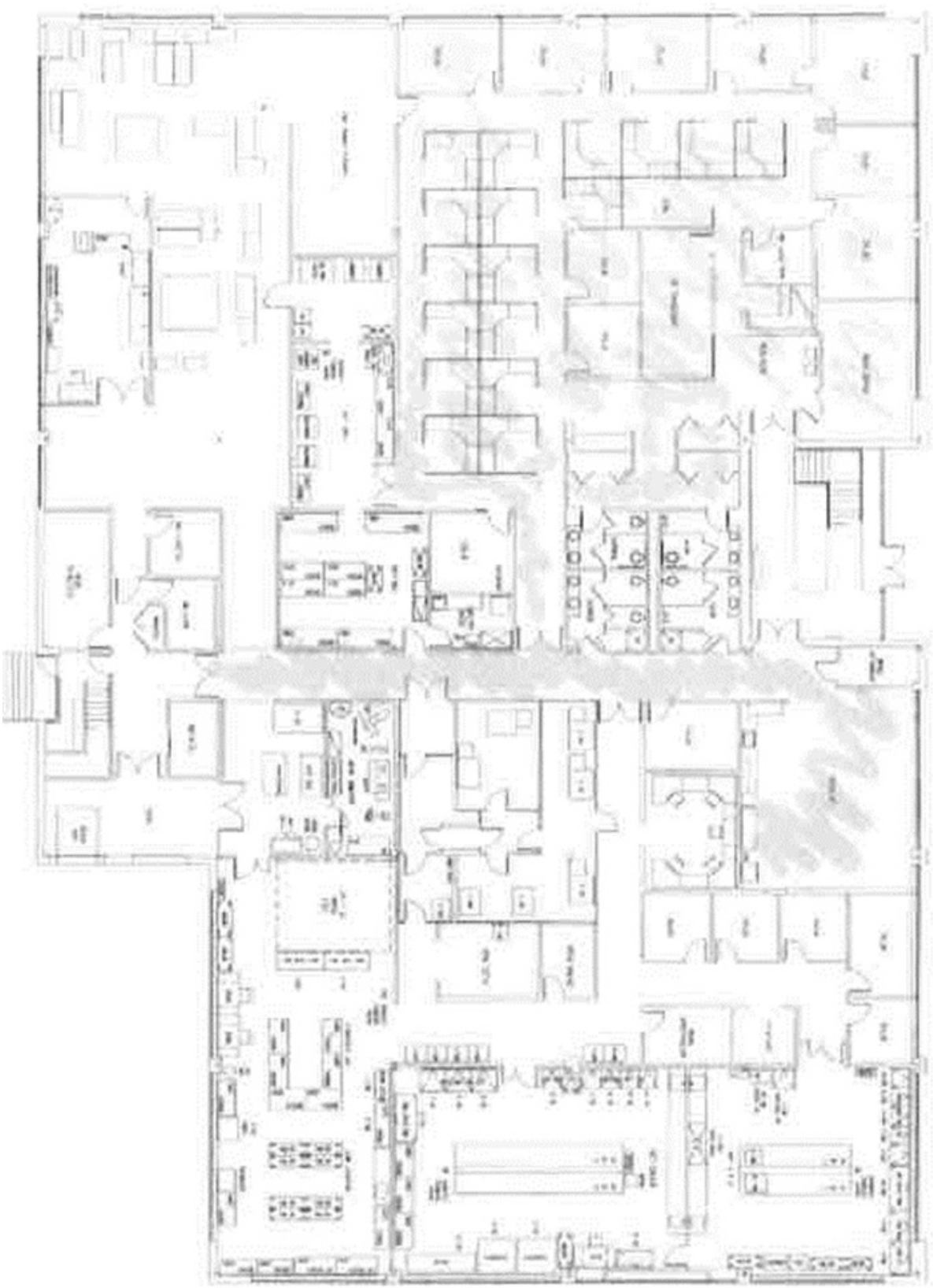

EXHIBIT A-2

Aushon
43 Manning Road

SqFt	**21,500**
Date	**24-Apr-15**

Contractor: **Dezine**

- Demo flooring at marked areas as shown in yellow on drawing.
New flooring at marked areas as shown in yellow on drawing.
Flooring priced is Interface "The Standard" carpet tiles;
standard 12" x 12" x 1/8" VCT and 4" x 1/8" vinyl cove base.

- Paint all areas where new flooring is installed.
- New 2' x 2' ceiling at Reception area.
- New 2' x 2' light fixtures at Reception area.
- Remove water cooler and piping; patch and paint.
- Moving of furniture and equipment by Dezine.

Bathrooms

- New plastic laminate countertops: Men's & Ladies (total 4).
- New sinks and faucets (total 4).
- New lighting: replace with new 2" x 2" fixtures and recessed lighting.
- New "Second Look" ceiling tile (4 bathrooms).
- Repaint (4 bathrooms).
- Demo and discard.

General conditions

- GC fee & insurance

Note — all cubicles in the Premises are to remain places during the performance of the Tenant Improvements.

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Exhibit 21.1

SUBSIDIARIES

Company Name	Jurisdiction of Incorporation
Aushon Biosystems, Inc.	Delaware
Quanterix Security Corporation	Massachusetts

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Exhibit 31.1

CERTIFICATIONS UNDER SECTION 302

I, E. Kevin Hrusovsky, certify that:

1. I have reviewed this annual report on Form 10-K of Quanterix Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 19, 2018

/s/ E. KEVIN HRUSOVSKY

E. Kevin Hrusovsky
Chairman, President and Chief Executive Officer
(principal executive officer)

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Exhibit 31.2

CERTIFICATIONS UNDER SECTION 302

I, Joseph Driscoll, certify that:

1. I have reviewed this annual report on Form 10-K of Quanterix Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 19, 2018

/s/ JOSEPH DRISCOLL

Joseph Driscoll
Chief Financial Officer
(principal financial officer and principal accounting officer)

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Exhibit 32.1

CERTIFICATIONS UNDER SECTION 906

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Quanterix Corporation, a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report for the year ended December 31, 2017 (the "Form 10-K") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 19, 2018

/s/ E. KEVIN HRUSOVSKY

E. Kevin Hrusovsky
Chairman, President and Chief Executive Officer

Dated: March 19, 2018

/s/ JOSEPH DRISCOLL

Joseph Driscoll
Chief Financial Officer

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