Stellar Biotechnologies, Inc.

### 1,388,396 Units (each Unit contains one Common Share and one Warrant to purchase one Common Share)

and

687,076 Pre-Funded Units (each Pre-Funded Unit contains one Pre-funded Warrant to purchase one Common Share and one Warrant to purchase one Common Share)

### (2,075,472 Common Shares Underlying the Common Warrants) and (687,076 Common Shares Underlying the Pre-funded Warrants)

We are offering 1,388,396 units consisting of one common share, no par value, and one warrant to purchase one common share at a public offering price of \$2.65 per unit. Each warrant contained in a unit will have an exercise price equal to \$2.65 per share. The warrants contained in the units will be exercisable immediately and will expire on the five year anniversary of the original issuance date. We are also offering the common shares that are issuable from time to time upon exercise of the warrants contained in the units.

We are also offering to certain purchasers whose purchase of units in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our common shares outstanding immediately following the consummation of this offering, the opportunity to purchase, if any such purchaser so chooses, 687,076 pre-funded units, in lieu of units that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or at the election of a purchaser, 9.99%) of our common shares outstanding. The purchase price of each pre-funded unit is equal to the price per unit being sold to the public in this offering, minus \$0.01, and the exercise price of each pre-funded warrant included in the pre-funded unit is \$0.01 per common shares. The pre-funded warrants will be exercisable immediately and expire when exercised in full. This offering also relates to the common shares issuable upon exercise of any pre-funded warrants sold in this offering. For each pre-funded unit, the number of units we are offering will not change as a result of a change in the mix of the units and pre-funded units sold. Each warrant contained in a pre-funded unit will have an exercise price equal to \$2.65 per share. The warrants contained in the pre-funded units will be exercisable immediately and will expire on the five year anniversary of the original issuance date. We are also offering the common shares that are issuable from time to time upon exercise of the warrants contained in the pre-funded units.

The units and the pre-funded units will not be issued or certificated. The common shares or pre-funded warrants, as the case may be, and the warrants can only be purchased together in this offering but the securities contained in the units or pre-funded units will be issued separately.

All historical references to common shares, warrants and share options outstanding prior to May 4, 2018 and the related exercise prices in this prospectus have been adjusted to reflect the effect of the one-for-seven reverse share split, effected at the close of market on May 4, 2018.

Our common shares are listed on the Nasdaq Capital Market under the symbol "SBOT." The last reported sale price of our common shares on May 10, 2018 was \$3.88 per share. The public offering price per unit and per pre-funded unit was determined between us and the investors, in consultation with the placement agent at the time of pricing, and may be at a discount to the current market price. The warrants and pre-funded warrants that we issue are not and will not be listed for trading on the Nasdaq Capital Market. We do not intend to apply for listing of the warrants on any securities exchange or other trading system. Without an active trading market, the liquidity of the warrants will be limited.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. See "Prospectus Summary – Implications of Being an Emerging Growth Company."

You should read this prospectus, together with additional information described under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information," carefully before you invest in our securities.

	Per Pre-funded					
	Per Unit		Unit		Total	
Public offering price	\$ 2.65	\$	2.64	\$	5,493,130	
Placement agent fees (1)	\$ 0.1855	\$	0.1855	\$	385,000	
Proceeds, before expenses, to us	\$ 2.4645	\$	2.4545	\$	5,108,130	

(1) We have also agreed to pay the placement agent a management fee equal to 1% of the gross proceeds raised in this offering, a non-accountable expense allowance of \$35,000 and reimbursement for legal fees and expenses of the placement agent in the amount of up to \$100,000. We have also agreed to issue the placement agent certain warrants. For additional information about the compensation paid to the placement agent, see "Plan of Distribution."

We have retained H.C. Wainwright & Co., LLC as our exclusive placement agent to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above. The offer is expected to end on or before May 17, 2018.

Investing in our securities involves a high degree of risk. These risks are described in the "Risk Factors" section on page 10 of this prospectus. You should also consider the risk factors described or referred to in any documents incorporated by reference in this prospectus, and in an applicable prospectus supplement, before investing in these securities. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the securities offered hereby is expected to be made on or about May 15, 2018.

H.C. Wainwright & Co.

The date of this prospectus is May 10, 2018.

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You should rely only on the information contained in this prospectus or in any related free writing prospectus filed by us with the Securities and Exchange Commission, or the SEC. We have not, and the placement agent and its affiliates have not, authorized anyone to provide you with any information or to make any representation not contained in this prospectus or incorporated by reference. We do not, and the placement agent and its affiliates do not, take any responsibility for, and can provide no assurance as to the reliability of, any information that others may provide to you. This prospectus is not an offer to sell or an offer to buy securities in any jurisdiction where offers and sales are not permitted. The information in this prospectus is accurate only as of its date, regardless of the time of delivery of this prospectus or any sale of units and pre-funded units. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of those documents, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

Neither we nor the placement agent have done anything that would permit a public offering of the units and pre-funded units or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the units and pre-funded units and the distribution of this prospectus outside of the United States.

### PROSPECTUS SUMMARY

This summary highlights information contained elsewhere or incorporated by reference in this prospectus and does not contain all of the information you should consider in making your investment decision. You should read this summary together with the more detailed information, including our financial statements and the related notes, contained or incorporated by reference in this prospectus. You should carefully consider, among other things, the matters discussed in "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the financial statements, before making an investment decision. You should also read and consider the information in the documents to which we have referred you in "Where You Can Find Additional Information" And "Incorporation of Certain Information by Reference." As used in this prospectus, "Stellar," "the Company," "we," "us," and "our" refer to Stellar Biotechnologies, Inc. and our consolidated subsidiaries, except where the context otherwise requires.

### **Summary of Risks**

Our business is subject to a number of risks and uncertainties that you should understand before making an investment decision. For example, we have a history of net losses, we expect to continue to incur net losses and we may not achieve or maintain profitability. Furthermore, we have limited cash flow to sustain our operations. We have historically relied upon the sale of common shares to help fund our operations and meet our obligations and presently expect to continue to do so in the future as and when we consider appropriate, subject to market conditions and the availability of favorable terms. In the near term our ability to generate revenues will depend solely on the commercial success of Stellar KLH, which depends upon its market acceptance by purchasers in the pharmaceutical market and the future market demand and medical need for products and research utilizing KLH. At present, KLH is used only for research and clinical trial purposes, and there is no commercially approved drug product or drug product submitted in a pending marketing application that incorporates KLH as an ingredient. As a result, no marketing authority has reviewed our drug master file (DMF) for KLH as a product ingredient or inspected Stellar. As of March 31, 2018, we have an accumulated deficit of \$48.1 million since inception. We have incurred substantial net losses since our inception, including net losses of \$5.03 million, \$5.03 million and \$2.84 million for the years ended September 30, 2017, 2016 and 2015, respectively. We expect to incur additional losses as we continue to invest in our research and development programs and move forward with our scale-up plans and commercialization activities. Additional risks are discussed more fully in the section entitled "Risk Factors" following this prospectus summary. These risks include, but are not limited to, the following:

- We have a history of net losses and limited cash flow to sustain our operations.
- We will require additional financing or financings in the future, including sales of our common shares, which is likely to result in substantial dilution to existing shareholders.
- We depend heavily on the success and market acceptance of KLH and we may never recoup our investment into its research and development.
- Our customers are drug developers and pharmaceutical companies, which themselves face substantial uncertainties related to regulatory approval of their products, which could reduce the market opportunity for our products.
- We have been, and expect to continue to be in the future, significantly dependent on collaboration and supply agreements for the development and sales of Stellar KLH.
- Our common shares are thinly traded and there may not be an active, liquid trading market for our common shares.
- If we cannot meet Nasdaq's continuing listing requirements and Nasdaq rules, Nasdaq may delist our securities, which could negatively affect our company and the price of our securities.
- Our business is geographically concentrated and if a catastrophic event were to impact our facilities, our business may be disrupted which could result in serious harm to our business, results of operations and financial condition.
- Our expansion plans include the design and development of aquaculture infrastructure and KLH production in Mexico which presents substantial risks to our business and personnel. We may never recoup our investment into this location, if we decide to proceed with its development.

- We may not be able to meet demand for KLH from either internally raised or ocean harvest sources.
- We compete with other companies in KLH production and manufacturing that may have greater resources or manufacturing capabilities than we do.
- We rely on the significant experience and specialized expertise of our Chief Executive Officer and other members of our senior management team.
- We are subject to the risk of product liability claims, for which we may not have, or be able to obtain, adequate insurance coverage.
- The inability to protect our intellectual property rights could result in competitive harm to our Company.
- We may become involved in lawsuits to protect or enforce our patents and patent applications, any patents that may be issued to us or other intellectual property, which could be expensive, time consuming and unsuccessful.
- We are governed by the corporate laws in British Columbia, Canada which in some cases have a different effect on shareholders than the corporate laws in Delaware.
- We are an "emerging growth company" under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common shares less attractive to investors.

#### **Business Overview**

### **Our Company**

We are a biotechnology company engaged in the aquaculture, research and development, manufacture and commercialization of Keyhole Limpet Hemocyanin (KLH). KLH is an immune-stimulating protein with an extensive history of safe and effective use in immunological applications.

Immunotherapies (also known as therapeutic vaccines) are an emerging class of treatments that involve using the body's own immune system to target and treat disease. Today, multiple companies and institutions are developing drugs that combine disease-targeting agents with KLH. These disease-targeting agents do not evoke a robust immune response by themselves and thus require a carrier molecule like KLH.

The versatility of the KLH molecule and its use in multiple drug development pipelines provide numerous commercial opportunities for us. KLH is currently utilized in immunotherapies in clinical or pre-clinical development for Alzheimer's disease, metastatic breast cancer, type 1 diabetes, dermatomyositis, systemic lupus erythematous, ovarian cancer and various other cancers and diseases. The successful commercialization of one or more of these drug development pipelines, especially in a major indication, could have a significant impact on the industry's ability to produce sufficient quantities of KLH. The protein is derived only from the Giant Keyhole Limpet, a scarce ocean mollusk that is native to a limited stretch of Pacific Ocean coastline. Due in part to the inherent limitations of utilizing of wild sources of KLH, we believe that aquaculture production methods, like the methods we practice, will be required to provide scalable, fully traceable supplies of KLH.

We produce clinical-grade KLH using Current Good Manufacturing Practices (GMP) and market and sell our products under the brand Stellar KLH. Our customers and partners include multinational biotechnology and pharmaceutical companies, academic institutions, clinical research organizations and research centers. We have multiple agreements to license and supply Stellar KLH and other technology in exchange for fees, revenues or royalties. Our customers manage and fund all product development and regulatory submissions for their respective drug products that utilize our KLH protein. We are in the process of upgrading and scaling our manufacturing operations and plan to produce KLH suitable for commercial drugs by the time our customers are ready to file marketing applications referencing our DMFs.

### **Competitive Strengths**

We believe that we possess a number of competitive strengths that position us to become the world leader in the sustainable manufacture of GMP grade KLH and KLH-conjugated vaccines, including:

- *Fully permitted, land-based aquaculture facility produces a barrier to market entry.* Our proprietary methods, infrastructure and aquaculture facility give us the capability to support the source animal in aquaculture. Due to the time needed to raise the source animal to maturity, and the time needed to obtain water discharge permits, among other limitations, we believe that we have a five to seven year lead over any new market entrants attempting to produce KLH in a similar manner. Due to its exceptional size and complexity, KLH has not been reproduced synthetically.
- *Fully traceable, GMP grade product offerings benefit commercialization programs.* Due to the known origin of material and continuity of data, we believe we are able to create a more consistent, high quality, immunogenic product than other KLH proteins in the market.
- Multiple supply and collaboration agreements reduce single-customer dependence. We believe that our supply and collaboration
  agreements with drug developers, which include binding orders, allow us to better manage our working capital as well as help build
  customer trust and loyalty.
- *Business model leverages growth potential.* We believe we have an attractive business model due to the unique nature of our product offerings, embedded growth opportunities within our existing customer base and operating leverage. In addition, we have established a model via our joint venture, Neostell, S.A.S., to participate in the profits from manufacturing of KLH-conjugated vaccines.
- *Intellectual property portfolio includes protection for specialized systems and technologies.* We have intellectual property related to KLH development and manufacturing, including one U.S. patent and foreign counterparts, trade secrets and know-how related to specialized aquaculture systems and technologies.
- Safety profile and extensive citations in scientific literature contribute to the appeal of KLH as a carrier platform for immunotherapies. KLH has been used for decades in immune system testing, it has an extensive safety record, and continues to be selected for new immunotherapies preparing to enter clinical testing.
- *Sustainability practices protect marine source and promote scalability.* Our KLH protein is produced using environmentally sound, sustainable practices intended to protect and renew the live marine source.
- *Leadership team provides extensive aquaculture production and related industry expertise*. Our leadership team includes industry experts who have extensive experience in the field of aquaculture and Giant Keyhole Limpet production, and possess a deep understanding of a variety of biotechnology businesses.

#### **Our Strategy**

We intend to develop and expand the market for KLH and KLH-conjugated vaccines. Our near-term focus is to support the further development of third party drug candidates utilizing Stellar KLH and to expand our customer base. This strategy seeks to preserve the opportunity for Stellar to share in the successful development and commercialization of product candidates utilizing our licensed KLH products. In addition to fees, revenues or royalties we may receive, we believe that the development of third-party drug candidates, if any are ultimately approved for human use, will further validate our technologies, increase awareness and promote broader adoption of our products by additional third parties. Key elements of our business strategy include:

- *Expand infrastructure and capacity while prudently managing our working capital.* We plan to incrementally increase our infrastructure, manufacturing capabilities and KLH production capacity based on our customers' forecasts and the anticipated future requirements of commercial-scale vaccine manufacturing, which we estimate could require multiple kilograms of GMP grade KLH per year.
- *Pursue additional supply and collaboration agreements*. We plan to continue pursuing opportunities for commercial growth that build on our strengths and core competencies in KLH development and manufacturing, including additional supply and collaboration agreements.
- Support continuing development of our Neostell Growth Initiative. In July 2016, we formed Neostell S.A.S., a joint venture with Neovacs S.A, to produce Neovacs' Kinoid immunotherapy product candidates which utilize Stellar KLH as a carrier molecule. In addition to expanding our market opportunities related to manufacturing of Neovacs' KLH-conjugated vaccines, this joint venture provides the opportunity to participate in the manufacture and sale of KLH-based immunotherapies for third party customers.
- *Continue innovation and new product development.* We plan to expand our KLH technology portfolio through ongoing research and development. We believe that these activities provide long-term strategic, revenue and clinical opportunities by potentially extending the commercial use of Stellar KLH and furthering our understanding of the KLH molecule.
- *Pursue additional markets for our technology and products.* We intend to evaluate additional markets for our current products and technologies. Due to the immune-stimulating characteristics of KLH, we believe the protein could have broader applications in the medical field or other markets.

### **Our Technology**

We have spent more than 15 years developing and optimizing sustainable KLH production methods, specifically focused on protection of the Giant Keyhole Limpet and a patented, non-lethal method to extract KLH protein. We believe our proprietary methods will provide a scalable supply of GMP grade KLH and meet pharmaceutical industry standards for immune response, consistency, purity, and traceability while protecting the natural source species. Currently, our technology allows us to produce clinical-grade KLH using GMP to support our customers at their current stages of development.

Our proprietary aquaculture technology involves methods we developed and optimized to control the reproduction and growth of the Giant Keyhole Limpet. We achieved a significant milestone in aquaculture science by developing the capability to sustain the complete life cycle of the Giant Keyhole Limpet. Using our proprietary methods, we can support the marine mollusk from embryo to protein-producing adult, and we now support multiple generations of limpets grown entirely within our land-based aquaculture facility.

The aquaculture cycle to raise Giant Keyhole Limpets from fertilized eggs to maturity for KLH production is approximately five years, with multiple complex larval and juvenile stages. The hemolymph circulatory fluid, which contains KLH, is extracted in a non-lethal manner utilizing our patented methods. Once extracted, the hemolymph is processed and purified through our proprietary methods, which are protected as trade secrets. KLH can be extracted from mature limpets multiple times per year.

We currently maintain a production inventory of limpets sufficient for an annual capacity of up to 1,500 grams/year of KLH pharmaceutical intermediate, which can be further processed and purified to produce various final product grades and formulations. We believe we can continue to scale up capacity to meet anticipated customer demand in the near term.

In December 2016, we initiated plans to optimize our protein manufacturing processes at our primary facility in Port Hueneme, California, including the evaluation and use of new equipment. This initiative is intended to increase the scalability and throughput capacity of existing manufacturing systems, which were originally developed to provide clinical development stage quantities of our Stellar KLH products. To date, we have completed process development studies and implemented new optimized manufacturing methods. We also initiated construction of approximately 10,000 square feet of renovated Pacific Ocean-front space for aquaculture production and related activities.

### **Our Aquaculture and KLH Production Facilities**

We maintain research and manufacturing facilities directly along the Pacific Ocean with dedicated, land-based aquaculture operations in Port Hueneme, California. We believe our waterfront location is a proprietary asset that allows our marine scientists to work in close proximity to naturally resident Giant Keyhole Limpet colonies. Our aquaculture operations include a fully permitted seawater supply and discharge system, which we believe is a competitive strength due in part to the time required and uncertainties related to the public review process required to obtain new water discharge permits in the State of California.

In January 2017, we established a wholly owned Mexican subsidiary to support our plan to establish additional aquaculture capabilities in Baja California, including the development of regional marine resources, aquaculture and raw material processing for Stellar's KLH products, in anticipation of the increased demand for our KLH products, among other considerations.

### **Research and Development**

Our research and development is focused primarily on the aquaculture of the Giant Keyhole Limpet; improvements in KLH protein characterization and manufacturing; the development of functional assays; and new uses for KLH in immunotherapy and immunodiagnostic applications. Our external collaborations have historically involved both development and evaluation projects, with multiple biopharmaceutical companies and research institutions, for the use of Stellar KLH in their programs. We believe that these collaborations provide for strategic, revenue and clinical opportunities for our future business by extending the commercial use of Stellar KLH and furthering our understanding of the KLH molecule.

### Products

We offer Stellar KLH protein in various grades, formulations, custom configurations and fill finishes for both drug development and research applications. Our portfolio includes GMP products suitable for our customers' Phase 1 and Phase 2 clinical studies as well as research-grade products intended for: conjugation as a carrier molecule in therapeutic vaccines; assessing immune function; and, in immunotoxicology studies, for monitoring the immunomodulatory effects of drug candidates. We are in the process of upgrading and scaling our manufacturing operations and plan to produce KLH suitable for commercial drugs by the time our customers are ready to file marketing applications referencing our DMFs.

### **Supply Agreements**

We have entered into, and intend to continue to enter into, agreements with third parties that will allow us to supply Stellar KLH in exchange for fees, revenues or royalties. Our current supply agreements are limited to clinical trials, and typically provide us with first negotiation rights for the supply of KLH in connection with potential future commercialization of a customer's products.

### **Intellectual Property and License Agreements**

We hold important proprietary intellectual property related to KLH development and manufacture and to the environmental protection of the Giant Keyhole Limpet including, but not limited to, one U.S. patent and foreign counterparts and trade secrets related to specialized aquaculture systems and technologies; spawning, selection and maintenance of the Giant Keyhole Limpet; non-lethal KLH protein extraction methods; and the processing, purification and production of KLH formulations.

### THE OFFERING

The following summary contains basic information about the offering and the securities we are offering and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the securities we are offering, please refer to the section of this prospectus titled "Description of Securities."

Units offered by us	1,388,396 units. Each unit consists of one common share and a warrant to purchase one common share.
Pre-funded units offered by us in this offering	We are also offering to certain purchasers whose purchase of units in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our common shares outstanding immediately following the consummation of this offering, the opportunity to purchase, if any such purchaser so chooses, 687,076 pre-funded units, in lieu of units that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of a purchaser, 9.99%) of our common shares outstanding. The purchase price of each pre-funded unit is equal to the price at which the units are being sold to the public in this offering, minus \$0.01 and the exercise price of each pre-funded warrant will be \$0.01 per common share. This offering. The pre-funded warrants will be exercisable immediately and will expire when exercised in full. For each pre-funded unit we sell, the number of units we are offering will be decreased on a one-for-one basis.
Public offering price per unit	\$2.65
Public offering price per pre-funded unit	\$2.64
Description of warrants	The warrants will be exercisable beginning on the closing date and expire on the five year anniversary of the closing date at an initial exercise price per share equal to \$2.65, subject to appropriate adjustment in the event of recapitalization events, share dividends, share splits, share combinations, reclassifications, reorganizations or similar events affecting our common shares.
Description of pre-funded warrants	The pre-funded warrants will be exercisable beginning on the closing date and expire when exercised in full at an initial exercise price per share equal to \$0.01, subject to appropriate adjustment in the event of recapitalization events, share dividends, share splits, share combinations, reclassifications, reorganizations or similar events affecting our common shares.
Common shares outstanding prior to this offering	1,502,870 common shares as of May 4, 2018.
Common shares to be outstanding after this offering	2,891,266 common shares.

Use of proceeds	We expect to receive net proceeds from this offering of approximately \$4.68 million, based on the public offering price of \$2.65 per unit and after deducting the placement agent fees and estimated offering expenses. We intend to use the net proceeds from this offering for general corporate purposes, including working capital. See "Use of Proceeds".
Nasdaq Capital Market trading symbol	SBOT
No listing of warrants or pre-funded warrants	We do not intend to apply for listing of the warrants or pre-funded warrants on any securities exchange or other trading system.
Risk Factors	See "Risk Factors" on page 10 of this prospectus to read about factors you should consider before buying units.

The number of common shares that will be outstanding after this offering is based on 1,502,870 shares outstanding as of May 4, 2018, and excludes:

- 80,787 common shares issuable upon exercise of options to purchase our common shares outstanding as of May 4, 2018 at a weighted average exercise price of \$26.46 per share;
- 180,805 common shares issuable upon exercise of warrants to purchase our Common Shares outstanding as of May 4, 2018 at an exercise price of \$31.50 per share;
- 147,356 additional common shares reserved as of May 4, 2018 for future issuance under our 2017 Incentive Compensation Plan;
- 2,075,472 common shares underlying the warrants issuable to investors in connection with this offering, at an exercise price of \$2.65 per share;
- 687,076 common shares underlying the pre-funded warrants issuable to investors in connection with this offering; and
- 145,283 common shares underlying the warrants issuable to the placement agent in connection with this offering, at an exercise price of \$3.31 per share.

### **Implications of Being an Emerging Growth Company**

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An "emerging growth company" may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- 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, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until September 30, 2021. However, if certain events occur prior to September 30, 2021, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company before such date.

We have elected to take advantage of certain of the reduced disclosure obligations and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our shareholders may be different than the information you might receive from other public reporting companies in which you hold equity interests.

### **Corporate Information**

We operate through our wholly-owned subsidiary, Stellar Biotechnologies, Inc., a California corporation which was organized September 9, 1999. Our executive offices are located at 332 East Scott Street, Port Hueneme, California 93041. Our phone number is (805) 488-2800. Our website address is www.stellarbiotechnologies.com. The contents of our website are not part of this prospectus for any purpose or otherwise incorporated by reference. Our website address is included for information only.

Our logo, Stellar KLH<sup>TM</sup> and other trademarks or service marks of ours appearing in this prospectus are our property. This prospectus contains additional trade names, trademarks and service marks of other companies. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply relationships with, or endorsement or sponsorship of us by, these other companies.

### **Summary Consolidated Financial Data**

The summary data presented below for each of the years in the three-year period ended September 30, 2017 have been derived from our consolidated financial statements, which financial statements have been audited by Moss Adams LLP, an independent registered public accounting firm. The historical financial data for the six months ended March 31, 2018, 2017 and 2016 has been derived from our unaudited condensed interim consolidated financial statements. You should read the summary of our consolidated financial data set forth below together with the more detailed information contained in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus.

	N	Si March 31, 2018		Six Months Ended March 31, 2017		March 31, 2016
Revenues:						
Product sales	\$	84,539	\$	154,875	\$	782,495
Contract services revenue		-		50,000		32,000
Total revenues		84,539		204,875		814,495
Loss from Operations		(2,733,736)		(2,562,033)		(2,403,297)
Net Loss	\$	(2,753,273)	\$	(2,589,349)	\$	(2,490,813)
Loss per common share:						
Basic and diluted	\$	(1.83)	\$	(1.79)	\$	(2.07)
Weighted average number of common shares outstanding:						
Basic and diluted		1,502,870		1,448,036		1,201,548
	Sep	otember 30, 2017		ears Ended eptember 30, 2016	Se	ptember 30, 2015
Revenues:						
Product sales	\$	178,287	\$	1,239,689	\$	563,689
Contract services revenue		50,000		32,000		195,000
Total revenues		228,287		1,271,689		758,689
Loss from Operations		(5,224,546)		(4,908,356)		(4,338,592)
Net Loss	<u>\$</u>	(5,030,648)	\$	(5,026,080)	\$	(2,843,029)
Loss per common share:						
	\$	(3.44)	\$	(3.99)	\$	(2.50)
Basic and diluted	Ψ					

### **RISK FACTORS**

Investing in our securities involves a high degree of risk. You should carefully consider the risks and uncertainties set forth below, together with all of the other information set forth in this prospectus and incorporated by reference, before investing in our securities. If any of these risks actually occur, our business, financial condition, results of operations and future prospects could be materially and adversely affected. In that event, the price of our securities could decline, and you could lose part or all of your investment.

### **Risks Related to this Offering and Ownership of Our Securities**

#### An investment in the units and pre-funded units is extremely speculative and there can be no assurance of any return on any such investment.

An investment in the units and pre-funded units is extremely speculative and there is no assurance that investors will obtain any return on their investment. Investors will be subject to substantial risks involved in an investment in us, including the risk of losing their entire investment.

### Holders of our warrants will have no rights as a common shareholder until they acquire our common shares.

Until you acquire our common shares upon exercise of your warrants, you will have no rights with respect to our common shares issuable upon exercise of your warrants. Upon exercise of your warrants, you will be entitled to exercise the rights of a common shareholder only as to matters for which the record date occurs after the exercise date.

### A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common shares.

A large number of shares issued in this offering may be sold in the market following this offering, which may depress the market price of our common shares. Sales of a substantial number of our common shares in the public market following this offering could cause the market price of our common shares to decline. If there are more common shares offered for sale than buyers are willing to purchase, then the market price of our common shares may decline to a market price at which buyers are willing to purchase the offered common shares and sellers remain willing to sell the shares. All of the common shares issued in the offering will be freely tradable without restriction or further registration under the Securities Act of 1933.

#### The warrants issued in this offering may not have any value.

Each warrant will have an exercise price equal to \$2.65 and will expire on the five year anniversary of the date they first become exercisable. Each pre-funded warrant will have an exercise price equal to \$0.01 and will expire when exercised in full. In the event our common shares price does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value.

# If our common shares are not listed on a national securities exchange, U.S. holders of the warrants or pre-funded warrants may not be able to exercise their warrants or pre-funded warrants without compliance with applicable state securities laws and the value of your warrants may be significantly reduced.

If our common shares are subsequently delisted from the Nasdaq Capital Market and are not eligible to be listed on another national securities exchange, the exercise of the warrants or the pre-funded warrants by U.S. holders may not be exempt from state securities laws. As a result, depending on the state of residence of a holder of the warrants or the pre-funded warrants, a U.S. holder may not be able to exercise its warrants or pre-funded warrants unless we comply with any state securities law requirements necessary to permit such exercise or an exemption applies. Although we plan to use our reasonable efforts to assure that U.S. holders will be able to exercise their warrants or pre-funded warrants under applicable state securities laws if no exemption exists, there is no assurance that we will be able to do so. As a result, in the event that our common shares are delisted from the Nasdaq Capital Market and are not eligible to be listed on another securities exchange, your ability to exercise your warrants or pre-funded warrants may be limited. The value of the warrants or pre-funded warrants may be significantly reduced if U.S. holders are not able to exercise their warrants or pre-funded warrants under applicable state securities laws.

# There is no public market for the warrants or the pre-funded warrants to purchase our common shares included in the units being offered by us in this offering.

There is no established public trading market for the warrants or the pre-funded warrants included in the units and pre-funded units being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the warrants or the pre-funded warrants on any national securities exchange or other nationally recognized trading system, including The Nasdaq Capital Market. Without an active market, the liquidity of the warrants and the pre-funded warrants will be limited.

### The price of our common shares may be subject to substantial volatility.

Although our common shares are listed on The Nasdaq Capital Market in the United States, there can be no assurance that an active public market will be sustained for our common shares. If there is a thin trading market or "float" for our common shares, the market price for our common shares may fluctuate significantly more than the stock market as a whole. Without a large float, our common shares would be less liquid than the stock of companies with broader public ownership and, as a result, the trading price of our common shares may be more volatile.

Furthermore, the stock market is subject to significant price and volume fluctuations, and the price of our common shares has been in the past, and may continue in the future to be subject to wide fluctuations in response to several factors, including:

- our quarterly or annual operating results;
- our cash and cash equivalents position;
- · changes in our earnings estimates;
- · investment recommendations by securities analysts following our business or our industry;
- · additions or departures of key personnel;
- changes in the business, earnings estimates or market perceptions of our competitors;
- our failure to achieve operating results consistent with securities analysts' projections;
- announcements or the expectation of raising additional financing;
- · sales of our common shares by us, our insiders or other shareholders;
- the status of our listing on the Nasdaq;
- · changes in industry, general market or economic conditions; and
- announcements of legislative or regulatory changes in the United States and in other countries where we transact business.

The stock markets in general, and the small-cap biotech market, in particular, have experienced extreme price and volume fluctuations in recent years that have significantly affected the quoted prices of the securities of many companies, including companies in our industry. The changes often appear to occur without regard to specific operating performance. The price of our common shares could fluctuate based upon factors that have little or nothing to do with our company and these fluctuations could materially reduce our share price.



### Our common shares are thinly traded and there may not be an active, liquid trading market for our common shares.

There is no guarantee that an active trading market for our common shares will be maintained on Nasdaq, or that the volume of trading will be sufficient to allow for timely trades. Investors may not be able to sell our common shares quickly or at the latest market price if trading in our shares is not active or if trading volume is limited. In addition, if trading volume in our common shares is limited, trades of relatively small numbers of shares may have a disproportionate effect on the market price of our common shares.

### If we cannot meet Nasdaq's continuing listing requirements and Nasdaq rules, Nasdaq may delist our securities, which could negatively affect our Company and the price of our securities.

On January 30, 2018, the Company received a letter from The Nasdaq Stock Market LLC (Nasdaq) notifying the Company that, based on the Company's closing bid price for the last 30 consecutive business days, the Company is not in compliance with the minimum bid price requirement of \$1.00 per share for continued listing, as set forth in Nasdaq Listing Rule 5550(a)(2). The Company has an initial period of 180 calendar days, or until July 30, 2018 to regain compliance with the minimum bid price requirement for continued listing on Nasdaq. Although the Nasdaq notification has no immediate impact on the listing of the Company's common shares, which will continue to trade on the Nasdaq Capital Market under the symbol "SBOT", we can make no assurances that the Company will regain compliance with the Nasdaq listing requirements.

On May 4, 2018, we effected a one for seven reverse split of our outstanding common shares. If at any time before July 30, 2018, the closing bid price of our common shares is at least \$1.00 per share for at least ten consecutive business days, we will regain compliance with the minimum bid price requirement. If we cannot demonstrate compliance by July 30, 2018 or if we are not afforded an additional grace period beyond July 30, 2018 by which to demonstrate compliance with the Nasdaq listing requirements, our common shares may then be delisted from Nasdaq, which could make trading our common shares more difficult for investors, potentially leading to declines in our share price and liquidity. Without a Nasdaq listing, shareholders may have a difficult time getting a quote for the sale or purchase of our shares, the sale or purchase of our shares would likely be made more difficult, and the trading volume and liquidity of our shares could decline. Delisting from Nasdaq could also result in negative publicity and could make it more difficult for us to raise additional capital. If our common shares are delisted by Nasdaq, our common shares may be eligible to trade on an over-the-counter quotation system where an investor may find it more difficult to sell our shares or obtain accurate quotations as to the market value of our common shares. We cannot assure you that our common shares, if delisted from Nasdaq, will be listed on another national securities exchange or quoted on an over-the-counter quotation system.

### We may require additional financing or financings, which would result in substantial dilution to existing shareholders.

Without additional financing or curtailing Company operations, the Company may not have the operating capital to continue its operations beyond the second quarter of fiscal 2019. Management expects to continue incurring losses for the foreseeable future and will need to raise additional capital to pursue our business plan beyond March 2019. In addition, we may decide to expand operations, undertake strategic acquisitions or determine some other business need. Financing could include debt and/or equity financings, including transactions with strategic customers and partners that may include debt and/or equity arrangements. Such sources of financing may not be available on acceptable terms, if at all. Failure to obtain such financing may cause us to curtail or cease operations and/or result in delay or indefinite postponement of research and development of our Stellar KLH, expansion initiatives, capital expenditures and other operational priorities. Any transaction involving the issuance of previously authorized but unissued common shares, or securities convertible into common shares, could result in dilution, possibly substantial, to present and prospective holders of common shares and may be on terms less favorable to us.



### We could be deemed a "passive foreign investment company" in the future, which could have negative consequences for U.S. investors.

We would be designated as a "passive foreign investment company", or a PFIC, under the meaning of Section 1297 of the United States Internal Revenue Code of 1986, as amended, or the Code, if (a) 75% or more of our gross income is "passive income" (generally, dividends, interest, rents, royalties and gains from the disposition of assets producing passive income) in any taxable year, or (b) at least 50% of the average value of our assets produce, or are held for the production of, passive income. If we are designated a PFIC for any taxable year during which a U.S. shareholder holds our common shares, it would likely result in materially adverse U.S. federal income tax consequences for such U.S. shareholder, including, but not limited to, any gain from the sale of our common shares would be taxed as ordinary income, as opposed to capital gain, and such gain and certain distributions on our common shares would be subject to an interest charge, except in certain circumstances. In addition, U.S. shareholders should be aware that there can be no assurances that we would be able to satisfy the record keeping requirements that apply to a PFIC, or that we would supply U.S. shareholders with the information that such U.S. shareholders require to make certain elections available under the Code that are intended to mitigate the adverse tax consequences of the PFIC rules. The PFIC rules are extremely complex. A U.S. shareholder of our common shares is encouraged to consult a tax advisor regarding the PFIC rules and the U.S. federal income tax consequences of the acquisition, ownership and disposition of our common shares.

# We are governed by the corporate laws in British Columbia, Canada which in some cases have a different effect on shareholders than the corporate laws in Delaware.

The material differences between the British Columbia Business Corporations Act (BCBCA) as compared to the Delaware General Corporation Law (DGCL) which may be of most interest to shareholders include the following: (i) for material corporate transactions (such as amalgamations, other extraordinary corporate transactions, amendments to the notice of articles and amendments to the Articles), the BCBCA generally requires a two-thirds majority vote by shareholders (and, in addition, especially where the holders of a class of shares are being affected differently from others, approval will be required by holders of two-thirds of the shares of such class voting in a meeting called for that purpose), whereas the DGCL generally only requires a majority vote of shareholders for similar material corporate transactions; (ii) quorum for shareholders meetings is not prescribed under the BCBCA and is 33-1/3% under our Articles (to assure compliance with Nasdaq corporate governance requirements); whereas, under the DGCL, quorum requires the holders of a majority of the shares entitled to vote to be present; and (iii) our Articles require a two-thirds majority vote of shareholders to pass a resolution for one or more directors to be removed, whereas the DGCL requires only the affirmative vote of a majority of the shareholders. Accordingly, certain provisions of our corporate governance under the laws of British Columbia may be disadvantageous to our shareholders.

### **Risks Related to Our Business**

#### We have a history of net losses and limited cash flow to sustain our operations.

We currently have limited revenue from product sales of Stellar KLH, and anticipate our planned total operating expenses will be greater than our revenues for the foreseeable future. We incurred net losses of \$5.03 million in fiscal 2017, \$5.03 million in fiscal 2016, and \$2.84 million in fiscal 2015. As of March 31, 2018, we have an accumulated deficit of \$48.1 million since inception. To date, we have not paid dividends on our common shares and do not anticipate doing so in the foreseeable future. We have historically relied upon the sale of common shares to help fund our operations and meet our obligations. Any future additional equity financing would cause dilution to current shareholders. If we do not have sufficient capital for our operations, management would be forced to reduce or discontinue our activities, which would have a negative effect on our operations and financial condition.

### We will require additional financing or financings, which is likely to result in substantial dilution to existing shareholders.

Without additional financing or curtailing Company operations, the Company may not have the operating capital to continue its operations beyond the second quarter of fiscal 2019. Management expects to continue incurring losses for the foreseeable future and will need to raise additional capital to pursue our business plan beyond March 2019. In addition, we may decide to expand operations, undertake strategic acquisitions or determine some other business need. Financing could include debt and/or equity financings, including transactions with strategic customers and partners that may include debt and/or equity arrangements. Such sources of financing may not be available on acceptable terms, if at all. Failure to obtain such financing may cause us to curtail or cease operations and/or result in delay or indefinite postponement of research and development of our Stellar KLH, expansion initiatives, capital expenditures and other operational priorities. Any transaction involving the issuance of previously authorized but unissued common shares, or securities convertible into common shares, could result in dilution, possibly substantial, to present and prospective holders of common shares and may be on terms less favorable to us.

### We depend heavily on the success and market acceptance of Stellar KLH and we may never recoup our investment into its research and development.

We have invested a significant portion of our time and financial resources into the development of Stellar KLH. We anticipate that in the near term our ability to generate revenues will depend solely on the commercial success of Stellar KLH, which depends upon its market acceptance by purchasers in the pharmaceutical market and the future market demand and medical need for products and research utilizing KLH. The degree of market acceptance of Stellar KLH depends on a number of factors including: the advantages and disadvantages of Stellar KLH as compared to other KLH proteins; our ability to educate the industry about the high quality, sustainable and traceable qualities of Stellar KLH; product efficacy; customer service; and the price and demonstrated cost-effectiveness of Stellar KLH as compared to our competitors.

#### Our customers face uncertainties related to regulatory approval, which could reduce the market for our products.

A primary market for our Stellar KLH products is its use as a component of active immunotherapies, which are currently under development. The pharmaceutical industry is subject to significant government regulation, which varies from country to country. None of the products being developed by our customers that utilize our Stellar KLH are approved for commercial sale or have been submitted in a marketing application where our KLH DMF was reviewed by a regulatory authority. Before regulatory approvals for the commercial sale of any drug is granted, it must be demonstrated through preclinical research and clinical trials to be safe and effective for its intended use in humans. The process to determine safety and efficacy, including clinical trials, is expensive, prolonged and uncertain. The time necessary to complete these processes and clinical trials, and to submit applications for regulatory approvals, is difficult to predict and is subject to numerous factors outside of our customers' control. Such clinical trials may not be successful. Larger or later stage clinical trials may not produce the same results as earlier trials. Successful results in clinical trials may not result in regulatory approval, due to certain factors including unacceptable side effects or safety issues. If our KLH is referenced in a pending marketing application or regulatory approval is granted for any drug or product that utilizes Stellar KLH, it will be subject to ongoing regulatory requirements, which include registration, manufacturing, labeling, advertising and promotion, packaging, distribution, record keeping and reporting, and storage. Because Stellar's KLH has not been part of a marketing application where our DMF was reviewed, no regulatory authority has inspected Stellar or its manufacturing operations. Manufacturing facilities, both those operated by us and by our contractors, would be subject to continual review and inspection, and failure to meet these regulatory requirements can interrupt, delay, or shut down these facilities. Previously unknown problems may result in regulatory restrictions on such products, including withdrawal from the marketplace. Delays in obtaining regulatory approvals for products developed by our customers that use Stellar KLH, or failure to obtain or maintain regulatory approvals altogether, would have a negative effect on market demand for our Stellar KLH products, and have a negative effect on our operations and financial condition.

### Our business is geographically concentrated and if a catastrophic event, such as a hurricane, an earthquake or coastal flooding, were to impact our facilities, our business may be disrupted which could result in serious harm to our business, results of operations and financial condition.

Our aquaculture operations, research and manufacturing facilities, laboratory space, and executive offices are all located in Port Hueneme, California, a coastal city located along the Pacific Ocean. To date, we have conducted all of our aquaculture operations, research and manufacturing at these facilities and we currently have no active backup facilities or second sites. In January 2017, we established a wholly owned Mexican subsidiary to support our plan to establish additional aquaculture capabilities in Baja California, including the development of regional marine resources, aquaculture and raw material processing for Stellar's KLH products. However, we do not anticipate the site to be available for manufacture and production until 2019 at the earliest. There can be no assurance that these expansion plans will result in successful development of additional sites of research and manufacturing and KLH production outside of our Port Hueneme location. If a hurricane, an earthquake or other natural disaster, including coastal flooding, or a virus affecting our limpet colony, were to impact our facilities, we may be unable to manufacture our KLH products, which would have a serious disruptive impact on our business and a material adverse effect on our results of operations and financial condition. While we carry personal property insurance, such insurance may not be adequate to compensate us for losses from any damage or interruption of our business operations resulting from a hurricane, an earthquake, coastal flooding or other catastrophic event.

### Government and geopolitical changes may impede the implementation of our strategy outside the United States.

Changes in geopolitical policies of the United States, such as changes in U.S. support for existing treaty and trade relationships with other countries, may adversely impact (i) the ability or willingness of non-U.S. companies to transact business in the United States, including with Stellar (ii) regulation and trade agreements affecting U.S. companies, (iii) global stock markets (including The Nasdaq Capital Market on which our common shares are traded), and (iv) general global economic conditions. These factors are outside of our control, but may nonetheless cause us to adjust our strategy in order to compete effectively in global markets.

### Our joint venture with Neovacs involves numerous risks that could adversely impact our financial results.

In May 2016, we entered into a strategic relationship with Neovacs S.A. to manufacture and sell conjugated therapeutic vaccines through a newlyformed joint venture entity in France called Neostell S.A.S. This relationship is subject to various risks that could adversely affect the value of our investments and our results of operations. These risks include the following:

- our interests could diverge from those of Neovacs or we may not be able to agree on ongoing manufacturing and operational activities, or on the amount, timing, or nature of further investments in Neostell;
- we may experience difficulties in transferring technology to Neostell;
- Neovacs' products may not receive regulatory approval, have not received regulatory approval to date, and even if they do, they may not be commercially successful;
- we may experience difficulties and delays in manufacturing and production at Neostell;
- we may experience difficulties in manufacturing KLH suitable for Neostell;
- · as a minority partner, our control over the operations of Neostell is limited;
- Neovacs may be unable to meet its commitments to us or to Neostell, which may pose credit risks for our transactions with them;
- due to differing business models or long-term business goals, we and Neovacs may not participate to the same extent on funding capital investments in Neostell;
- our working capital or cash flows may be inadequate to fund increased capital requirements in Neostell;
- we may experience difficulties or delays in collecting amounts due to us from Neostell and/or Neovacs due to multinational financial regulations or geopolitical forces beyond our control; and
- shifts in the geopolitical landscape may result in tax, legal, or regulatory changes in the United States, France and/or the European Union, thereby necessitating amendments to the agreements with Neovacs and/or the structure of the joint venture.

If our joint venture with Neovacs is unsuccessful, our business, results of operations, or financial condition may be materially adversely affected.

### Our expansion plans include the design and development of aquaculture infrastructure and KLH production in Mexico which presents substantial risks to our business and personnel. We may never recoup our investment into this location.

We plan to establish additional aquaculture capabilities in Baja California, including the development of regional marine resources, aquaculture and raw material processing for Stellar's KLH products, in anticipation of the increased demand for our KLH products, among other considerations. There are certain administrative, legal, governmental and societal risks to operating in Mexico that could adversely impact our ability to expand our operations there. Any one or more of the risks that could adversely affect our ability to successfully implement our expansion and therefore ultimately have a material adverse effect on our business, financial condition and results of operations include, without limitation:

- geopolitical factors could adversely impact the ongoing relationship between the United States and Mexico and/or the continuity of the North American Free Trade Agreement, or NAFTA, in its present form;
- · regional political and economic instability;
- · ability to hire and maintain a significant work force;

- burdensome and evolving government regulations;
- cooperation of various departments of the Mexican government in issuing permits, and inspecting our operations on a timely basis;
- providing adequate security for our employees; and
- change in the value of the Mexican peso.

In addition, our international operations are governed by the U.S. Foreign Corrupt Practices Act and similar anti-corruption laws outside the U.S. Global enforcement of anti-corruption laws has increased substantially in recent years, with more enforcement proceedings by U.S. and foreign governmental agencies and the imposition of significant fines and penalties. While we have implemented policies and procedures to enhance compliance with these laws, our international operations create the risk that there may be unauthorized payments or offers of payments made by employees, consultants, sales agents or distributors. Any alleged or actual violations of these laws may subject us to government investigations, significant criminal or civil sanctions and other liabilities, and negatively affect our reputation.

### Our sales in international markets subject us to foreign currency exchange and other risks and costs, which could harm our business.

Substantial portions of our revenues are derived from outside the United States; primarily from Europe and Asia. We anticipate that revenues from international customers will continue to represent a substantial portion of our revenues for the foreseeable future. All our revenues are generated in U.S. dollars. However, if the effective price of our products were to increase as a result of fluctuations in foreign currency exchange rates, demand for our products could decline and adversely affect our results of operations and financial condition.

### We compete with other companies in KLH production and manufacturing that may have greater resources than we do.

The immunotherapy industry is rapidly evolving and new competitors with competing technologies and products are regularly entering the market. Our Stellar KLH products are similar to KLH-based products produced by other companies. While we believe we are the only company that offers GMP grade KLH supported by fully traceable manufacturing methods, we may not be able to maintain our competitive position against current and potential competitors. We compete directly with Biosyn Corporation, a pharmaceutical and biotechnology company which manufactures KLH starting material and offers clinical and research grade KLH products. We also compete directly with SAFC, a division of Sigma-Aldrich, which offers clinical and research grade KLH products. Some of our competitors, both public and private, have greater financial and personnel resources than us, and have greater sales and marketing experience in the industry than us. If they are able to produce and sell comparable KLH products for less than us, it will have a negative effect on our operations and financial position. In addition to competition from current suppliers of KLH, we also face indirect competition from developers of other carrier proteins, adjuvants or therapeutic vaccine platforms. We are unable to predict what effect evolution of the KLH and immunotherapy industries and potential new entrants may have on price, selling strategies, intellectual property or our competitive position.

#### We may not be able to meet demand for KLH from either internally raised or ocean harvest sources.

We are dependent upon a supply of Giant Keyhole Limpets (*Megathura crenulata*) for KLH production. The range of the Giant Keyhole Limpet in the wild is limited, and due to the lack of a regulated harvest, the wild stocks of Giant Keyhole Limpets are believed to be declining. If the wild stocks are depleted, and our hatchery and aquaculture operations are unable to produce sufficient supplies of captive Giant Keyhole Limpets to meet demand, it would have a negative effect on our operations and financial condition.



# We may not be able to manufacture our products in commercial quantities and currently depend on third parties for certain steps in our manufacturing operations, which could prevent us from marketing our products.

The manufacture of pharmaceutical starting materials like KLH requires significant expertise, including the development of advanced manufacturing techniques and process controls that are GMP compliant. We may encounter difficulties in production or meeting GMP standards, particularly in scaling up production. These problems include difficulties with production costs and yields, quality control, including stability of the product and quality assurance testing, shortages of qualified personnel, as well as compliance with federal, state and foreign regulations.

In addition, we contract with third party vendors, including contract testing organizations and contract manufacturing organizations for testing of our products and for certain steps in the manufacture of some our products, and may be unable to monitor and establish or maintain relationships with qualified vendors in order to produce sufficient supplies of our finished products.

We are currently dependent upon a small number of contractors and locations for certain steps in our manufacturing operations, namely product release testing and vialing. We do not currently have backup manufacturing capacity for some of our key products. If we are unable to retain our current contractors, or are unable to obtain new contractors to provide manufacturing services in a timely manner and on similar terms, it will have a negative effect on our operations. Further, these contract manufactures and testing organizations provide services to many biotechnology and research companies, and such third party contractors may not provide acceptable quality, quantity or costs required by us. In addition, they may not be able to provide the services required on a schedule acceptable to us. These issues may result in us being unable to manufacture our products in the required quantities or at an acceptable cost, which would have a negative effect on our operations and financial condition.

# We have been, and expect to continue to be in the future, significantly dependent on collaboration and supply agreements for the development and sales of Stellar KLH.

In conducting our research and development and commercialization activities, we currently rely, and expect to continue to rely, on collaboration and supply agreements with third parties, such as contract research organizations, commercial partners, universities, governmental agencies and not-for-profit organizations, for strategic, technological, and financial resources. The inability to secure agreements on acceptable terms, the termination of these relationships, changes in our strategy or development plans or those of third parties, or failure to perform by us or third parties who are subject to regulatory, competitive and other risks, under their respective agreements or arrangements with us, would substantially disrupt or delay our research and development and commercialization activities, including potential commercial sales. Any such loss would likely increase our expenses and materially harm our business, financial condition and results of operation.

# We have limited marketing, sales and distribution experience and capabilities. We will need to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our products.

We currently have limited experience in the marketing, sales and distribution of KLH products. Depending on market acceptance of our Stellar KLH products, we may need to expand our capabilities. We may not be able to establish such additional capabilities in-house, and then will need to enter into agreements with third parties to successfully perform these tasks. If we contract or make arrangements with third parties for the sales and marketing of our products, our revenues will be dependent on the efforts of these third parties, whose efforts may not be successful. If we market any of our products directly, we must either internally develop or acquire a marketing and sales force, which would require substantial resources and management attention.

### We rely on the significant experience and specialized expertise of our Chief Executive Officer and other members of our senior management team, and we will need to hire and retain other highly skilled personnel to maintain and grow our business.

Our ability to be successful in the highly competitive biotechnology and pharmaceutical industries depends in large part upon our ability to attract and retain highly qualified managerial, scientific, medical, sales and other personnel. Our performance is substantially dependent on the research and development and business development expertise of Frank Oakes, our President and Chief Executive Officer, and other executive officers. We do not have employment agreements currently in effect with Mr. Oakes and other executive officers, and they are free to leave their employment with us at any time.

There is little possibility that this dependence will decrease in the near term. The loss of the services of Mr. Oakes, or the increased demands placed on our key executives and personnel by our continued growth, could adversely affect our financial performance and our ability to execute our strategies. Our continued success also depends on our ability to attract and retain qualified team members to meet our future growth needs. We may not be able to attract and retain necessary team members to operate our business.

In addition, our future success depends on our ability to identify, attract, hire, train, retain and motivate highly skilled technical, managerial and research personnel in all areas within our organization. We plan to continue to grow our business and will need to hire additional personnel to support this growth. We believe that there are only a limited number of individuals with the requisite skills to serve in many of our key positions, and we compete for key personnel with other biotechnology companies, as well as universities and research institutions. It is often difficult to hire and retain these persons, and we may be unable to timely replace key persons if they leave or be unable to fill new positions, as they become available, requiring key persons with appropriate experience. If we fail to attract, integrate and retain the necessary personnel, our ability to maintain and grow our business could suffer significantly.

### We are subject to the risk of product liability claims, for which we may not have, or be able to obtain, adequate insurance coverage.

The pharmaceutical industry is subject to product liability claims in the event of adverse effects, even in respect to products that have received regulatory approval for commercial sale. Such claims might be made directly by consumers, healthcare providers or by pharmaceutical companies, or others selling or utilizing our Stellar KLH products. Although we currently maintain liability insurance for our products, we may not be able to obtain or maintain sufficient and affordable insurance coverage for all claims that may occur. The cost of any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. In addition, our inability to obtain or maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims could prevent or inhibit the development and commercial production and sale of our products, which could adversely affect our business, financial condition and results of operations.

### Our activities are subject to regulation in the United States and in the foreign jurisdictions in which we operate. Failure to comply with applicable laws and regulations could adversely impact our operations.

Our operations, including our aquaculture and harvesting activities, and our production activities, are subject to regulation at the local, state and federal levels in the United States by a number of regulatory agencies including, but not limited to, the U.S. Food and Drug Administration, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Secretary of the Navy, The Regional Water Quality Control Board, the California Department of Fish and Wildlife, and similar foreign agencies. In addition to regulations in the United States, we may be subject to a variety of foreign regulations related to research, manufacturing, and the commercial sales and distribution of our products, to the extent we choose to manufacture, sell or distribute any products outside of the United States, such as Mexico. If we are unable to comply with laws and regulations in the United States and elsewhere, our operations could be restricted, or sanctions could be imposed on us, if we are found to not be in compliance with any such regulation.

#### We may face environmental risks related to handling regulated substances and hazardous materials.

Our research and clinical development activities, as well as the manufacture of materials and products, are subject to federal, state and local laws, rules, regulations and policies governing the use, generation, manufacture, storage, air emission, effluent discharge, handling and disposal of certain materials, biological specimens and wastes. We may be required to incur significant costs to comply with environmental and health and safety regulations in the future. Our research and clinical development, both now and in the future, may involve the controlled use of hazardous materials, including but not limited to certain hazardous chemicals. We cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of such an occurrence, we could be held liable for any damages that result and any such liability could exceed our resources.

### We deal with hazardous materials and must comply with environmental, health and safety laws and regulations, which can be expensive and restrict how we do business and/or give rise to significant liabilities.

As we operate a manufacturing facility, we are subject to various environmental, health and safety laws and regulations, including those governing air emissions, water and wastewater discharges, noise emissions, the use, management and disposal of hazardous materials and wastes, and the cleanup of contaminated sites. The cost of compliance with these laws and regulations could be significant. In the event of a violation of these requirements, including from accidental contamination or injury, we could be held liable for damages exceeding our available financial resources. We could be subject to monetary fines, penalties or third party damage claims as a result of violations of such laws and regulations or noncompliance with environmental permits required at our facility. As an operator of real property and a generator of hazardous materials and wastes, we also could be subject to environmental cleanup liability, in some cases without regard to fault or whether we were aware of the conditions giving rise to such liability. In addition, we may be subject to liability and may be required to comply with new or existing environmental laws regulating pharmaceuticals in the environment. Environmental laws or regulations (or their interpretation) may become more stringent in the future. If any such future revisions require significant changes in our operations, or if we engage in the development and manufacturing of new products or otherwise expand our operations requiring new or different environmental controls, we will have to dedicate additional management resources and incur additional expenses to comply with such laws and regulations.

In the event of an accident, applicable authorities may curtail our use of hazardous materials and interrupt our business operations. In addition, with respect to our manufacturing facility, we may incur substantial costs to comply with environmental regulations and may become subject to the risk of accidental contamination or injury from the use of hazardous materials in our manufacturing process.

### **Risks Related to Intellectual Property**

### The inability to protect our intellectual property rights could result in competitive harm to our Company.

Our success and ability to maintain our competitive position depends on our ability to protect our intellectual property, including by obtaining patent protection in the United States and other countries, or through protection of our trade secrets, including unpatented know-how, technology and other proprietary information. When appropriate, we seek to protect our proprietary position by filing patent applications in the United States and other countries. If we are unable to protect our intellectual property, whether by obtaining patents or through trade secret protection, our competitors could develop and commercialize products similar or identical to ours.

We may not have adequate remedies for any infringement or funds to take action against those infringing any of our intellectual property rights, or if our trade secrets otherwise become known or independently developed by competitors. There can be no assurance that any current or future patents held, licensed by or applied for by us will be upheld, if challenged, or that the protections afforded will not be circumvented by others. The patent positions of biotechnology and pharmaceutical companies, which often involve licensing agreements, are frequently uncertain and involve complex legal and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued. Consequently, our patents, patent applications and licensed rights may not provide protection against competitive technologies or may be held invalid if challenged or could be circumvented. If we enter litigation in regards to our business or to protect or enforce our patents, it may involve substantial expenditures and require significant management attention, even if we ultimately prevail.

The patent position of biotechnology companies is generally highly uncertain. The degree of patent protection we require may be unavailable or severely limited in some cases and may not adequately protect our rights, provide sufficient exclusivity, or preserve our competitive advantage. For example:

• we might not have been the first to invent or the first to file patent applications on the inventions covered by each of our pending patent applications;

- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- the patents of others may have an adverse effect on our business;
- any patents we obtain or license from others in the future may not encompass commercially viable products, may not provide us with any competitive advantages or may be challenged by third parties;
- any patents we have obtained, will obtain or license from others in the future may not be valid or enforceable; and
- we may not develop additional proprietary technologies that are patentable.

Patents have a limited lifespan. In the United States, the natural expiration of a utility patent typically is generally 20 years after it is filed. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited.

In addition, some of our technologies are not covered by any patent application and we rely instead on confidentiality agreements and trade secret law to protect such intellectual property rights. We require all of our employees and consultants to sign confidentiality agreements. The agreements also oblige our employees, and to the extent practicable, our consultants, and advisors, to assign to us ideas, developments, discoveries and inventions made by such persons in connection with their work with us. We cannot be sure that these agreements will maintain confidentiality, will prevent disclosure, or will protect our proprietary information or intellectual property, or that others will not independently develop substantially equivalent proprietary information or intellectual property.

### The failure of our patents, patent applications, applicable intellectual property law or our confidentiality agreements to protect our intellectual property and other proprietary information, including our trade secrets, could have a material adverse effect on our competitive advantages and on our operations and financial position.

Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our products and our technologies. There are numerous recent changes to the U.S. patent laws and proposed changes to the rules of the United States Patent and Trademark Office (USPTO) that may have a significant impact on our ability to obtain and enforce intellectual property rights. In particular, the Leahy-Smith America Invents Act (Leahy-Smith Act) was adopted in September 2011. The Leahy-Smith Act includes a number of significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. Under the Leahy-Smith Act, the United States transitioned from a "first-to-invent" system to a "first-inventor-to-file" system for patent applications filed on or after March 16, 2013, if we are the first to invent but not the first to file a patent application, we may not be able to fully protect our intellectual property rights and may be found to have violated the intellectual property rights of others if we continue to operate in the absence of a patent issued to us. Many of the substantive changes to patent law associated with the Leahy-Smith Act have recently become effective. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any patents that issue, all of which could have a material adverse effect on our business and financial condition.

In addition, patent reform legislation may pass in the future that could lead to additional uncertainties and increased costs surrounding the prosecution, enforcement, and defense of patent applications and any patents we may obtain. Furthermore, the U.S. Supreme Court and the U.S. Court of Appeals for the Federal Circuit have made, and will likely continue to make, changes in how the patent laws of the United States are interpreted. Similarly, foreign courts have made, and will likely continue to make, changes in how the patent laws of the United States are interpreted. We cannot predict future changes in the interpretation of patent laws or changes to patent laws that might be enacted into law by United States and foreign legislative bodies. Those changes may materially affect our patents and patent applications or any patents we may obtain and our ability to obtain and enforce or defend additional patent protection in the future.



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

Filing, prosecuting and defending patents on our products and technologies in all countries throughout the world would be prohibitively expensive. We have never, and may never, seek to enforce our U.S. patent. The requirements for patentability may differ in certain countries, particularly developing countries, and the breadth of patent claims allowed can be inconsistent. In addition, the laws of some foreign countries may not protect our intellectual property rights to the same extent as laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, but enforcement on infringing activities is inadequate.

We seek to protect our proprietary position by, among other methods, filing, when possible, U.S. and foreign patent applications relating to our technology, inventions and improvements that are important to our business. We have obtained patent protection for our non-lethal extraction methods of hemocyanin in the United States and other countries. We also rely on trade secrets, know-how, continuing technological innovation, and in-licensing opportunities to develop and maintain our proprietary position.

We plan to file other international patent applications directed to patentable features of our products and technologies from time to time. If patent rights are obtained in foreign jurisdictions, proceedings to enforce such rights could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put our pending 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. Thus, we may not be able to stop a competitor from marketing and selling in foreign countries products that are the same as or similar to our product.

### We may become involved in lawsuits to protect or enforce our patents and patent applications, any patents that may be issued to us or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or patent applications, or other of our intellectual property. To counter infringement or unauthorized use, we may be required to file infringement or misappropriation claims, which can be expensive and time consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents or claiming that our patents are invalid or unenforceable. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or lack of statutory subject matter. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant material information from the USPTO, or made a materially misleading statement, during prosecution. Third parties may also raise similar validity claims before the USPTO in post-grant proceedings such as ex parte reexaminations, inter partes review, or post-grant review, or oppositions or similar proceedings outside the United States, in parallel with litigation or even outside the context of litigation. The outcome following legal assertions of invalidity and unenforceability is unpredictable. We cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. For any patents and patent applications we may license, we may have limited or no right to participate in the defense of any such patents against challenge by a third party. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of any future patent applications or patents, if issued, are invalid or unenforceable, in whole or in part, construe the patent's claims narrowly, or refuse to stop the other party from using the technology at issue on the grounds that our patent applications do not cover the technology. An adverse res



### Our trade secrets are difficult to protect and misappropriation could reduce the market for our products.

We may not be able to obtain adequate remedies for the unauthorized use or disclosure of our proprietary information, including our trade secrets. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time consuming, and the outcome is unpredictable. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position could be harmed.

### Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our success depends, in part, on our ability to operate without infringing the patents and other proprietary intellectual property rights of third parties. This is generally referred to as having the "freedom to operate." The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. The defense and prosecution of intellectual property claims, interference proceedings and related legal and administrative proceedings, both in the United States and internationally, involve complex legal and factual questions. As a result, such proceedings are lengthy, costly and time-consuming, and their outcome is highly uncertain. We may become involved in protracted and expensive litigation in order to determine the enforceability, scope and validity of the proprietary rights of others, or to determine whether we have the freedom to operate with respect to the intellectual property rights of others.

Patent applications in the United States are, in most cases, maintained in secrecy until approximately 18 months after the patent application is filed. The publication of discoveries in the scientific or patent literature frequently occurs substantially later than the date on which the underlying discoveries were made. Therefore, patent applications relating to a product or method similar to ours may have already been filed by others without our knowledge. In the event that a third party has also filed a patent application covering our products, methods or other claims, we may have to participate in an adversarial proceeding, such as an interference or derivation proceeding in the USPTO or similar proceedings in other countries, to determine the priority of invention. In the event an infringement claim is brought against us, we may be required to pay substantial legal fees and other expenses to defend such a claim and, if we are unsuccessful in defending the claim, we may be subject to injunctions or damage awards.

In the future, the USPTO or a foreign patent office may grant patent rights to our claims to third parties. Subject to the issuance of these future patents, the claims of which will be unknown until issued, we may need to obtain a license or sublicense to these rights in order to have the appropriate freedom to further use, develop or commercialize such products or methods. Any required licenses may not be available to us on acceptable terms, if at all. If it is determined that we have infringed an issued patent and do not have the freedom to operate, we could be subject to injunctions, and compelled to pay significant damages, including punitive damages, which could harm our business.

### We may become involved in lawsuits to protect or enforce our patents and patent applications, any patents that may be issued to us or other intellectual property, which could be expensive, time consuming and unsuccessful.

If we become involved in any patent litigation or other legal proceedings, we could incur substantial expense, and the efforts of our technical and management personnel could be significantly diverted. A negative outcome of such litigation or proceedings may expose us to the loss of our proprietary position or to significant liabilities, or require us to seek licenses that may not be available from third parties on commercially acceptable terms, if at all. We may be restricted or prevented from using or developing methods, or manufacturing and selling our products in the event of an adverse determination in a judicial or an administrative proceeding, or if we fail to obtain necessary licenses. Further, even if we are successful in defending against claims of infringement, such litigation could be burdensome and costly, and divert management's attention away from executing our business plan.



### We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

Certain of our employees were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise improperly used or disclosed confidential information of these third parties or our employees' former employers. We may also be subject to claims that former employees, consultants, independent contractors or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging our right to and use of confidential and proprietary information. If we fail in defending any such claims, we may lose our rights to such information, in addition to paying monetary damages. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

### **Risks Related to an Emerging Growth Company**

### We are an "emerging growth company" under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common shares less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act), and as a result, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth company." We will remain an "emerging growth company" until the earlier of: (i) the last day of the fiscal year (a) following the fifth anniversary of the date of our first sale of common equity securities pursuant to an effective registration statement under the Securities Act of 1933, (b) in which we have more than \$1.07 billion in annual revenues (\$1.0 billion threshold adjusted for inflation effective April 2017), or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common shares that is held by non-affiliates exceeded \$700 million as of the prior March 31st and (ii) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. While we became a reporting company following the effectiveness of our Form 20-F, filed with the Securities and Exchange Commission on February 3, 2012, our first sale of common equity securities pursuant to an effective registration statement under the Securities Act of 1933 was July 6, 2016. We may choose to take advantage of some but not all of these reduced reporting burdens.

For so long as we remain an emerging growth company, we will not be required to:

- have an auditor report on our internal control over financial reporting pursuant to Section 404(b) of Sarbanes-Oxley;
- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board (PCAOB), regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis);
- submit certain executive compensation matters to shareholders advisory votes pursuant to the "say on frequency" and "say on pay" provisions (requiring a non-binding shareholder vote to approve compensation of certain executive officers) and the "say on golden parachute" provisions (requiring a non-binding shareholder vote to approve golden parachute arrangements for certain executive officers in connection with mergers and certain other business combinations) of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010; and
- include detailed compensation discussion and analysis in our filings under the Exchange Act, and, instead, may provide a reduced level of disclosure concerning executive compensation.

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 not to take advantage of the extended transition period for complying with new or revised accounting standards.

If we take advantage of any of these reduced reporting burdens in future filings, the information that we provide our security holders may be different than information such security holders might receive from other public companies in which they hold equity interests. We cannot predict if investors will find our common shares less attractive because we may rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and, as such, may involve known and unknown risks, uncertainties and assumptions. Forward-looking statements are based upon our current expectations, speak only as of the date hereof, and are subject to change. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. You can generally identify forward-looking statements as those statements containing the words "anticipate," "believe," "plan," "estimate," "expect," "intend," "may," "will," "would," "could," "should," "might," "potential," "continue" or other similar expressions.

Specifically, this prospectus contains forward-looking statements regarding:

- our aquaculture production methods;
- our competitive strengths, including, strengths over market entrants and current and potential competitors, quality of product, supply and collaboration agreements and business model;
- our ability to develop and expand the market for KLH and its uses;
- the expansion of our infrastructure and manufacturing capabilities and continued commercial growth and research and development;
- the broader application of KLH in other markets;
- our ability to scale capacity to meet anticipated customer demand;
- the proprietary nature of our locations in California and in Mexico and the relative availability and success of each;
- our ability to finance company operations with cash on hand and product sales;
- our financial success; and
- our ability to attract and retain talented employees.

You should not rely on our forward-looking statements as they are not a guarantee of future performance. There can be no assurance that forward-looking statements will prove to be accurate because the matters they describe are subject to assumptions, known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors, some of which are listed under the "Risk Factors" section and elsewhere in this prospectus. Risks and uncertainties include, among others, the availability of funds and resources to pursue our research and development projects, the successful and timely completion of preclinical or clinical studies by third parties in which our products are utilized, our ability to meet the goals of our joint ventures and strategic partnerships, the degree of market acceptance for our products or for other companies' products in which our products are components, our ability to take advantage of business opportunities in the pharmaceutical industry, changes in our strategy or development plans, our ability to protect our intellectual property, uncertainties related to governmental regulations and regulatory processes, the volatility of our common share price, the effect of competition, the effect of technological changes, reliance on key personnel, and general changes in economic or business conditions. Except as required by law, we undertake no obligation to update forward-looking statements.

### **USE OF PROCEEDS**

We estimate that the net proceeds from this offering will be approximately \$4.68 million, based on a public offering price of \$2.65 per unit and \$2.64 per pre-funded unit, after deducting the placement agent fees and estimated offering expenses payable by us. We will only receive additional proceeds from the exercise of the warrants issuable in connection with this offering if the warrants are exercised and the holders of such warrants pay the exercise price in cash upon such exercise.

We intend to use the net proceeds from this offering for general corporate purposes, which may include working capital, capital expenditures and research and development expenses. Pending the use of the net proceeds of this offering, we intend to invest the net proceeds in short-term investment-grade, interest-bearing securities.

We will have broad discretion over the manner in which the net proceeds of the offering will be applied, and we may not use these proceeds in a manner desired by our shareholders. Although we have no present intention of doing so, future events may require us to reallocate the offering proceeds.

### PRICE RANGE OF OUR COMMON SHARES

Our common shares trade on the Nasdaq Capital Market in the United States under the symbol "SBOT" since November 5, 2015.

From January 15, 2013 through November 4, 2015, our common shares were traded in the United States on the U.S. OTCQB Marketplace Exchange under the symbol "SBOTF." From April 19, 2010 to April 8, 2016 our common shares traded on the TSX Venture Exchange in Canada under the symbol "KLH."

The table below lists the high and low sale prices for our common shares for each fiscal quarter during 2018, 2017 and 2016 as reported by Nasdaq, Inc. or OTC Markets Group, Inc., as applicable. The OTC quotations reflect inter-dealer prices, without retail mark- up, mark-down or commission, and may not necessarily represent actual transactions. The prices have been adjusted to reflect the one-for-seven reverse split of our outstanding common shares effected May 4, 2018.

### Common Shares Trading Activity Nasdaq Capital Market and OTCQB Marketplace

	<b>US Dollars</b>		;	
Period		High		Low
Fiscal Year 2018				
	_			
Third Quarter through 5/10/18	\$	6.50	\$	3.88
Second Quarter Ended 3/31/18	\$	6.93	\$	5.39
First Quarter Ended 12/31/2017	\$	9.10	\$	5.60
Fiscal Year 2017				
Fourth Quarter Ended 9/30/17	\$	10.08	\$	7.77
Third Quarter Ended 6/30/17	\$	11.48	\$	7.84
Second Quarter Ended 3/31/17	\$	15.12	\$	10.71
First Quarter Ended 12/31/16	\$	17.50	\$	13.09
Fiscal Year 2016				
Fourth Quarter Ended 9/30/16	\$	26.74	\$	14.91
Third Quarter Ended 6/30/16	\$	32.90	\$	17.08
Second Quarter Ended 3/31/16	\$	47.95	\$	33.67
First Quarter Ended 12/31/15 (after 11/4/15)	\$	65.87	\$	45.43
First Quarter Ended 12/31/15 (through 11/4/15)	\$	59.92	\$	47.25

On January 30, 2018, we received a letter from Nasdaq notifying us that, based on our closing bid price for the last 30 consecutive business days, we were not in compliance with the minimum bid price requirement of \$1.00 per share for continued listing, as set forth in Nasdaq Listing Rule 5550(a)(2).

In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we have an initial period of 180 calendar days, or until July 30, 2018, to regain compliance with the minimum bid price requirement for continued listing on the Nasdaq Capital Market. In order to regain compliance, the closing bid price of our common shares must be at least \$1.00 per share for at least ten consecutive business days during the 180-day grace period. On May 4, 2018, we effected a one for seven reverse split of our outstanding common shares.

### **DIVIDEND POLICY**

We have never declared or paid cash dividends on our common shares. We currently intend to retain any future earnings and do not expect to declare or pay any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our Board of Directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our Board of Directors considers relevant.

### CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of March 31, 2018:

### on an actual basis; and

• on an as adjusted basis to give effect to the sale of 1,388,396 units and 687,076 pre-funded units in this offering, the application of the net proceeds of this offering and after deducting the placement agent fees and estimated offering expenses payable by us.

You should read this table together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the accompanying notes contained in this prospectus.

	As of March 31, 2018 (Unaudited)			
	-	Actual	А	s Adjusted
Cash and cash equivalents	\$	3,293,010	\$	7,973,535
Short-term debt, net of discount	\$	589,793	\$	589,793
Shareholders' (deficit) equity:				
Common shares, unlimited common shares authorized, no par value, 1,502,870 issued and outstanding at				
March 31, 2018 and September 30, 2017		48,351,701		51,345,798
Accumulated share-based compensation		4,533,568		4,533,568
Accumulated deficit		(48,145,316)		(48,145,316)
Total shareholders' equity		4,739,953		7,734,050
Total capitalization	\$	5,329,746	\$	8,323,843

The total number of common shares outstanding in the table above is based on 1,502,870 common shares outstanding as of March 31, 2018, and excludes, as of that date, the following:

- 80,787 common shares issuable upon exercise of options to purchase our Common Shares outstanding as of March 31, 2018 at a weighted average exercise price of \$26.46 per share;
- 180,805 common shares issuable upon exercise of warrants to purchase our Common Shares outstanding as of March 31, 2018 at an exercise price of \$31.50 per share;
- 147,356 common shares reserved as of March 31, 2018 for future issuance under our 2017 Incentive Compensation Plan;
- 2,075,472 common shares underlying the warrants issuable to investors in connection with this offering, at an exercise price of \$2.65 per share; and
- 145,283 common shares underlying the warrants issuable to the placement agent in connection with this offering, at an exercise price of \$3.31 per share.



### DILUTION

If you invest in the units being offered by this prospectus, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per unit and the as adjusted net tangible book value per share of our common shares immediately after giving effect to this offering.

As adjusted net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the total number of our common shares outstanding as of March 31, 2018. After giving effect to the sale by us of 1,388,396 common units and 687,076 pre-funded units in this offering at a public offering price of \$2.65 and \$2.64 per unit and pre-funded unit, respectively, and after deducting estimated placement agent fees and estimated offering expenses payable by us, and assuming the exercise of all of the pre-funded warrants, the as adjusted net tangible book value as of March 31, 2018, would have been \$9.42 million, or \$2.63 per share. This represents an immediate decrease in as adjusted net tangible book value of \$0.02 per share to new investors purchasing common shares in this offering at the public offering price.

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

Public offering price per common share included in each unit		\$ 2.65
Net tangible book value per share as of March 31, 2018 before giving effect to this offering	\$ 3.15	
Decrease in net tangible book value per share attributable to new investors	\$ 0.52	
As adjusted net tangible book value per share after giving effect to this offering		\$ 2.63
Accretion per share to investors in this offering		\$ 0.02

The above discussion and table are based on our common shares outstanding as of March 31, 2018. This number excludes:

- 80,787 common shares issuable upon exercise of options to purchase our common shares outstanding as of March 31, 2018 at a weighted average exercise price of \$26.46 per share;
- 180,805 common shares issuable upon exercise of warrants to purchase our common shares outstanding as of March 31, 2018 at an exercise price of \$31.50 per share;
- 147,356 common shares reserved as of March 31, 2018 for future issuance under our 2017 Incentive Compensation Plan;
- 2,075,472 common shares underlying the warrants issuable to investors in connection with this offering, at an exercise price of \$2.65 per share; and
- 145,283 common shares underlying the warrants issuable to the placement agent in connection with this offering, at an exercise price of \$3.31 per share.

To the extent that any outstanding options or warrants are exercised, new investors will experience further dilution.

### 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 together with our historical consolidated financial statements and the other financial information appearing elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Please see "Special Note Regarding Forward-Looking Statements" for a discussion of the uncertainties, risks and assumptions associated with these statements. The results of operations for the periods reflected herein are not necessarily indicative of results that may be expected for future periods, and our actual results may differ materially from those discussed in our forward-looking statements as a result of various factors, including but not limited to those listed under "Risk Factors" on page 10 of this prospectus and those included elsewhere in this prospectus.

#### **Operating and Financial Review and Prospects**

#### Overview

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) and include the accounts of the Company and our wholly-owned subsidiaries, Stellar Biotechnologies, Inc. and BioEstelar S.A. de C.V.

In the past, operations of the Company have primarily been funded by the issuance of common shares, exercise of warrants, grant revenues, contract services revenue and product sales. While the Company plans to finance company operations in the near term with cash on hand and product sales, management expects to continue incurring losses for the foreseeable future. Management is taking action to adjust planned expenditures based on a number of factors including the size and timing of capital expenditures, staffing levels, inventory levels, and the status of customer clinical trials. Management also seeks to expand the customer base for existing marketed products, and intends to secure additional financing through debt and/or equity financings, including transactions with strategic customers and partners that may include debt and/or equity arrangements. We have not secured any commitment for new financing at this time, nor can we provide any assurance that new financing will be available on commercially acceptable terms, if needed. Without raising additional capital to pursue our business plan, there is substantial doubt about the Company's ability to continue as a going concern beyond one year from the date of the issuance of the Company's financial statements in Form 10-Q filed with the Securities and Exchange Commission on May 7, 2018.

### **Results of Operations**

### Comparison of the Six Months Ended March 31, 2018 and 2017

Our total revenues decreased by \$0.12 million to \$0.08 million for the six months ended March 31, 2018 compared to \$0.20 million for the same period last year due to a decrease in our product sales. While our customer base has not changed significantly, product sales volumes are subject to variability associated with the rate of development and progression of clinical studies of third-party products that utilize Stellar KLH. The rate of progression toward later stage studies is expected to continue to affect the timing and volume of future product sales. During both periods, product mix was similar, consisting of various grades of KLH for clinical and pre-clinical studies and immune system assays.

Our total expenses increased by \$0.05 million to \$2.82 million for the six months ended March 31, 2018 compared to \$2.77 million for the same period last year:

- Our cost of sales and contract services decreased by \$0.08 million to \$0.07 million for the six months ended March 31, 2018 compared to \$0.15 million for the same period last year primarily due to decreased product sales volume as well as reduced expenses related to sales of KLH that was produced as a byproduct of our research and development activities.
- Our research and development expenses increased by \$0.33 million to \$1.12 million for the six months ended March 31, 2018 compared to \$0.79 million for the same period last year. The increase was primarily due to research and development activities intended to increase the scalability and throughput capacity of existing manufacturing systems, including engineering lots of KLH produced under our optimization initiative. Additional research and development in aquaculture as well as process, analytical and product formulation development also contributed to the increase.



Our general and administrative expenses decreased by \$0.23 million to \$1.45 million for the six months ended March 31, 2018 compared to \$1.68 million for the same period last year primarily due to management's continued actions to reduce corporate expenses, including salaries, professional fees and travel, as well as lower legal fees and public company expenses.

Our total other income (loss) decreased by \$0.01 million to an overall loss of \$0.02 million for the six months ended March 31, 2018 compared to an overall loss of \$0.03 million for the same period last year. Foreign exchange loss was \$0.03 million for the six months ended March 31, 2018 compared to a loss of \$0.04 million for the same period last year due to fluctuations in exchange rates and decreased amounts held in Canadian cash and cash equivalents.

Our net loss for the six months ended March 31, 2018 was \$2.75 million, or \$1.83 per basic share, compared to a net loss of \$2.59 million, or \$1.79 per basic share, for the six months ended March 31, 2017.

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

Our total revenues were relatively unchanged at \$0.06 million for the three months ended March 31, 2018 compared to the same period last year. Product sales increased by \$0.05 million to \$0.06 million for the three months ended March 31, 2018 compared to \$0.01 million for the same period last year. While our customer base has not changed significantly, product sales volumes are subject to variability associated with the rate of development and progression of clinical studies of third-party products that utilize Stellar KLH. The rate of progression toward later stage studies is expected to continue to affect the timing and volume of future product sales. During both periods, product mix was similar, consisting of various grades of KLH for clinical and preclinical studies and immune system assays. We had no contract services revenue for the three months ended March 31, 2018 compared to \$0.05 million for the same period last year due to the completion of a technology transfer in the prior period.

Our total expenses increased by \$0.20 million to \$1.41 million for the three months ended March 31, 2018 compared to \$1.21 million for the same period last year:

- Our cost of sales and contract services was relatively unchanged at \$0.07 million for the three months ended March 31, 2018 compared to the same period last year. Increased costs associated with higher product sales volume and an initial GMP lot produced under our optimization initiative were offset by reduced expenses related to sales of KLH that was produced as a byproduct of our research and development activities.
- Our research and development expenses increased by \$0.16 million to \$0.49 million for the three months ended March 31, 2018 compared to \$0.33 million for the same period last year. The increase was primarily due to research and development activities intended to increase the scalability and throughput capacity of existing manufacturing systems, including engineering lots of KLH produced under our optimization initiative. Additional research and development in aquaculture as well as process, analytical and product formulation development also contributed to the increase.
- Our general and administrative expenses increased by \$0.03 million to \$0.77 million for the three months ended March 31, 2018 compared to \$0.75 million for the same period last year primarily due a noncash share-based compensation expense in the most recent quarter which was partially offset by reduced corporate expenses, including salaries, professional fees and travel, as well as lower legal fees and public company expenses.

Our total other income (loss) decreased by \$0.05 million to an overall loss of \$0.01 million for the three months ended March 31, 2018 compared to an overall gain of \$0.04 million for the same period last year. Foreign exchange loss was \$0.02 million for the three months ended March 31, 2018 compared to a gain of \$0.04 million for the same period last year due to fluctuations in exchange rates and decreased amounts held in Canadian cash and cash equivalents.

Our net loss for the three months ended March 31, 2018 was \$1.35 million, or \$0.90 per basic share, compared to a net loss of \$1.10 million, or \$0.76 per basic share, for the three months ended March 31, 2017.

#### Comparison of the Fiscal Years Ended September 30, 2017 and 2016

### Fiscal Year Ended September 30, 2017

Our total revenues decreased by \$1.04 million to \$0.23 million for fiscal 2017 compared to \$1.27 million for fiscal 2016 primarily due to a decrease in product sales. While our customer base has not changed significantly, product sales volumes are subject to variability associated with the rate of development and progression of clinical studies of third-party products that utilize Stellar KLH. For fiscal 2017, product sales consisted of KLH for clinical and pre-clinical studies and immune system assays. For fiscal 2016, product sales primarily consisted of higher volume orders for later stage clinical studies. The rate of progression toward later stage studies is expected to continue to affect the timing and volume of future product sales

Our total expenses decreased by \$0.73 million to \$5.45 million for fiscal 2017 compared to \$6.18 million for fiscal 2016:

- Our costs of sales and contract services decreased by \$0.57 million to \$0.25 million for fiscal 2017 compared to \$0.82 million for fiscal 2016 primarily due to decreased product sales.
- Our research and development expenses increased by \$0.24 million to \$1.97 million for fiscal 2017 compared to \$1.73 million for fiscal 2016. The increase was primarily due to research and development activities intended to increase the scalability and throughput capacity of existing manufacturing systems, including additional research and development in aquaculture, both in the U.S. and for our aquaculture feasibility assessment in Baja California, Mexico; improvements in analytical, manufacturing, and purification processes; stability studies; and formulation development.
- Our general and administrative expenses decreased by \$0.38 million to \$2.94 million for fiscal 2017 compared to \$3.32 million for fiscal 2016 primarily due to management's actions to reduce corporate expenses, including travel and professional fees, as well as lower legal fees and public company expenses.

Our other income (loss) increased by \$0.31 million to an overall gain of \$0.19 million for fiscal 2017 compared to an overall loss of \$0.11 million for fiscal 2016. The increase was primarily due to a noncash change in fair value of warrant liability related to warrants with Canadian dollar exercise prices. All such warrants were exercised or expired by December 2015 and, consequently, there was no warrant liability and no gain/loss in fair value of warrant

liability for fiscal 2017 compared to a loss of \$0.21 million for fiscal 2016. Foreign exchange gain (loss) was a gain of \$0.16 million for the fiscal 2017 compared to a gain of \$0.08 million for fiscal 2016 due to fluctuations in exchange rates and decreased amounts held in Canadian cash and cash equivalents.

Our net loss for fiscal 2017 was \$5.03 million, or \$3.44 per basic share, compared to a net loss of \$5.03 million, or \$3.99 per basic share, for fiscal 2016.

### Fiscal Year Ended September 30, 2016

Our total revenues increased by \$0.51 million to \$1.27 million for fiscal 2016 compared to \$0.76 million for fiscal 2015. Product sales increased by \$0.68 million to \$1.24 million for fiscal 2016 compared to \$0.56 million for fiscal 2015 primarily due to an increase in the number of customers and greater product sales volume, including sales under supply agreements and custom manufactured products. Contract services revenue decreased by \$0.17 million to \$0.03 million for fiscal 2016 compared to \$0.20 million for fiscal 2015 as a result of the successful conclusion of a collaboration agreement in December 2015.

Our total expenses increased by \$1.08 million to \$6.18 million for fiscal 2016 compared to \$5.10 million for fiscal 2015.

- Our costs of sales and contract services increased by \$0.24 million to \$0.82 million for fiscal 2016 compared to \$0.58 million for fiscal 2015, due to increased product sales.
- Our research and development expenses increased by \$0.70 million to \$1.73 million fiscal 2016 compared to \$1.03 million for fiscal 2015. The increase was a result of additional research and development in aquaculture, both in the U.S. and for our aquaculture feasibility assessment in Baja California, Mexico; improvements in analytical, manufacturing, and purification processes; stability studies; and formulation development.
- Our general and administrative expenses increased by \$0.09 million to \$3.32 million for fiscal 2016 compared to \$3.23 million for fiscal 2015. The increase resulted from increased corporate expenses, including our Nasdaq listing fees; compensation increases; and expanded business development and investor relations activities; offset by decreases in legal fees due to the Form S-3 shelf registration statement and our transition to reporting as a U.S. domestic issuer during fiscal 2015.

Other income decreased by \$1.64 million to an overall loss of \$0.11 million for fiscal 2016 compared to an overall gain of \$1.53 million for fiscal 2015 primarily due to a noncash change in fair value of warrant liability, which fluctuated to a loss of \$0.21 million for fiscal 2016 compared to a gain of \$2.13 million in fiscal 2015. All warrants with Canadian dollar exercise prices were exercised or expired by December 2015 and, consequently, there was no warrant liability and no gain/loss in fair value of warrant liability after that time. These fair value gains and losses occur in inverse relation to changes in our share price that affect the Black Scholes valuation model. The loss in fiscal 2016 is a result of the increase in our share price from September 30, 2015 to the exercise dates of the warrants compared to the gain in fiscal 2015 as a reflection of both the decrease in our share price from September 30, 2014 to the exercise dates of warrants during the year and the decrease in our share price from \$11.90 at September 30, 2014 to \$6.40 for warrants outstanding at September 30, 2015. Our foreign exchange gain in fiscal 2016 was \$0.08 million compared to a foreign exchange loss of \$0.65 million in fiscal 2015. The change over the prior year was due to improved exchange rates for our Canadian cash and cash equivalents.

Our net loss for fiscal 2016 was \$5.03 million, or \$3.99 per basic share, compared to a net loss of \$2.84 million, or \$2.50 per basic share, for fiscal 2015. The increase in net loss of approximately \$2.19 million for fiscal 2016 was primarily due to significant fluctuations in non-cash gain/loss in fair value of warrant liability and non-cash foreign exchange gain/loss, as well as increased research and development expenses, which were offset by increased product sales.



### **Capital Expenditures**

Our capital expenditures, which primarily consist of scientific, manufacturing, and aquaculture equipment, and facility leasehold improvements for the previous three fiscal years are as follows:

2017	\$ 302,733
2016	\$ 402,271
2015	\$ 274,589

Capital expenditures include \$145,318 of construction in progress, primarily for aquaculture site improvements and installation of lab equipment.

#### Liquidity and Capital Resources

Company operations have historically been funded by the issuance of common shares, exercise of warrants, grant revenues, contract services revenue and product sales. For the six months ended March 31, 2018 and 2017, the Company reported net losses of approximately \$2.8 million and \$2.6 million, respectively. For the fiscal years ended September 30, 2017, 2016 and 2015, the Company reported net losses of approximately \$5.0 million, \$5.0 million and \$2.8 million, respectively. While the Company plans to finance company operations in the near term with cash on hand and product sales, management expects to continue incurring losses for the foreseeable future. Management is taking action to adjust planned expenditures based on a number of factors including the size and timing of capital expenditures, staffing levels, inventory levels, and the status of customer clinical trials. Management also seeks to expand the customer base for existing marketed products, and intends to secure additional financing through debt and/or equity financings, including transactions with strategic customers and partners that may include debt and/or equity arrangements. We have not secured any commitment for new financing at this time, nor can we provide any assurance that new financing will be available on commercially acceptable terms, if needed.

At March 31, 2018, the Company had cash, cash equivalents and short-term investments in U.S. Treasury Bills of approximately \$3.8 million, working capital of approximately \$3.7 million, shareholders' equity of approximately \$4.7 million and an accumulated deficit of approximately \$48.1 million. Without raising additional capital to pursue our business plan, there is substantial doubt about the Company's ability to continue as a going concern beyond one year from the date of the issuance of the Company's financial statements in Form 10-Q filed with the Securities and Exchange Commission on May 7, 2018.

#### **Research and Development**

Our core business is developing and commercializing Keyhole Limpet Hemocyanin for use in immunotherapy and immunodiagnostic applications. Our internal research has included, among other activities, continual improvement of methods for the culture and growth of Giant Keyhole Limpet, innovations in aquaculture systems and infrastructure, biophysical and biochemical characterization of the KLH molecule, analytical processes to enhance performance of our products, KLH manufacturing process improvements, new KLH formulations, and early development of potential new KLH-based immunotherapies.

Research and development costs, including materials, KLH designated for internal research use only and salaries of employees directly involved in research and development efforts, are expensed as incurred.

The following table includes our research and development costs for each of the most recent three fiscal years:

2017	\$ 1,973,400
2016	\$ 1,729,445
2015	\$ 1,029,489

#### **Off Balance Sheet Arrangements**

We do not have any off balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources.

## **Disclosure of Contractual Obligations**

We currently lease 4,300 square feet of executive office and laboratory space in Port Hueneme, California under a lease which was renewed in July 2016 for a two-year term, with options to renew for three successive two-year terms.

Our aquaculture and KLH manufacturing operations are located on approximately 37,000 square feet of oceanfront land in the Port Hueneme Aquaculture Business Park. Our facilities here include specialized aquaculture infrastructure, seawater supply and discharge systems, laboratories, manufacturing and administrative offices. We have two sublease agreements which expire in September and October 2020, respectively, with options to extend the leases for two additional five-year terms.

We also currently lease undeveloped land in Baja California, Mexico under a lease agreement which we entered into in June 2015, with a three-year term, which lease agreement is terminable at will at any time with 30 days prior notice by either party. In February 2018, the lease term was extended for two years without further rent payments. We are utilizing the undeveloped land to conduct suitability studies for the potential development of an additional aquaculture locale and future expansion of production. We also have a short-term lease for office space in a business center located in Ensenada, Baja California. This office serves as the administrative headquarters of our BioEstelar subsidiary.

We have purchase commitments for contract research organizations, consultants and construction contractors. The approximate amounts of our contractual obligations are as follows:

## Contractual Obligations as of September 30, 2017

	Less than 1						Μ	ore than 5		
	Total		year		r 1-3 ye		rs 3-5 years			years
Operating lease obligations	\$	378,000	\$	160,000	\$	212,000	\$	6,000	\$	-
Purchase obligations		252,000		186,900		65,100		-		-
Total	\$	630,000	\$	346,900	\$	277,100	\$	6,000	\$	-

# **Significant Accounting Policies and Estimates**

Our consolidated financial statements, which are indexed in the Registration Statement of which this prospectus forms a part, have been prepared in accordance with accounting principles generally accepted in the United States, which require that the management make certain assumptions and estimates and, in connection therewith, adopt certain accounting policies. Our significant accounting policies are set forth in Note 3 in the Notes to Consolidated Financial Statements. Of those policies, we believe that the policies discussed below may involve a higher degree of judgment or may otherwise be more relevant to our financial condition and results of operations.



## Investments

Investments at September 30, 2017 and 2016 consisted of U.S. Treasury bills with original maturities between 13 and 52 weeks. They are classified as held-to-maturity and are reported at amortized cost, which approximates fair value. We regularly review these investments to determine whether any decline in fair value below the amortized cost basis has occurred that is other than temporary. If a decline in fair value has occurred that is determined to be other than temporary, the cost basis of the investment is written down to fair value.

#### Inventory

We record inventory at the lower of cost or market, with market not in excess of net realizable value. Raw materials are measured using FIFO (firstin first-out) cost. Work in process and finished goods are measured using average cost. Raw materials include inventory of manufacturing supplies. Work in process includes manufacturing supplies, direct and indirect labor, contracted manufacturing and testing, and allocated manufacturing overhead for inventory in process at the end of the year. Finished goods include products that are complete and available for sale. The Company recorded work in process and finished goods inventory only for those products with recent sales levels to evaluate net realizable value.

# Warrant Liability

Our equity offerings in prior years included the issuance of warrants with exercise prices denominated in Canadian dollars. As a result of having exercise prices denominated in a currency other than our functional currency, our warrants with Canadian dollar exercise prices met the definition of derivatives and were therefore classified as derivative liabilities measured at fair value with noncash adjustments to fair value recognized through the consolidated statements of operations. Upon exercise of these warrants, the fair value of warrants included in derivative liabilities was reclassified to common shares. If these warrants expired, the related decrease in warrant liability was recognized as gain in fair value of warrant liability. There was no cash flow impact as a result of this accounting treatment. The fair value of the warrants was determined using the Black-Scholes option valuation model at the end of each reporting period.

All warrants with exercise prices denominated in Canadian dollars were exercised or expired by December 2015. Therefore, there is no outstanding warrant liability at September 30, 2017.

#### **Revenue Recognition**

#### Product Sales

The Company recognizes product sales when KLH product is shipped (for which the risk is typically transferred upon delivery to the shipping carrier) and there is persuasive evidence of an arrangement, the fee is fixed or determinable, and collectability is reasonably assured. The Company documents arrangements with customers with purchase orders and sales agreements.

Product sales include sales made under supply agreements with customers for a fixed price per gram of KLH products based on quantities ordered. Supply agreements are typically on a non-exclusive basis except within that customer's field of use.

#### Contract Services Revenue

The Company recognizes contract services revenue when contract services have been performed and reasonable assurance exists regarding measurement and collectability. An appropriate amount will be recognized as revenue in the period that the Company is assured of fulfilling the contract requirements. Amounts received in advance of performance of contract services are recorded as deferred revenue.

Contract services include services performed under collaboration agreements and technology transfer and purchase agreement.

# Share-Based Compensation

We grant options to buy common shares of the Company to our directors, officers, employees and consultants, and grant other equity-based instruments to non-employees.

The fair value of share-based compensation is measured on the date of grant, using the Black-Scholes option valuation model and is recognized over the vesting period net of estimated forfeitures for employees or the service period for non-employees. The Black- Scholes option valuation model requires the input of subjective assumptions, including price volatility of the underlying shares, risk-free interest rate, dividend yield, and expected life of the option.

# Foreign Exchange

Items included in the financial statements of our subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the functional currency). Our functional currency and the functional currency of our subsidiaries is the U.S. dollar.

Transactions in currencies other than the U.S. dollar are recorded at exchange rates prevailing on the dates of the transactions.

# **Recent Accounting Pronouncements**

Recent accounting pronouncements are contained in Note 3 to the financial statements, for the fiscal year ended September 30, 2017.

#### BUSINESS

## Overview

We are a biotechnology company engaged in the aquaculture, research and development, manufacture and commercialization of KLH. KLH is an immune-stimulating protein with an extensive history of safe and effective use in immunological applications.

Immunotherapies (also known as therapeutic vaccines) are an emerging class of treatments that involve using the body's own immune system to target and treat disease. Today, multiple companies and institutions are developing drugs that combine disease-targeting agents with KLH. These disease-targeting agents do not evoke a robust immune response by themselves and thus require a carrier molecule like KLH.

The versatility of the KLH molecule and its use in multiple drug development pipelines provide numerous commercial opportunities for us. KLH is currently utilized in immunotherapies in clinical or pre-clinical development for Alzheimer's disease, metastatic breast cancer, type 1 diabetes, dermatomyositis, systemic lupus erythematous, ovarian cancer and various other cancers and diseases. The successful commercialization of one or more of these drug development pipelines, especially in a major indication, could have a significant impact on the industry's ability to produce sufficient quantities of KLH. The protein is derived only from the Giant Keyhole Limpet, a scarce ocean mollusk that is native to a limited stretch of Pacific Ocean coastline. Due in part to the inherent limitations of utilizing of wild sources of KLH, we believe that aquaculture production methods, like the methods we practice, will be required to provide scalable, fully traceable supplies of KLH.

Based upon our specialized knowledge of aquaculture science and KLH, we have built unique land-based aquaculture, laboratory and production facilities in Port Hueneme, California, and developed production and manufacturing processes to produce clinical-grade KLH using Current Good Manufacturing Practices (GMP). Using our proprietary aquaculture technology, we can support the marine mollusk from embryo to protein-producing adult, and we now support multiple generations of limpets grown entirely within our land-based aquaculture facility. We believe that other KLH suppliers do not have this capability and thus are reliant on scarce, wild populations of limpets.

We market and sell our KLH products under the brand Stellar KLH. Our customers and partners include multinational biotechnology and pharmaceutical companies, academic institutions, clinical research organizations and research centers. We have multiple agreements to license and supply Stellar KLH and other technology in exchange for fees, revenues or royalties. Our customers manage and fund all product development and regulatory submissions for their respective drug products that utilize our KLH protein.

#### **Competitive Strengths**

We believe that we possess a number of competitive strengths that position us to become the world leader in the sustainable manufacture of GMP grade KLH and KLH-conjugated vaccines, including:

- *Fully permitted, land-based aquaculture facility produces a barrier to market entry.* Our proprietary methods, infrastructure and aquaculture facility give us the capability to support the source animal in aquaculture. Due to the time needed to raise the source animal to maturity, and the time needed to build and validate facilities and manufacturing processes, including water discharge permits, we believe that we have a five to seven year lead over any new market entrants attempting to produce KLH in a similar manner. Due to its exceptional size and complexity, KLH has not been reproduced synthetically.
- *Fully traceable, GMP grade product offerings benefit commercialization programs.* Using our proprietary production and manufacturing methods, we are able to produce a high quality, GMP grade KLH product that is fully traceable and controlled from native source to finished product, which we believe are important considerations for our pharmaceutical partners as they pursue later-stage trials and commercial introductions subject to more rigorous regulatory standards than early-stage research. Due to the known origin of material and continuity of data, we believe we are able to create a more consistent, high quality, immunogenic product than other KLH proteins in the market. In contrast, commercial supplies of KLH from other sources have historically differed widely in their source, traceability, purity, form and preparation, as well as their immunogenicity (their ability to stimulate an immune response). We believe that we are the only company that offers GMP grade KLH supported by fully traceable manufacturing methods.



- *Multiple supply and collaboration agreements reduce single-customer dependence.* We believe that our supply and collaboration agreements with drug developers, which include binding orders, allow us to better manage our working capital as well as build long- term relationships. Our manufacturing and quality experts work closely with our collaboration partners and customers to deliver KLH products according to their specifications. We believe that our long-term relationships and collaborative approach have helped build customer trust and loyalty.
- Business model leverages growth potential. We believe we have an attractive business model due to the unique nature of our product offerings, embedded growth opportunities within our existing customer base and operating leverage. As we increase production volumes and sales, we expect our operating expenses to decrease as a percentage of revenue, providing for greater operating leverage. In addition, we have established a model via our joint venture, Neostell, S.A.S., to participate in the manufacturing of KLH-conjugated vaccines, which provides additional revenue and growth opportunities.
- Intellectual property portfolio includes protection for specialized systems and technologies. Our intellectual property mainly consists of trade secrets. We have intellectual property related to KLH development and manufacturing, including one U.S. patent and foreign counterparts, and trade secrets and know-how related to specialized aquaculture systems and technologies; related to the Giant Keyhole Limpet, including spawning, selection and maintenance of the species; non- lethal KLH protein extraction methods; and the processing, purification and production of KLH formulations.
- Safety profile and extensive citations in scientific literature contribute to the appeal of KLH as a carrier platform for immunotherapies. KLH has been used for decades in immune system testing, it has an extensive safety record, and continues to be selected for new immunotherapies preparing to enter clinical testing. According to a search on PubMed, a service of the U.S. National Library of Medicine, there are more than 3,600 publications referencing Keyhole Limpet Hemocyanin in biomedical literature.
- *Sustainability practices protect marine source and promote scalability.* Our KLH protein is produced using environmentally sound, sustainable practices intended to protect and renew the live marine source. We believe this is a critical component of ensuring long-term, scalable supplies, since rapid growth in demand has had severe consequences to other related species. In California, for example, failure to manage wild populations of abalone resulted in dramatic declines and eventually led to closure of commercial abalone harvests.
- *Leadership team provides extensive aquaculture production and related industry expertise.* Our leadership team includes industry experts who have extensive experience in the field of aquaculture and Giant Keyhole Limpet production, and possess a deep understanding of a variety of biotechnology businesses. Our President and CEO has more than 40 years of experience leading commercial aquaculture businesses and projects focused on mollusk domestication and production.

# **Our Strategy**

We intend to develop and expand the market for KLH. Our near-term focus is to support the further development of third party drug candidates utilizing Stellar KLH and to expand our customer base. This strategy seeks to preserve the opportunity for Stellar to share in the successful development and commercialization of product candidates utilizing our licensed KLH products. In addition to fees, revenues or royalties we may receive, we believe that the successful development of third party drug candidates will further validate our technologies, increase awareness and promote broader adoption of our products by additional third parties. Key elements of our business strategy include:

- *Expand infrastructure and capacity while prudently managing our working capital.* We currently have multiple customers with KLH-based drug candidates in Phase 2 studies. While the outcome of these clinical studies cannot be predicted, we are preparing for the possible impact that favorable clinical results could have on the KLH market and the company's supply capabilities. We plan to incrementally increase our infrastructure, manufacturing capabilities and KLH production capacity based on our customers' forecasts and the anticipated future requirements of commercial-scale vaccine manufacturing, which we estimate could require multiple kilograms of GMP grade KLH per year. In order to produce such volumes and to provide our customers with greater certainty of future supply, we intend to have the capacity to support commercial drug launches in a variety of indications, with planned redundancy at multiple locations. We also plan to increase efficiency and throughput capacity by optimizing our manufacturing and purification processes.
- *Pursue additional supply and collaboration agreements.* We plan to continue pursuing opportunities for commercial growth that build on our strengths and core competencies in KLH development and manufacturing, including additional supply and collaboration agreements. We regularly engage in discussions with various entities involved in immunotherapies, in connection with opportunities for licensing, supply and collaborative research.
- Support continuing development of our Neostell Growth Initiative. In July 2016, we formed Neostell S.A.S., a joint venture with Neovacs S.A, to produce Neovacs' Kinoid immunotherapy product candidates which utilize Stellar KLH as a carrier molecule. In addition to expanding our market opportunities related to manufacturing of Neovacs' KLH-conjugated vaccines, this joint venture provides the opportunity to manufacture and sell KLH-based immunotherapies for third party customers.
- *Continue innovation and new product development.* We plan to expand our KLH technology portfolio through ongoing research and development. Our research and development activities are focused primarily on the aquaculture of the Giant Keyhole Limpet; improvements in KLH protein characterization and manufacturing; the development of functional assays; and new uses for KLH in immunotherapy and immunodiagnostic applications. We believe that these activities provide long-term strategic, revenue and clinical opportunities by extending the commercial use of Stellar KLH and furthering our understanding of the KLH molecule.
- *Pursue additional markets for our technology and products.* We intend to evaluate additional markets for our current products and technologies. Due to the immune-stimulating characteristics of KLH, we believe the protein could have broader applications in the medical field or other markets.

## **Keyhole Limpet Hemocyanin**

KLH is a safe, potent, immune-stimulating protein. Specifically, it is a very large, high molecular weight, oxygen-carrying glycoprotein. In addition to the native molecule, KLH can be chemically dissociated into a subunit formulation commonly used in the production of immunotherapies. Both the native, high molecular weight molecule and subunit forms of KLH are excellent immune stimulants. The KLH molecular structure offers numerous sites for conjugation, and can generate multiple product configurations. Because of its large size, immune-stimulating properties, numerous sites for conjugation, and safety profile, KLH is used by researchers and product developers as a vaccine carrier protein. However, due to its exceptional size and complexity, KLH has not been reproduced synthetically.



KLH can be used as a carrier molecule, or it can be used as a finished, injectable product in the immunodiagnostic market.

As a carrier molecule, KLH is combined, or conjugated, to vaccine antigens that are used to promote the generation of antibody and cell-mediated immune responses against targeted diseases. By themselves, the small haptens (partial antigens) and vaccine antigens used to target these diseases are not usually immunogenic enough to awaken the immune system and therefore, require a carrier molecule or adjuvant, like KLH, in order to be effective. The combination of an antigen against specific pathogenic targets, such as tumors, and over- expressed proteins, conjugated to the immunogenic KLH molecule, is the basis for a promising new class of drugs in development known as active immunotherapies or therapeutic vaccines. Unlike preventative vaccines, active immunotherapies are designed to stimulate the body's own immune system to generate an immune response to target and attack an existing disease or condition. We believe immunotherapies are, and will continue to be, one of the fastest-growing sectors of pharmaceutical research and development. KLH is an important component for drugs used in clinical development, including major indications such as Alzheimer's disease, metastatic breast cancer, systemic lupus erythematous, dermatomyositis, ovarian cancer and various other cancers and diseases. New indications expected to enter clinical trials, such as type 1 diabetes, point to expanding clinical potential for KLH.

As a finished injectable product, KLH has been used extensively by pharmaceutical companies and researchers as a safe, immune- stimulating antigen in drug-screening, drug immunotoxicology, and assessment of immune status. KLH is a standard immunogen in T-Cell Dependent Antibody Response (TDAR), a functional assay which is widely recognized as a standard test for monitoring the effects of drugs on the immune system.

KLH protein is derived only from the hemolymph of the Giant Keyhole Limpet (Megathura crenulata), a mollusk native only to a limited stretch of the Pacific Ocean coastline along Southern California and Baja California, Mexico. Historically, suppliers other than us have obtained KLH protein directly from wild and sensitive populations of Giant Keyhole Limpet, or have utilized lethal production processes. Based on publicly available information and reports, commercial supplies of KLH differ widely in their source, traceability, purity, form, and preparation, as well as in immunogenicity (their ability to stimulate an immune response). We believe that highly- specialized aquaculture manufacturing methods, like the methods we practice, protect the KLH molecule's source species and provide sustainable, scalable supplies of quality KLH protein. The concept of sustainability involves sound, responsible management of environmental resources and, especially where biological systems are concerned, includes protecting native species so that the species thrive and remain diverse and productive over time. Further, we believe that environmentally sound methods associated with professional and specialized aquaculture can minimize variability in KLH products and assure full traceability to their biological source.

#### **Our Technology**

We have spent more than 15 years developing and optimizing sustainable KLH production methods, specifically focused on protection of the Giant Keyhole Limpet and a patented, non-lethal method to extract KLH protein. We believe our proprietary methods will provide a scalable supply of GMP grade KLH and meet pharmaceutical industry standards for immune response, consistency, purity, and traceability while protecting the natural source species.

Our proprietary aquaculture technology involves methods we developed and optimized to control the reproduction and growth of the Giant Keyhole Limpet including, but not limited to, culture systems, nutritional requirements and the recirculation of seawater. We achieved a significant milestone in aquaculture science by developing the capability to sustain the complete life cycle of the Giant Keyhole Limpet. Using our proprietary methods, we can support the marine mollusk from embryo to protein-producing adult, and we now support multiple generations of limpets grown entirely within our landbased aquaculture facility. We believe that other KLH suppliers do not have this capability and thus are reliant on scarce, wild populations of limpets.

The aquaculture cycle to raise Giant Keyhole Limpets from fertilized eggs to maturity for KLH production is approximately five years, with multiple complex larval and juvenile stages. The hemolymph circulatory fluid, which contains KLH, is extracted in a non-lethal manner utilizing our patented methods. Once extracted, the hemolymph is processed and purified through our proprietary methods, which are protected as trade secrets. KLH can be extracted from mature limpets multiple times per year.

We currently maintain a production inventory of limpets sufficient for an annual capacity of up to 1,500 grams/year of KLH pharmaceutical intermediate, which can be further processed and purified to produce various final product grades and formulations. We believe we can continue to scale up capacity to meet anticipated customer demand in the near term. Given sufficient funding to continue scale- up, our projected production capacity is up to 20,000 grams (20 kg) of KLH pharmaceutical intermediate in five to seven years. We plan to incrementally increase hatchery production of limpets and expand aquaculture infrastructure, which will thereby increase our KLH production capacity, in order to meet the anticipated future multi-kilogram KLH requirements of immunotherapy commercialization.

In December 2016, we initiated plans to optimize our protein manufacturing processes at our primary facility in Port Hueneme, California, including the evaluation and use of new equipment. This initiative is intended to increase the scalability and throughput capacity of existing manufacturing systems, which were originally developed to provide clinical development stage quantities of our Stellar KLH products.

We rely on contract manufacturing organizations and contract testing organizations for certain steps of GMP processing and quality control testing. The services performed by these contract vendors have included sterile fill/finish and product release testing.

As a result of these operational capabilities, we believe we will be able to supply GMP grade KLH in commercial quantities to meet the anticipated long-term demand within the pharmaceutical industry, while protecting the natural source species. We base these beliefs on our intellectual property, achievements in aquaculture science, KLH production capacity, KLH sustainable manufacturing know- how, and survey data used to estimate populations of Giant Keyhole Limpets in the wild.

# **Our Aquaculture and KLH Production Facilities**

We maintain research and manufacturing facilities directly along the Pacific Ocean with dedicated, land-based aquaculture operations in Port Hueneme, California. We have approximately 37,000 square feet of leased aquaculture, manufacturing and laboratory space. We believe our waterfront location is a proprietary asset that allows our marine scientists to work in close proximity to naturally resident Giant Keyhole Limpet colonies, and to be at the forefront in developing protective measures and environmentally sound practices for KLH production. At this location, our seawater supply and discharge system is fully permitted, which we believe is a competitive strength due in part to the time required and uncertainties related to obtaining new water discharge permits in the State of California.

Our aquaculture operations include, among other specialized infrastructure, systems for spawning, larval development, and maturation of limpets, recirculating seawater supply systems and environmental controls. Our facility currently includes multiple production tanks and numerous individual limpet production modules in two independent aquaculture production systems. Each closed recirculating system is equipped with temperature controlled seawater distribution, filtration and treatment equipment. The facility also contains a fabrication shop for production of equipment and culture apparatus.

# Additional Aquaculture and KLH Production Locations

In January 2017, we established a wholly owned Mexican subsidiary under the name BioEstelar, S.A. de C.V. to support our plan to establish additional aquaculture capabilities in Baja California, including the development of regional marine resources, aquaculture and raw material processing for Stellar's KLH products. Since 2015, we have leased undeveloped land in Baja California as part of multi-year site suitability studies. We have a related, exclusive collaboration agreement with the lessor to collaborate on the design, expansion and development of marine aquaculture resources for hatchery and maturation of Giant Keyhole Limpets on the leased property. The collaboration agreement expires in June 2018, unless terminated earlier. We believe this expansion in Mexico, if pursued to the development stage, will support our goal to meet the anticipated long-term industry demand for KLH protein.

# **Research and Development**

Our research and development is focused primarily on the aquaculture of the Giant Keyhole Limpet; improvements in KLH protein characterization and manufacturing; the development of functional assays; and new uses for KLH in immunotherapy and immunodiagnostic applications. These activities involve both internal programs and external collaborations with other biopharmaceutical companies or research organizations.

Our internal research has included, among other activities, improvement of methods for the culture and growth of Giant Keyhole Limpet, developing proprietary formulated limpet diets, innovations in aquaculture systems and infrastructure, biophysical and biochemical characterization of the KLH molecule, analytical processes to enhance performance of our products, KLH manufacturing process improvements, and new KLH formulations and KLH-related technologies.

Our external collaborations have historically involved both development and evaluation projects, with multiple biopharmaceutical companies and research institutions, for the use of Stellar KLH in their programs. We believe that these collaborations provide for strategic, revenue and clinical opportunities for our future business by extending the commercial use of Stellar KLH and furthering our understanding of the KLH molecule.

For the years ended September 30, 2017, 2016 and 2015, our research and development expense were \$1.97 million, \$1.73 million and \$1.03 million, respectively. These amounts related mainly to research and development in aquaculture, improvements in analytical, manufacturing, and purification processes, stability studies and formulation development.

# **Our Stellar KLH Products**

We offer Stellar KLH protein in various grades, formulations, custom configurations and fill finishes for both drug development and research applications. Our portfolio includes GMP products suitable for our customers' Phase 1 and Phase 2 clinical studies as well as research grade products intended for: conjugation as a carrier molecule in therapeutic vaccines; assessing immune function; and, in immunotoxicology studies, for monitoring the immunomodulatory effects of drug candidates. We also offer KLH-based in vitro diagnostic kits for research and preclinical use. We are in the process of upgrading and scaling our manufacturing operations and plan to produce KLH suitable for commercial drugs by the time our customers are ready to file marketing applications referencing our DMFs.

We currently have limited revenue from sales of our Stellar KLH products. The list price for bulk Stellar KLH protein ranges from approximately \$15,000 to \$50,000 per gram, depending on the purity, grade, preparation, packaging configuration and volume ordered. While our customer base has not changed significantly from year to year, product sales volumes have been highly dependent and subject to a high degree of variability associated with the rate of development and progression of clinical studies of third-party immunotherapies and other technologies that utilize our products. The rate of progression towards later stage studies is expected to continue to affect the timing and volume of future product sales. The advancement and commercial success of third-party products utilizing Stellar KLH is dependent upon many factors, including available capital, trial recruitment and progress, trial success, and regulatory review and approval.

Revenues from the sale of products and contract services revenues in the six months ended March 31, 2018 and fiscal years 2017, 2016 and 2015 are as follows:

	Six Months		Fiscal Year		Fiscal Year		Fiscal Year		
	Ended Ended Ended		Ended		Ended Ended		Ended	]	Ended
		March 31, 2018		September 30, 2017		September 30, 2016		September 30, 2015	
Product sales	\$	84,539	\$	178,287	\$	1,239,689	\$	563,689	
Contract services revenue	\$	-	\$	50,000	\$	32,000	\$	195,000	

The geographic breakdown of revenues in fiscal years 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Europe	64%	43%	53%
North America	33%	12%	9%
Asia	3%	45%	38%

#### Drug Master Files for Stellar KLH

We have submitted Type II Drug Master Files (DMFs) for Stellar KLH to the FDA. A Master File is a confidential, detailed dossier kept on file at the FDA that contains the proprietary information on the manufacture and safety of a drug component. These files can be used to support the regulatory approval process for customers' immunotherapy products that use our Stellar KLH, while allowing us to control access to our manufacturing data.

# Customers

We primarily market and distribute our products directly to biotechnology and pharmaceutical companies, academic institutions, clinical research organizations and research centers. Products are shipped to our customers from our facilities in Port Hueneme, California using a common carrier chosen by the customer. The geographic markets of our customers are principally Europe, North America and Asia.

The customers that represent 10% or more of our total consolidated revenue in the six months ended March 31, 2018 and fiscal years 2017, 2016 and 2015 are as follows:

Customer		Percentage
	<u>Six Months Ended March 31, 2018</u>	
Zoetis, Inc.		58%
Araclon Biotech, SL		14%
	<u>Fiscal Year Ended September 30, 2017</u>	
Araclon Biotech, SL		57%
Matrivax R&D Corporation		22%
	<u>Fiscal Year Ended September 30, 2016</u>	
OBI Pharma, Inc.		41%
Eurogentec		25%
Neovacs SA		10%
	<u>Fiscal Year Ended September 30, 2015</u>	
Araclon Biotech, SL		19%
Amaran Biotechnology, Inc.		19%
OBI Pharma, Inc.		17%
AXON Neuroscience SE		16%
Neovacs SA		15%

# Supply Agreements, Collaboration Agreements and Contracts

We have entered into, and intend to continue to enter into, agreements with third parties that will allow us to supply Stellar KLH in exchange for fees, revenues or royalties. Supply agreements generally involve a customer's commitment to purchase our Stellar KLH for use as a carrier molecule in the customer's own immunotherapy products or as a finished product in their development programs. In return, we license and provide exclusive or priority supply in a given field and territory, and provide technical and regulatory support. When applicable, we also agree to maintain a master file with the U.S. Food and Drug Administration (FDA) for the KLH product. Our current supply agreements are limited to clinical trials and typically have an initial multi-year term, which may be renewed by customers for additional one-year periods. Our supply agreements also typically provide us with first negotiation rights for the supply of KLH in connection with potential future commercialization of a customer's products.

To date, our Stellar KLH protein has been used in research and development, preclinical and clinical phases of development but has not yet been used in any commercialized and marketed drug products. Quantities required for clinical trials depend on, among other variables, the nature of the trial, the clinical indication, the number of patients enrolled, dosing regimens and vaccine manufacturing processes.

We have supply agreements with Araclon Biotech SL, a privately-held biotechnology company headquartered in Spain and majority-owned by global healthcare company Grifols, who is developing beta amyloid-targeting active immunotherapies for neurodegenerative diseases with a primary focus on Alzheimer's disease; Amaran Biotechnology, Inc., a biopharmaceuticals manufacturer based in Taiwan that manufactures a KLH conjugate vaccine for OBI Pharma, Inc., a publicly-listed Taiwan biotech company; and French biotechnology company Neovacs S.A, for the use of Stellar KLH in the development and manufacture of Neovacs' active immunotherapies. As previously disclosed, our agreement with Neovacs provides for Neovacs to purchase Stellar KLH for use in its proprietary KLH-based Kinoid immunotherapies in the European Union, Latin America, Asia, the U.S. and Canada. Our customers manage and fund all product development and regulatory submissions for their respective drug products that utilize Stellar KLH.

# **Neostell Joint Venture Agreement**

In May 2016, we entered into a joint venture agreement with Neovacs S.A., a publicly-held biotechnology company in Paris, France for the formation of a joint venture company to manufacture and sell conjugated therapeutic vaccines. In July 2016, Neostell S.A.S., a French simplified stock corporation (Neostell), was formed to carry out the business of the joint venture. Neostell is expected to produce Neovacs' Kinoid immunotherapy product candidates which utilize Stellar KLH as a carrier molecule. Neostell may also manufacture and sell other KLH-based immunotherapy products for third-party customers worldwide.

We hold a 30% equity interest in the joint venture in exchange for an initial capital contribution of €120,000. One-half of the initial contribution, approximately \$67,000, was paid in June 2016 with the balance due upon the occurrence of certain defined future events. We will also provide additional financing to Neostell, as may be required, on a pro rata basis in line with our equity interest. According to the joint venture agreement, if certain milestones were not achieved by December 31, 2017, Neostell would be dissolved, unless the parties mutually agreed to pursue the joint venture arrangement, or either party decides to purchase the equity interests of the other party. In February 2018, the parties renewed and amended the joint venture agreement to extend this deadline to December 31, 2018. Each of the parties is entitled, upon the occurrence of certain defined events, to acquire the interest of the other party. Except as otherwise described herein, the joint venture has an initial ten-year term, renewable for successive five-year terms. If either party provides notice at least six months prior to the expiration date of an applicable term that it does not wish to continue its participation in the joint venture, the other party will have a right to acquire all of such terminating party's equity interests in Neostell.

In connection with the formation of Neostell and the execution of its strategy, the parties intend over time to enter into an exclusive supply agreement within a limited field of use for Stellar to supply KLH to Neostell, a supply agreement designating Neostell as the exclusive manufacturer and supplier of the Neovacs' vaccines, and services agreements for the provision of various knowledge and expertise by each of the parties. Neovacs will also license certain of its intellectual property to Neostell.

## **Intellectual Property and License Agreements**

We hold important proprietary intellectual property related to KLH development and manufacture and to the environmental protection of the Giant Keyhole Limpet including, but not limited to, one U.S. patent and foreign counterparts and trade secrets related to specialized aquaculture systems and technologies; spawning, selection and maintenance of the Giant Keyhole Limpet; non-lethal KLH protein extraction methods; and the processing, purification and production of KLH formulations. Our proprietary methods also include methods for the control of larval development, metamorphosis and maturation of the Giant Keyhole Limpets, which we protect as trade secrets.

Our success depends in part on our ability to obtain and maintain proprietary protection for our product technology and know- how, to operate without infringing proprietary rights of others, and to prevent others from infringing our proprietary rights. We seek to protect our proprietary position by, among other methods, filing, when possible, U.S. and foreign patent applications relating to our technology, inventions and improvements that are important to our business. We also rely on trade secrets, know-how, continuing technological innovation, and in-licensing opportunities to develop and maintain our proprietary position. We require our employees, consultants and advisors to execute confidentiality agreements in connection with their employment, consulting or advisory relationship with us. We also require our employees, and to the extent practicable, our consultants and advisors with whom we expect to work on our products to agree to disclose and assign to us all inventions made in the course of our working relationship with them, while using our intellectual property or which relate to our business.



We hold patent protection for our non-lethal extraction methods of hemocyanin in the United States and other countries, including one issued patent in the United States, U.S. Patent No. 6,852,338, which currently expires in 2023, and covers a two-step method for obtaining hemolymph from a live gastropod mollusk. This U.S. patent was originally granted to our Chief Executive Officer, Frank Oakes, who assigned the patent to the Company in August 2002. Foreign patent counterparts were granted in Canada, France and Germany.

The scope of any patent protection may not exclude competitors or provide competitive advantages to us, and any of our patents may not be held valid if subsequently challenged, and others may claim rights in or ownership of our patents and proprietary rights. Furthermore, others may develop products similar to our products and may duplicate any of our products or design around our patents.

Our common law trademarks include, but are not limited to, "Powering and Improving Immunotherapy<sup>TM</sup>", "Stellar KLH<sup>TM</sup>" and "KLH Site<sup>TM</sup>". We have not sought registered trademarks for these or other marks from the U.S. Patent and Trademarks Office. In addition to our U.S. patent and foreign counterparts and trademarks, we rely on trade secrets and other intellectual property laws, nondisclosure agreements and other measures to protect our intellectual property rights.

# Competition

The immunotherapy industry is rapidly evolving and new competitors with competing technologies and products are regularly entering clinical development and the market. We compete on the basis of: the advantages and disadvantages of Stellar KLH as compared to other KLH proteins manufactured by our competitors; our ability to educate the industry about the high quality, and sustainable and traceable features, of Stellar KLH; our future ability to supply scalable quantities of GMP grade KLH; product efficacy; customer service; and the price and demonstrated cost-effectiveness of Stellar KLH as compared to our competitors. We believe that our products and services currently compete favorably with respect to such factors. However, we may not be able to maintain our competitive position against current and potential competitors. We compete directly with Biosyn Corporation, a pharmaceutical and biotechnology company which manufactures KLH starting material and offers clinical and research grade KLH products. We also compete directly with SAFC, a division of Sigma-Aldrich, which offers clinical and research grade KLH products. In addition to competition from current suppliers of KLH, we also face indirect competition from developers of other carrier proteins, adjuvants or therapeutic vaccine platforms. We are unable to predict what effect evolution of the KLH and immunotherapy industries and potential new entrants may have on price, selling strategies, intellectual property or our competitive position.

## **Government Regulation**

Our operations, including our aquaculture and harvesting activities, as well as production operations, manufacturing site development, and drug research, development and sales, are subject to complex regulation at the local, state and federal levels in the United States by a number of regulatory agencies including, but not limited to, the U.S. Food and Drug Administration, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Secretary of the Navy, the Regional Water Quality Control Board Los Angeles Region, the California Department of Fish and Wildlife, the California Coastal Commission, the California Air Pollution Control Board, the County of Ventura, and the City of Port Hueneme.

We are subject to laws and regulations covering clean water and waste discharge, and are required to hold licenses for the aquaculture production and wild harvesting of the Giant Keyhole Limpet. Our aquaculture facility is subject to regulation by the California Department of Fish and Wildlife and the Regional Water Quality Control Board, Los Angeles Region. These agencies impose regulations that restrict any activity that could pose a potential risk to the California marine environment including, but not limited to, seawater waste discharge limitations specified in our National Pollution Discharge Elimination Systems (NPDES) permit. We regularly monitor our KLH production and manufacturing processes for material compliance with applicable regulations.

In addition to regulations in the United States, we may be subject to a variety of foreign regulations related to research, manufacturing, and the commercial sale and distribution of our products, to the extent we choose to manufacture, sell or distribute any products outside of the United States. The requirements governing our activities in jurisdictions outside the United States vary greatly from country to country.

In Mexico, our current research and development activities and collaborations, and potential future operations, are subject to regulation, permitting and oversight by the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), including the National Service of Health, Food Safety and Quality (SENASICA), the National Commission of Fisheries and Aquaculture (CONAPESCA), and the National Institute of Fisheries and Aquaculture (INAPESCA), all of which are administrative bodies of SAGARPA. We are also subject to regulation, permitting and oversight by the Secretariat of the Environment and Natural Resources (SEMARNAT), the Secretariat of Health's Federal Commission for the Protection Against Sanitary Risks (COFEPRIS), and by and other state and local agencies.

# Good Manufacturing Practices

The FDA and other regulatory agencies regulate and inspect equipment, facilities and processes used in the manufacture of pharmaceutical and biologic products prior to approving a product. If, after receiving approval from regulatory agencies, a company makes a material change in manufacturing equipment, location or process, additional regulatory review and approval may be required. All facilities and manufacturing techniques used for the manufacture of our products must comply with applicable regulations governing the production of pharmaceutical products known as Current Good Manufacturing Practices. These requirements include, among other things, quality control, quality assurance and the maintenance of records and documentation. We are responsible for regularly assessing compliance with GMP requirements through record reviews and periodic audits and for ensuring that we take corrective action for any identified deficiencies.

The FDA and other regulatory agencies also conduct regular, periodic visits to re-inspect equipment, facilities and processes following initial approval of a product. If, as a result of these inspections, it is determined that our equipment, facilities or processes do not comply with applicable regulations and conditions of product approval, regulatory agencies may issue warning or similar letters or may seek civil, criminal, or administrative sanctions against us. To date, we have not been subject to inspection by the FDA or other drug regulatory agency because none of our customers or partners has filed an application in any country for marketing approval of a product encompassing our Stellar KLH protein.

## New Drug Development

None of our KLH products have been subject to approval as a drug by any regulatory authority. However, a number of our customers and strategic partners are utilizing Stellar KLH in the development of pharmaceuticals and immunotherapies would be subject to the regulatory approval process in various jurisdictions. The regulatory approval process for new drugs under development by our customers is typically long and expensive. Clinical trials that they conduct may not be successful and such products may not receive regulatory approval. Delays by our customers in obtaining, or the inability to obtain, regulatory approvals for their products which use Stellar KLH will have a direct effect on the demand for our products.

#### Employees

As of May 4, 2018, we had 25 employees. We consider our employee relations to be good. None of our employees are represented by a labor union or collective bargaining agreement.

#### Properties

We currently lease 4,300 square feet of executive office and laboratory space in Port Hueneme, California under a lease which was renewed in July 2016 for a two-year term, with options to renew for three successive two-year terms.

Our aquaculture and KLH manufacturing operations are located on approximately 37,000 square feet of oceanfront land in the Port Hueneme Aquaculture Business Park. Our facilities here include specialized aquaculture infrastructure, seawater supply and discharge systems, laboratories, manufacturing and administrative offices. We have two sublease agreements which expire in September and October 2020, respectively, with options to extend the leases for two additional five-year terms.

We currently lease undeveloped land in Baja California, Mexico under a lease agreement which we entered into in June 2015, with a three-year term, which lease agreement is terminable at will at any time with 30 days prior notice by either party. In February 2018, the lease term was extended for two years without further rent payments. We are utilizing the undeveloped land to conduct suitability studies for the potential development of an additional aquaculture locale and future expansion of production. We also have a short-term lease for office space in a business center located in Ensenada, Baja California. This office serves as the administrative headquarters of our BioEstelar subsidiary.

#### Legal Proceedings

From time to time, we may be involved in legal proceedings, claims, regulatory fines or penalties and litigation arising in the ordinary course of business, including contract disputes, employment matters and intellectual property disputes. We are not currently a party to any material legal proceedings or claims outside the ordinary course of business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

# **Market Risk**

We are exposed to financial market risks associated with foreign exchange rates, concentration of credit, and liquidity. In accordance with our policies, we manage our exposure to various market-based risks and where material, these risks are reviewed and monitored by our Board of Directors.

#### Foreign Exchange Risk

Our exposure to foreign exchange risk is primarily related to fluctuations between the Canadian dollar and the U.S. dollar. Funds held in Mexican pesos are nominal. We incur operating expenses and capital expenditures mostly in U.S. dollars, with some operating expenses incurred in Canadian dollars which are subject to foreign currency fluctuations. The fluctuation of the U.S. dollar in relation to the Canadian dollar will have an impact upon our profitability and may also affect the value of our assets and the amount of shareholders' equity. We have not entered into any agreements or purchased any instruments to hedge possible currency risks. At September 30, 2017, we held approximately CDN\$1.5 million in cash and cash equivalents in Canadian dollars and the U.S. dollar was equal to 1.2458 Canadian dollars. Based on the exposure at September 30, 2017, a 10% annual change in the Canadian/U.S. exchange rate over the prior year would impact our net loss by approximately \$122,000.

#### Concentration of Credit Risk

We are potentially subject to financial instrument concentration of credit risk through our cash equivalents, US Treasury bills and accounts receivables. We place our cash and cash equivalents in 4 week US Treasury bills or financial institutions believed to be credit worthy and perform periodic evaluations of their relative credit standing. We place short-term investments in 13 to 52 week US Treasury bills. Accounts receivables can be potentially exposed to a concentration of credit risk with our major customers.

# MANAGEMENT

#### **Executive Officers and Directors**

The following table sets forth information regarding our executive officers and directors as of May 4, 2018.

Name	Age	Position
Frank R. Oakes	67	President, Chief Executive Officer and Chairman
Kathi Niffenegger, CPA	60	Chief Financial Officer and Corporate Secretary
Gregory T. Baxter, Ph.D.	59	Executive Vice President of Corporate Development
Deborah F. Aghib, Ph.D.	58	Director
Tessie M. Che, Ph.D	67	Director
Paul Chun	37	Director
David L. Hill, Ph.D	67	Director
Daniel E. Morse, Ph.D.	76	Director
Charles V. Olson, D.Sc.	60	Director
Mayank D. Sampat	62	Director

# **Executive Officers**

**Frank R. Oakes** was appointed our President and Chief Executive Officer and Chairman of our Board of Directors in April 2010. Prior to that time, he served as founder and Chief Executive Officer of Stellar's California subsidiary since 1999. He has more than 40 years of management experience in aquaculture including a decade as Chief Executive Officer of The Abalone Farm, Inc., during which he led the company through the R&D, capitalization, and commercialization phases of development to become the largest abalone producer in the United States. Mr. Oakes is the inventor of our patented method for non-lethal extraction of hemolymph from a live gastropod mollusk. He was the principal investigator on our Small Business Innovation Research (SBIR) grant from the National Science Foundation and was principal investigator on our Phase I and II SBIR grants from the NIH's Center for Research Resources, and a California Technology Investment Partnership (CalTIP) grant from the Department of Commerce. Mr. Oakes has consulted and lectured for the aquaculture industry around the world. He received his Bachelor of Science degree from California State Polytechnic University, San Luis Obispo and is a graduate of the Los Angeles Regional Technology Alliance University's management-training program. Mr. Oakes is a valuable member of our Board due to his depth of operating, strategic, and senior management experience in our industry, specifically as related to aquaculture. Additionally, Mr. Oakes holds an intimate knowledge of Stellar due to his longevity in the industry and with us.

Kathi Niffenegger, CPA was appointed Chief Financial Officer in November 2013 and Corporate Secretary in June 2013. She initially joined Stellar in May 2012 as Controller, after previously serving as the company's outside Certified Public Accountant for more than 12 years. Ms. Niffenegger has more than 30 years of experience in accounting and finance in a range of industries. She held positions of increasing responsibility in the audit division of Glenn Burdette CPAs from 1988 to 2012 and served most recently as technical partner. She obtained CFO experience at Martin Aviation, and began her career at Peat, Marwick, Mitchell & Co. (now KPMG LLP). Ms. Niffenegger has held leadership roles for audits of manufacturing, aquaculture, pharmaceutical and governmental grant clients, and developed specific expertise in cost accounting systems and internal controls. Ms. Niffenegger holds a B.S. degree in Business Administration, Accounting from California State University, Long Beach and is a member of the American Institute of Certified Public Accountants (AICPA).



**Gregory T. Baxter, Ph.D.** joined Stellar's executive management team in December 2016 following his service on the company's Board of Directors, which he joined in August 2012. Dr. Baxter has served as an executive and scientist for several biotechnology corporations and foundations. Since 2001, Dr. Baxter has been a Senior Scientist in the Department of Clinical Drug Development for CCS Associates Inc., a scientific research consulting firm specializing in technical and support services for clinical research, design strategies for preclinical studies, chemical information sciences and research and development support for translational science. His prior experience includes serving as Program Director for the National Science Foundation (NSF) Division of Industrial Innovation and Partnerships, Founder and CSO of Hurel Corporation, Founder and CEO of Aegen Biosciences and Research Scientist for Molecular Device Corporation. He also serves as Adjunct Associate Professor at Cornell University in the College of Chemical Engineering and on the Founders Board of Stanford University's StartX Med Program. Dr. Baxter received his B.A. and Ph.D. in Biochemistry/Molecular Biology from University of California, Santa Barbara.

#### **Board of Directors**

**Deborah F. Aghib, Ph.D.** has been a director of Stellar since January 2018. She has more than 24 years of executive and consulting experience for biotechnology and healthcare-related companies and organizations. She is currently a business development executive for CellPly S.r.L., a position she has held since August 2017. She also currently serves as an advisor to the boards and management of BrainDTech S.r.L (since January 2016), Sanipedia S.r.L (since October 2014) and Neuro-Zone S.r.L. (since January 2007). Previously, from February 2014 to September 2014, she was a private equity consultant for CRG LP, a healthcare-focused investment firm. From 2013 to 2014 she was Business Development and Strategy executive under a consulting arrangement for Theravance Inc. From February 2012 to December 2012, she served as Stellar's chief business development executive under a consulting arrangement. From 2007 to 2012, she was the Vice President of Business Development and Strategy for Neuro-Zone Since October 2015, Dr. Aghib has served on the Advisory Board of Open Common Consortium, a cloud computing and data commons infrastructure that supports cancer medical research from the University of Chicago. Dr. Aghib holds a Ph.D. in Molecular and Cellular Biology from the University of Milan and a Ph.D. in Human Genetics from the University of Pavia. Dr. Aghib has broad scientific knowledge and significant international experience in developing long-term strategies for business development, licensing and asset spinoffs for drug discovery, medical device and companion diagnostics companies.

**Tessie M. Che, Ph.D.** has been a director of Stellar since September 2013. Dr. Che is currently General Manager and Chair of the Board of Directors of Amaran Biotechnology Inc., a privately-held biopharmaceuticals manufacturer based in Taiwan, a position she has held since 2012. She is also a director of OBI Pharma USA, a wholly-owned subsidiary of OBI Pharma, Inc., a publicly traded biotechnology corporation in Taiwan. From 1998 to 2011 she served as COO and Sr. V.P., Corporate Affairs of Optimer Pharmaceuticals Inc., a company she co-founded. At Optimer, Dr. Che guided the company's CMC team to the successful registration and commercialization of DificidTM in the U.S., Canada and Europe. Prior to Optimer, Dr. Che's experience includes 20 years in research, operations and management at global companies, including Exxon Mobil Corp., Aventis Pharmaceuticals Inc., and EniChem SpA. Dr. Che holds bachelor degrees in chemistry from Illinois State University and Fu-Jen Catholic University (Taiwan) and a PhD in physical-inorganic chemistry from Brandeis University. She has authored numerous scientific publications and holds over 20 U.S. patents. Dr. Che has extensive scientific, operational, manufacturing, quality assurance, product development and senior management experience in the pharmaceutical and biotechnology industries, as well as experience serving on a board of directors within our industry.

**Paul Chun** has been a director of Stellar since December 2016 and serves as the chair of the Nominating and Governance Committee. He is a Managing Partner of Eldred Advisors LLC, a life sciences advisory firm he founded in May 2016. From November 2015 to April 2016, he served as Director of Strategy and Corporate Development at Kiromic, LLC. From May 2011 to October 2015, Mr. Chun served as a life sciences principal with Westwicke Partners, LLC, a capital markets advisory firm. During his tenure at Westwicke, he supported the capital markets and investor engagement objectives of private and public biopharma companies, including the support of multiple initial public offerings and other strategic transactions. Prior to Westwicke, he held various roles in investment research and corporate finance, including at Amgen, Inc., Tavistock Life Sciences and Goldman, Sachs & Co. He received his bachelors in biological sciences from Columbia University. Mr. Chun has broad experience in therapeutics development and commercialization, valuation, corporate development and finance.

**David L. Hill, Ph.D.** has been a director of Stellar since May 2011. Since January 2018 he has operated the California Central Coast IVF Laboratory, a healthcare company he founded in San Luis Obispo, California. He previously served as Scientific Director for the ART Reproductive Center, Beverly Hills, California, from December 1999 in December 2016. He is also an Assistant Clinical Professor in the Dept. of Obstetrics and Gynecology at the David Geffen School of Medicine, University of California, Los Angeles, and a Research Assistant IV at Cedars-Sinai Medical Center, Los Angeles, California. Dr. Hill received his Ph.D. in Biological Sciences from the Department of Pathology, School of Life Sciences, University of Connecticut and completed a Postdoctoral Fellowship at the Dana Farber Cancer Institute through an appointment by the Department of Physiology and Biophysics, Harvard Medical School, Boston, Massachusetts. Dr. Hill has extensive scientific and clinical research experience in our industry.

**Daniel E. Morse, Ph.D.** has been a director of Stellar since April 2010. Dr. Morse is the Wilcox Professor Emeritus of Molecular Genetics and Biochemistry Biotechnology, Biomolecular Science and Engineering, a position he has held since 2008, and Director of the Marine Biotechnology Center, at the University of California, Santa Barbara, a position he has held since 1986. Previously, he served as Director of the UCSB-MIT-Caltech Institute of Collaborative Biotechnologies from 2003 to 2010, and also served as Stellar's Executive Vice-President, Science & Technology from 2010 until December 2011. Dr. Morse is an expert in the structure and function of the KLH molecule and internationally recognized expert in protein chemistry, molecular biology, molluscan reproductive biology, and aquaculture, and has an intimate understanding of our technology. Mayank (Mike) D. Sampat has been a director of our Company since August 2012, and serves as the chair of the Audit Committee. Mr. Sampat is an independent consultant providing business services to companies seeking expertise in financial planning and analysis, accounting and financial reporting, M&A transactions support and financial system implementation. He previously held the positions of controller at Precision Toxicology, LLC, a healthcare focused clinical laboratory specializing in providing quantitative drug testing, from February 2015 to May 2016, Zpower, LLC, an emerging manufacturer in the microbattery industry, from June 2012 to September 2014, and Imaging Advantage LLC from September 2010 to June 2012, and the position of Chief Financial Officer for Gamma Medica-Ideas, a supplier of imaging equipment to the medical industry, from September 2007 to June 2010. Mr. Sampat received a BBA in accounting from Bombay University and his MBA in Finance at Mercer University. Mr. Sampat is a seasoned finance and accounting executive, having worked with multiple companies ranging from startups to large Fortune 100 companies.

**Charles V. Olson, D.Sc.** has been a director of Stellar since December 2016 and a member of our scientific advisory board since June 2014. He serves as the chair of the Compensation Committee. Since September 2017, he has served at Applied Molecular Transport Inc., as the Vice President of Biologics. He has also been a Principal Biotechnology Consultant for Compass Biotechnology LLC since 2006. Dr. Olson previously held senior and executive management positions at Anthera Pharmaceuticals Inc. from April 2010 to August 2017, NGM Bioharmaceuticals Inc, Coherus BioSciences Inc., Nexbio Inc., Cell Genesys, Inc., Biomarin Pharmaceuticals, Inc., and Onyx Pharmaceuticals, Inc. After graduate school, Dr. Olson was a Research Scientist at Kaiser Hospitals, followed by Scientist and Senior Scientist positions at Genentech and Bayer, respectively. He holds a B.A. in biology and chemistry from Westmont College, an M.A. in chemistry from the University of California at Santa Barbara and a D.Sc. in biochemistry. Dr. Olson has extensive scientific, manufacturing operations, process development, and senior management experience in the biopharmaceutical industry.

**Mayank (Mike) D. Sampat** has been a director of Stellar since August 2012, and serves as the chair of the Audit Committee. Mr. Sampat is an independent consultant providing business services to companies seeking expertise in financial planning and analysis, accounting and financial reporting, M&A transactions support and financial system implementation. He previously held the positions of controller at Precision Toxicology, LLC, a healthcare focused clinical laboratory specializing in providing quantitative drug testing, from February 2015 to May 2016, Zpower, LLC, an emerging manufacturer in the microbattery industry, from June 2012 to September 2014, and Imaging Advantage LLC from September 2010 to June 2012, and the position of Chief Financial Officer for Gamma Medica-Ideas, a supplier of imaging equipment to the medical industry, from September 2007 to June 2010. Mr. Sampat received a BBA in accounting from Bombay University and his MBA in Finance at Mercer University. Mr. Sampat is a seasoned finance and accounting executive, having worked with multiple companies ranging from startups to large Fortune 100 companies.

#### **Director Independence**

The Board evaluates the independence of each nominee for election as a director of our Company in accordance with the Listing Rules (the Nasdaq Listing Rules) of the Nasdaq Stock Market LLC. Pursuant to these rules, a majority of our Board must be "independent directors" within the meaning of the Nasdaq Listing Rules, and all directors who sit on our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee must also be independent directors.

The Nasdaq definition of "independence" includes a series of objective tests, such as the director or director nominee is not, and was not during the last three years, an employee of the Company and has not received certain payments from, or engaged in various types of business dealings with, the Company. In addition, as further required by the Nasdaq Listing Rules, the Board has made a subjective determination as to each independent director that no relationships exist which, in the opinion of the Board, would interfere with such individual's exercise of independent judgment in carrying out his or her responsibilities as a director. In making these determinations, the Board reviewed and discussed information provided by the directors with regard to each director's business and personal activities as they may relate to the Company and its management.

As a result, the Board of Directors has affirmatively determined that Deborah Aghib, Paul Chun, David Hill, Daniel Morse, Charles Olson and Mayank Sampat are "independent directors." This means that our Board of Directors is composed of a majority of independent directors as required by Nasdaq. The Board of Directors has also affirmatively determined that all members of our Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee are independent directors.

# EXECUTIVE COMPENSATION

The following summary compensation table sets forth all compensation awarded to, earned by, or paid to our named executive officers during the fiscal years ended September 30, 2017 and 2016.

Name and Principal Position	Fiscal Year	Salary (\$)	Bonus (\$)	Stock Awards (\$) (1)	Option Awards (\$) (2)	All Other Compensation (\$)	Total (\$)
Frank R. Oakes	2017	\$ 257,100	\$ 25,000	\$ 296,969(3)		\$ 23,669(4)	\$ 602,738
President, Chief Executive	2016	250,100	120,000	-	-	59,737	429,837
Officer and Chairman of the							
Board of Directors							
Kathi Niffenegger, CPA	2017	202,560	20,000	-	19,744	18,526(5)	260,830
Chief Financial Officer and	2016	196,560	47,250	-	61,148	19,004	323,962
Corporate Secretary							
Gregory T. Baxter, Ph.D.	2017	157,372	500	-	15,605	18,406(7)	191,883
Executive Vice President of	2016	-	-	-	-	11,800	11,800
Corporate Development (6)							

(1) The amounts shown in this column represent the aggregate grant date fair value of the share awards based on the closing price on Nasdaq, not the actual amounts paid to or realized by the named executive officer during the covered fiscal year. It differs from the amounts recorded in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification 718, which were based on the share value at the inception of the performance share plan in April 2010 expensed over the estimated vesting period ended August 31, 2012. The vesting requirements of these awards are set forth in Note 8 to our audited consolidated financial statements for the fiscal year ended September 30, 2017 included in our Annual Report.

(2) The amounts shown in this column represent the aggregate grant date fair value of the share option awards computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification 718, not the actual amounts paid to or realized by the named executive officers during the covered fiscal year. The assumptions used in determining grant date fair value of these awards are set forth in Note 8 to our audited consolidated financial statements for the fiscal year ended September 30, 2017 included in our Annual Report.

(3) 33,670 shares were issued under our Performance Share Plan.

(4) Represents (i) \$15,719 in health insurance and (ii) \$7,950 in 401(k) Company contributions.

- (5) Represents (i) \$11,984 in health insurance and (ii) \$6,542 in 401(k) Company contributions.
- (6) Dr. Baxter's employment with the Company began December 1, 2016. Dr. Baxter was a director of the Company from August 15, 2012 until December 1, 2016.
- (7) Represents (i) \$8,656 in health insurance, (ii) \$1,050 in director fees and (iii) \$8,700 in consultant fees prior to becoming an employee.

# **Outstanding Equity Awards at 2017 Fiscal Year-End**

The following table summarizes the equity awards made to our named executive officers that were outstanding at September 30, 2017.

		Option Awards								
Name	Award grant date	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable (1)	Option exercise prices (\$)	Option expiration date					
Frank R. Oakes	8/8/11 4/13/12	6,080 5,366	- \$	CDN45.50 CDN29.40	8/8/18 4/13/19					
Kathi Niffenegger, CPA	6/18/12 12/19/12 5/14/13 11/1/13 11/12/14 12/22/15 12/20/16	1,286 714 1,286 1,429 1,286 1,429 476	- - - - 953	CDN20.30 CDN17.50 CDN40.60 128.10 CDN106.40 50.68 14.21	6/18/19 12/19/19 5/14/20 11/1/20 11/12/21 12/22/22 12/20/23					
Gregory T. Baxter, Ph.D.	8/16/12 11/12/14 3/28/17	1,000 179 -	- - 1,429	CDN25.90 CDN106.40 11.20	8/16/19 11/12/21 3/28/24					

(1) Our options vesting policy is described in the Outstanding Equity Awards Narrative Disclosure section.

There was no value of incentive plan awards vested or earned during the fiscal year ended September 30, 2017 for named executive officers.

# **Employment Agreements**

We do not have employment agreements currently in effect with any of our named executive officers. Like our other employees, our executives are eligible for annual salary increases and discretionary equity grants.

# **Director Compensation**

Directors who are also our officers are not separately compensated for their service as directors. The following table sets forth information regarding the compensation of our non-employee directors for the fiscal year ended September 30, 2017.

Name	Paid i	arned or n Cash \$)	Stock Awards (\$) (1)	Option Awards (\$) (2)	All Other Compensation (\$)		Total (\$)
Tessie M. Che, Ph.D.	\$	1,000	\$ -	\$ 8,996(4)	\$-	\$	9,996
Paul Chun		8,850	-	8,996(5)	-		17,846
David L. Hill, Ph.D.		10,250	-	8,996(4)	-		19,246
Daniel E. Morse, Ph.D.		5,700	169,697(3)	8,996(4)	900(6	5)	185,293
Charles V. Olson, D.Sc.		4,700	-	8,996(5)	5,775(7	')	19,471
Mayank D. Sampat		10,250	-	8,996(4)	-		19,246

- (1) The amounts shown in this column represent the aggregate grant date fair value of the share awards based on the closing price on Nasdaq, not the actual amounts paid to or realized by the named executive officer during the covered fiscal year. It differs from the amounts recorded in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification 718, which were based on the share value at the inception of the performance share plan in April 2010 expensed over the estimated vesting period ended August 31, 2012. The vesting requirements of these awards are set forth in Note 8 to our audited consolidated financial statements for the fiscal year ended September 30, 2017 included in this Annual Report.
- (2) The amounts shown in this column represent the aggregate grant date fair value of the share option awards computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification 718, not the actual amounts paid to or realized by the directors during the fiscal year. The assumptions used in determining grant date fair value of these awards are set forth in Note 8 to our audited consolidated financial statements for the fiscal year ended September 30, 2017 included in this Annual Report.
- (3) 19,240 shares were issued under our Performance Share Plan and are fully vested.
- (4) The option awards were issued under our 2017 Incentive Compensation Plan for past service, with 357 options vesting in thirds beginning December 2016 and 357 options vesting in thirds beginning March 2017.
- (5) The option awards were issued under our 2017 Incentive Compensation Plan, with 357 options for future service vesting in thirds beginning December 2017 and 357 options for past service vesting in thirds beginning March 2017.
- (6) Represents amount for service as member of our Scientific Advisory Board.
- (7) Represents (i) \$5,425 in consultant fees and (ii) \$350 for service as member of our Scientific Advisory Board.

# CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

## **Related Party Transactions**

#### Patent Royalty Agreement

On August 14, 2002, through our California subsidiary, we entered into an agreement with Frank Oakes, our Chief Executive Officer, where he would receive royalty payments in exchange for the assignment of his rights to U.S. Patent No. 6,852,338 to us. The royalty is 5% of gross receipts from products using this invention in excess of \$500,000 annually. Patent royalties of \$35,516 were paid to Mr. Oakes for the fiscal year ended September 30, 2016. No royalties were paid for the fiscal year ended September 30, 2017.

#### Collaboration Agreement

In December 2013, we entered into a collaboration agreement (the Amaran Agreement) with Amaran Biotechnology, Inc. to develop and evaluate methods for Amaran's potential manufacture of the OBI-822 (Adagloxad Simolenin) active immunotherapy using our GMP grade Stellar KLH. The Amaran Agreement expired by its terms on December 7, 2015.

Revenues received from Amaran under the Amaran Agreement totaled \$32,000 during the fiscal year ended September 30, 2016. No revenues were received from Amaran under the Amaran Agreement during the fiscal year ended September 30, 2017. The terms of the collaboration with Amaran also provided for negotiation of a commercial supply agreement for Stellar KLH in the future, which was executed in February 2017.

Tessie Che, a member of our Board of Directors, currently serves as general manager and chair of the board of directors of Amaran.

## **Policies and Procedures for Review of Related Party Transactions**

The Audit Committee reviews, approves and oversees any transaction between us and any "related person" (as defined in Item 404 of Regulation S-K) and any other potential conflict of interest situations, on an ongoing basis. Under these policies and procedures, the Audit Committee is to be informed of transactions subject to review before their implementation. The procedures establish our practices for obtaining and reporting information to the Audit Committee regarding such transactions on a periodic and an as-needed basis. The policy provides that such transactions are to be submitted for approval before they are initiated but also provides for ratification of such transactions. No director who is interested in a transaction may participate in the Audit Committee's determinations as to the appropriateness of such transaction.

#### PRINCIPAL SHAREHOLDERS

#### Security Ownership of Certain Beneficial Owners and Management

The following tables sets forth certain information as of May 4, 2018 with respect to the beneficial ownership of our common shares by: (1) all of our directors; (2) our named executive officers listed in the Summary Compensation Table; (3) all of directors and executive officers as a group; and (4) each person known by us to beneficially own more than 5% of our outstanding common shares.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all common shares that they beneficially own, subject to applicable community property laws.

Common shares subject to options or warrants currently exercisable or exercisable within 60 days of May 4, 2018 are deemed outstanding for computing the share ownership and percentage of the person holding such options and warrants, but are not deemed outstanding for computing the percentage of any other person. The percentage ownership of our common shares of each person or entity named in the following table is based on 1,502,870 common shares outstanding as of May 4, 2018.



# **Directors and Officers**

Name and Address of Beneficial Owner (1)	Amount and Nature of Beneficial Ownership (2)	Percent of Shares Beneficially Owned	Percent of Shares Beneficially Owned Following the Offering
Frank R. Oakes	68,275(3)	4.5%	2.36%
Kathi Niffenegger, CPA	10,050(4)	*	*
Gregory T. Baxter, Ph.D.	3,084(5)	*	*
Deborah F. Aghib, Ph.D.	119(6)	*	*
Tessie M. Che, Ph.D.	1,595(7)	*	*
Paul Chun	476(8)	*	*
David L. Hill, Ph.D.	2,309(9)	*	*
Daniel E. Morse, Ph.D.	32,183(10)	2.1%	1.11%
Charles V. Olson, D.Sc.	655(11)	*	*
Mayank D. Sampat	1,595(12)	*	*
All divectors and executive officers as a group (10 percens)	100 041(12)	7.09/	1 1 0/
All directors and executive officers as a group (10 persons)	120,341(13)	7.8%	1.16%

<sup>\*</sup> Percentage of shares beneficially owned does not exceed one percent.

- (1) Unless otherwise indicated, the address of each beneficial owner is c/o Stellar Biotechnologies, Inc., 332 E. Scott Street, Port Hueneme, California 93041.
- (2) For purposes of calculating the amount and nature of beneficial ownership, the number of shares outstanding does not assume the exercise of the warrants offered in this prospectus.
- (3) This amount includes (i) 13,351 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018; and excludes (ii) 2,981 common shares and 791 common shares issuable upon the exercise of outstanding options currently exercisable or exercisable within 60 days of May 4, 2018 which are held by Mr. Oakes' spouse who has sole voting and dispositive power over the securities, and as to which Mr. Oakes disclaims beneficial ownership. Mr. Oakes does not have the power to vote or dispose of, or to direct the voting or disposition of, the shares held by his spouse, or with respect to any shares acquired under her outstanding options.
- (4) Represents 10,050 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (5) Represents 3,084 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (6) Represents 119 shares issuable upon exercise of options currently exercisable or exercisable within 60 days of May 4, 2018
- (7) Represents 1,595 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (8) Represents 476 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (9) This amount includes 2,023 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (10) This amount includes 4,394 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (11) Represents 655 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (12) Represents 1,595 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.
- (13) This amount includes 37,342 shares issuable upon the exercise of options currently exercisable or exercisable within 60 days of May 4, 2018.



# Shareholders Known by Us to Own 5% or More of Our Common Shares

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Shares Beneficially Owned	Percent of Shares Beneficially Owned Following the Offering
Ernesto Echavarria			
Blvd. Anaya			
1225 Culiacan Sinaloa, Mexico 80040	226,027(1)	15.0%	6.3%

(1) This amount is based solely on Amendment No. 3 to Schedule 13G filed with the SEC on February 14, 2018 by Ernesto Echavarria. Mr. Echavarria has sole power to vote or direct the vote and sole power to dispose or to direct the disposition of these shares.

# DESCRIPTION OF SECURITIES WE ARE OFFERING

The following is a brief description of the securities we are offering. This summary does not purport to be complete in all respects. This description is subject to and qualified entirely by the terms of our Amended and Restated Articles, which we refer to as our Articles, copies of which have been filed with the Commission and are also available upon request from us.

We are offering (i) 1,388,396 units, each unit consisting of one common shares and one warrant to purchase one common share, and (ii) 687,076 prefunded units, each pre-funded unit consisting of one pre-funded warrant to purchase one common share and one warrant to purchase one common share. For each pre-funded unit we sell, the number of units we are offering will be decreased on a one-for-one basis. The common shares and accompanying warrant included in each unit will be issued separately, and the pre-funded warrant to purchase one common share and the accompanying warrant included in each pre-funded unit will be issued separately. Neither the units nor the pre-funded units will be issued or certificated. We are also registering the common shares included in the units and the common shares issuable from time to time upon exercise of the pre-funded warrants included in pre-funded units and warrants included in the units and the pre-funded units offered hereby.

# **Common Shares**

We are authorized to issue an unlimited number of common shares, no par value. As of May 4, 2018, we had 1,502,870 common shares issued and outstanding. Holders of our common shares are entitled to one vote per share on all matters to be voted upon by our shareholders. Our Articles do not authorize cumulative voting. A majority of two-thirds of the votes cast is required for the passage of a special resolution or a special separate resolution.

The holders of our common shares are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors out of funds legally available for the payment of dividends, subject to the rights of any series of preferred shares. In the event of a liquidation, dissolution or winding up, the holders of our common shares are entitled to share ratably in all assets remaining after payment of the preferential amounts, if any, to which the holders of our preferred shares, if any, are entitled. Our common shares have no preemptive, conversion or other subscription rights. There are no redemption or sinking fund provisions applicable to our common shares. All of our outstanding common shares are fully paid and non-assessable.

#### Warrants

The following summary of certain terms and provisions of warrants included in the units and pre-funded units that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the warrants, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of warrant for a complete description of the terms and conditions of the warrants.

#### **Duration and Exercise Price**

Each warrant included in the units and the pre-funded units offered hereby will have an initial exercise price per share equal to \$2.65. The warrants will be immediately exercisable and will expire on the five year anniversary of the original issuance date. The exercise price and number of common shares issuable upon exercise is subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our common shares and the exercise price. The warrants will be issued separately from the common shares included in the units or the pre-funded warrants included in the pre-funded units, as the case may be, and may be transferred separately immediately thereafter. A warrant to purchase up to one a common share will be included in each unit or pre-funded unit purchased in this offering.

#### **Cashless Exercise**

If, at the time a holder exercises its warrants, a registration statement registering the issuance of the common shares underlying the warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of common shares determined according to a formula set forth in the warrants.



# Exercisability

The warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of our common shares purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the warrant to the extent that the holder would own more than 4.99% (or, at the election of a purchaser prior to issuance of the warrant, 9.99%) of the outstanding common shares immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding shares after exercising the holder's warrants up to 9.99% of the number of our common shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants.

## **Fractional Shares**

No fractional common shares will be issued upon the exercise of the warrants. Rather, the number of common shares to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

#### Transferability

Subject to applicable laws, a warrant may be transferred at the option of the holder upon surrender of the warrant to us together with the appropriate instruments of transfer.

# Exchange Listing

We do not intend to list the warrants on any securities exchange or nationally recognized trading system.

# **Rights as a Shareholder**

Except as otherwise provided in the warrants or by virtue of such holder's ownership of our common shares, the holders of the warrants do not have the rights or privileges of holders of our common shares, including any voting rights, until they exercise their warrants.

#### Fundamental Transaction

In the event of a fundamental transaction which is approved by our Board, the holders of the warrants have the right to require us or a successor entity to redeem the warrant for cash in the amount of the Black-Scholes value of the unexercised portion of the warrant on the date of the consummation of the fundamental transaction. In the event of a fundamental transaction which is not approved by our Board, the holders of the warrants have the right to require us or a successor entity to redeem the warrant for the consideration paid in the fundamental transaction in the amount of the Black Scholes value of the unexercised portion of the warrant on the date of the consummation of the fundamental transaction.

#### **Pre-Funded Warrants**

The following summary of certain terms and provisions of pre-funded warrants included in the pre-funded units that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the pre-funded warrant, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of pre-funded warrants for a complete description of the terms and conditions of the pre-funded warrants.

# **Duration and Exercise Price**

Each pre-funded warrant will have an aggregate exercise price per share equal to \$2.65, all of which will be pre-funded except for a nominal exercise price of \$0.01 per common share, subject to adjustment. The pre-funded warrants will be immediately exercisable and may be exercised at any time until the pre-funded warrants are exercised in full. The exercise price and number of common shares issuable upon exercise is subject to appropriate adjustment in the event of share dividends, share splits, reorganizations or similar events affecting our common shares and exercise price. The pre-funded warrants will be issued separately from the accompanying warrants included in the pre-funded units, and may be transferred separately immediately thereafter.

## Exercisability

The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of our common shares purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the pre-funded warrant to the extent that the holder would own more than 4.99% (or, at the election of a purchaser prior to issuance of the warrant, 9.99%) of the outstanding common shares immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding shares after exercising the holder's pre-funded warrants up to 9.99% of the number our common shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants.

#### **Cashless Exercise**

If, at the time a holder exercises its pre-funded warrants, a registration statement registering the issuance of the common shares underlying the prefunded warrants under the Securities Act is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise (either in whole or in part) the holder would receive upon such exercise the net number of common shares determined according to a formula set forth in the pre-funded warrants.

# Transferability

Subject to applicable laws, a pre-funded warrant may be transferred at the option of the holder upon surrender of the pre-funded warrant to us together with the appropriate instruments of transfer.

#### **Fractional Shares**

No fractional common shares will be issued upon the exercise of the pre-funded warrants. Rather, the number of common shares to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

#### **Trading Market**

There is no trading market available for the pre-funded warrants on any securities exchange or nationally recognized trading system.

## Rights as a Shareholder

Except as otherwise provided in the pre-funded warrants or by virtue of such holder's ownership of our common shares, the holders of the prefunded warrants do not have the rights or privileges of holders of our common shares, including any voting rights, until they exercise their pre-funded warrants.

#### **Placement Agent Warrants**

We have agreed to issue to the placement agent warrants to purchase 145,283 common shares, which represents 7.0% of the aggregate number of common shares and pre-funded warrants sold in this offering. The placement agent warrants will have a term of five years from the effective date of this prospectus and an exercise price per share equal to 125% of the public offering price for the units sold in this offering, or \$3.31 per share. Pursuant to FINRA Rule 5110(g), the placement agent warrants and any shares issued upon exercise of the placement agent warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering and the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the underwriter or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remain of any security, if all securities remain subject to the lock-up restriction set forth above for the remain of any security, if all securities in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or con

# MATERIAL UNITED STATES FEDERAL TAX CONSEQUENCES

## **United States Federal Income Taxation**

As used below, a "U.S. holder" is a beneficial owner of a common share that is, for U.S. federal income tax purposes, (i) a citizen or resident alien individual of the United States, (ii) a corporation (or an entity treated as a corporation) created or organized under the law of the United States, any State thereof or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income tax without regard to its source or (iv) a trust if (1) a court within the United States is able to exercise primary supervision over the administration of the trust, and one or more United States persons have the authority to control all substantial decisions of the trust, or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person. For purposes of this discussion, a "non-U.S. holder" is a beneficial owner of a common share that is (i) a nonresident alien individual, (ii) a corporation (or an entity treated as a corporation) created or organized in or under the law of a country other than the United States or a political subdivision thereof or (iii) an estate or trust that is not a U.S. Holder. If a partnership (including for this purpose any entity treated as a partnership for U.S. federal tax purposes) is a beneficial owner of a common share, the U.S. federal tax treatment of a partner in the partnership generally will depend on the status of the partner and the activities of the partnership. A holder of a common share that is a partnership and partners in that partnership should consult their own tax advisers regarding the U.S. federal income tax consequences of holding and disposing of common shares. We have not sought a ruling from the Internal Revenue Service (IRS) or an opinion of counsel as to any U.S. federal income tax consequence described herein. The IRS may disagree with the description herein, and its determination may be upheld by a court. This discussion does not address U.S. federal tax laws other than those pertain

GIVEN THE COMPLEXITY OF THE TAX LAWS AND BECAUSE THE TAX CONSEQUENCES TO ANY PARTICULAR SHAREHOLDER MAY BE AFFECTED BY MATTERS NOT DISCUSSED HEREIN, SHAREHOLDERS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS WITH RESPECT TO THE SPECIFIC TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF COMMON SHARES, INCLUDING THE APPLICABILITY AND EFFECT OF STATE, LOCAL AND NON-U.S. TAX LAWS, AS WELL AS U.S. FEDERAL TAX LAWS.

# PLAN OF DISTRIBUTION

Pursuant to an engagement agreement dated April 9, 2018, we have engaged H.C. Wainwright & Co., LLC, or the placement agent, to act as our exclusive placement agent in connection with this offering of our securities pursuant to this prospectus on a reasonable best efforts basis. The terms of this offering are subject to market conditions and negotiations between us, the placement agent and prospective investors. The engagement agreement does not give rise to any commitment by the placement agent to purchase any of our securities, and the placement agent will have no authority to bind us by virtue of the engagement agreement. Further, the placement agent does not guarantee that it will be able to raise new capital in any prospective offering. The placement agent may engage sub-agents or selected dealers to assist with the offering.

Only certain institutional investors purchasing the securities offered hereby will execute a securities purchase agreement with us, providing such investors with certain representations, warranties and covenants from us, which representations, warranties and covenants will not be available to other investors who will not execute a securities purchase agreement in connection with the purchase of the securities offered pursuant to this prospectus. Therefore, those investors shall rely solely on this prospectus in connection with the purchase of securities in the offering.

We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. We expect to deliver the securities being offered pursuant to this prospectus on or about May 15, 2018.

# Fees and Expenses

	Per Unit	Per Pre- unded Unit
Placement Agent Fees	\$ 0.1855	\$ 0.1855
Total	\$ 5 257,547	\$ 127,453

We have agreed to pay the placement agent a total cash fee equal to 7.0% of the gross proceeds of this offering and a management fee equal to 1.0% of the gross proceeds raised in this offering. We will also pay the placement agent a non-accountable expense allowance of \$35,000 and reimburse the placement agent's legal fees and expenses in an amount up to \$100,000. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agent fees and expenses, will be approximately \$244,000.

#### **Placement Agent Warrants**

We have agreed to issue to the placement agent warrants to purchase 145,283 common shares, which represents 7.0% of the aggregate number of common shares and pre-funded warrants sold in this offering. The placement agent warrants will have a term of five years from the effective date of this prospectus and an exercise price per share equal to 125% of the public offering price for the units sold in this offering, or \$3.31 per share. Pursuant to FINRA Rule 5110(g), the placement agent warrants and any shares issued upon exercise of the placement agent warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering and the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the underwriter or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth berod.



# **Right of First Refusal**

We have also agreed to give the placement agent, subject to a successful completion of this offering, a right of first refusal to act as our sole underwriter or placement agent for any further capital raising transactions undertaken by us until the twelve-month anniversary following the consummation of the offering, subject to certain conditions.

## Lock-Up Agreements

We and each of our officers and directors have agreed not to offer, pledge, sell, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, or otherwise dispose of, directly or indirectly, any common shares or any securities convertible into, exercisable for, or exchangeable for common shares, or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common shares for a period of 90 days after the effective date of the registration statement of which this prospectus is a part.

# Indemnification

We have agreed to indemnify the placement agent and specified other persons against certain liabilities relating to or arising out of the placement agent's activities under the placement agency agreement and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of common shares and warrants by the placement agent acting as principal. Under these rules and regulations, the placement agent:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

#### **Determination of Offering Price**

The public offering price of the securities we are offering was negotiated between us and the investors, in consultation with the placement agent based on the trading of our common shares prior to the offering, among other things. Other factors considered in determining the public offering price of our common shares we are offering include the history and prospects of the Company, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

### Listing

Our common shares are listed on the Nasdaq Capital Market under the symbol "SBOT."

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our common shares is Computershare Investor Services, Inc.

# **Other Relationships**

From time to time, the placement agent may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. However, except as disclosed in this prospectus, we have no present arrangements with the placement agent for any further services.

# LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by McMillan LLP, Vancouver, British Columbia, and certain other matters will be passed upon for us by Greenberg Traurig, LLP, Los Angeles, California. Certain legal matters in connection with this offering will be passed upon for the Placement Agent by Ellenoff Grossman & Schole LLP, New York, New York.

# EXPERTS

The consolidated financial statements of Stellar Biotechnologies, Inc. included in the Registration Statement on Form S-1 has been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report. Such consolidated financial statements have been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

# WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed a registration statement on Form S-1 with the SEC covering the units and pre-funded units we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete and you should refer to the exhibits filed or documents incorporated by reference as part of the registration statement for copies of the actual contract, agreement or other document.

We file annual, quarterly and other periodic reports, proxy statements and other information with the Securities and Exchange Commission. You can read our Securities and Exchange Commission filings, including this registration statement, over the Internet at the Securities and Exchange Commission's website at www.sec.gov. You may also read and copy any document we file with the Securities and Exchange Commission at its public reference facilities at 100 F Street NE, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the Securities and Exchange Commission at 100 F Street NE, Washington, D.C. 20549. Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

Our Internet address is www.stellarbiotechnologies.com. There we make available free of charge, on or through the investor relations section of our website, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with the Securities and Exchange Commission. The information found on our website is not part of this prospectus and investors should not rely on any such information in deciding whether to invest.

# INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus.

We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-37619):

- our Annual Report on Form 10-K for the year ended September 30, 2017, which was filed with the SEC on December 1, 2017;
- our Quarterly Reports on Form 10-Q for the quarters ended December 31, 2017 and March 31, 2018, which were filed with the SEC on February 7, 2018 and May 7, 2018;
- our Current Reports on Form 8-K, which were filed with the SEC on December 1, 2017, January 25, 2018, February 2, 2018, February 7, 2018, April 3, 2018, April 11, 2018, April 27, 2018 and May 7, 2018;
- our definitive proxy statement relating to our 2018 Annual Meeting of Stockholders, which was filed with the SEC on February 13, 2018;
- our preliminary proxy statement, which was filed with the SEC on February 2, 2018; and
- the description of our common shares contained in the Registration Statement on Form 8-A12B, which was filed with the SEC on November 3, 2015.

Documents incorporated by reference are available from us without charge. We will provide to any person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement but not delivered in the prospectus. Any such requests should be directed to our Corporate Secretary (written or oral) at our executive offices at 332 E. Scott Street, Port Hueneme, California 93041, telephone: (805) 488-2800. You may also access these documents on our Internet site at www.stellarbiotechnologies.com.



# Stellar Biotechnologies, Inc.

1,388,396 Units (each Unit contains one Common Share and one Warrant to purchase one Common Share)

and

687,076 Pre-Funded Units (each Pre-Funded Unit contains one Pre-funded Warrant to purchase one Common Share and one Warrant to purchase one Common Share)

(2,075,472 Common Shares Underlying the Common Warrants) and (687,076 Common Shares Underlying the Pre-funded Warrants)

PROSPECTUS

Placement Agent

H.C. Wainwright & Co.

May 10, 2018