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Registration No. 333-225450

PROSPECTUS

Stellar Biotechnologies, Inc.
3,444,773 Common Shares

The selling shareholders named in this prospectus are offering an aggregate of 3,444,773 of our common shares. The 3,444,773 common shares consist of (i) 1,122,076 common shares underlying outstanding Series A Common Share Purchase Warrants exercisable at $2.65 per share (subject to customary adjustments for share splits and dividends), (ii) 78,545 common shares underlying outstanding Series A Common Share Purchase Warrants exercisable at $3.3125 per share (subject to customary adjustments for share splits and dividends) and (iii) 2,244,152 common shares underlying outstanding Series B Common Share Purchase Warrants exercisable at $2.65 per share (subject to customary adjustments for share splits and dividends). We will not receive any proceeds from the resale of the common shares by the selling shareholders. Any proceeds received by us from the exercise of the warrants will be used for general corporate purposes.

The selling shareholders may offer our common shares from time to time in a number of different methods and at varying prices. For more information on possible methods of offer and sale by the selling shareholders, please see the section entitled “Plan of Distribution” beginning on page 26 of this prospectus.

Our common shares are listed on the Nasdaq Capital Market under the symbol “SBOT.” The last reported sale price of our common shares on June 1, 2018 was $1.79 per share.

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.

Investing in our securities involves a high degree of risk. These risks are described in the “Risk Factors” section on page 9 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.

The date of this prospectus is June 15, 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 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 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 common shares. You should not assume that the information contained in this prospectus or any prospectus supplement or free writing 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.

We have not done anything that would permit a public offering of the common shares 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 common shares 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" included elsewhere in this prospectus, the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes, each included in our Annual Report on Form 10-K for the year ended September 30, 2017, filed with the SEC on December 1, 2017, which is incorporated by reference herein, and the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our unaudited consolidated financial statements and related notes, each included in our Quarterly Reports on Form 10-Q filed with the SEC on February 7, 2018 and May 7, 2018, each of which is incorporated by reference herein, 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 the selling shareholders 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 the selling shareholders are offering, please refer to the section of this prospectus titled "Description of Securities."

Common shares being offering by the selling shareholders	The selling shareholders are offering up to 3,444,773 common shares consisting of (i) 1,122,076 common shares underlying outstanding Series A Common Share Purchase Warrants exercisable at $2.65 per share (subject to customary adjustments for share splits and dividends), (ii) 78,545 common shares underlying outstanding Series A Common Share Purchase Warrants exercisable at $3.3125 per share (subject to customary adjustments for share splits and dividends) and (iii) 2,244,152 common shares underlying outstanding Series B Common Share Purchase Warrants exercisable at $2.65 per share (subject to customary adjustments for share splits and dividends).
Warrant exercisability and expiration	The Series A Common Purchase Warrants are exercisable immediately and expire on May 29, 2023. The Series B Common Share Purchase Warrants are exercisable immediately and expire on December 31, 2018.
Common shares outstanding prior to this offering	5,118,519 common shares as of June 1, 2018.
Common shares to be outstanding after this offering	8,563,292 common shares.
Use of proceeds	All proceeds from the sale of the common shares under this prospectus will be for the account of the selling shareholders. We will not receive any proceeds from the sale of our common shares offered pursuant to this prospectus. Any proceeds received by us from the exercise of the warrants will be used for general corporate purposes, which may include working capital, capital expenditures and research and development expenses. See the section entitled "Use of Proceeds" in this prospectus.
Nasdaq Capital Market trading symbol	SBOT
Listing	Our common shares are listed for trading on the Nasdaq Capital Market. There is no established trading market for the warrants and we do not intend to list the warrants on any exchange or other trading or quotation system.
Risk Factors	See "Risk Factors" on page 9 of this prospectus to read about factors you should consider before buying common shares.

The number of common shares that will be outstanding after this offering is based on 5,118,519 shares outstanding as of June 1, 2018, and excludes:

- 80,787 common shares issuable upon exercise of options to purchase our common shares outstanding as of June 1, 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 June 1, 2018 at an exercise price of $31.50 per share;
- 147,356 additional common shares reserved as of June 1, 2018 for future issuance under our 2017 Incentive Compensation Plan;
- 145,283 common shares issuable upon exercise of warrants to purchase our common shares as of June 1, 2018 at an exercise price of $3.31 per share; and
- 535,295 common shares issuable upon exercise of warrants to purchase our common shares as of June 1, 2018 at an exercise price of $2.65 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™ 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 and 2017 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, each included in our Annual Report on Form 10-K for the year ended September 30, 2017, filed with the SEC on December 1, 2017, which is incorporated by reference herein.

	Six Months Ended	
	March 31, 2018	**March 31, 2017**
Revenues:		
Product sales	$ 84,539	$ 154,875
Contract services revenue	-	50,000
Total revenues	84,539	204,875
Loss from Operations	(2,733,736)	(2,562,033)
Net Loss	$ (2,753,273)	$ (2,589,349)
Loss per common share:		
Basic and diluted	$ (1.83)	$ (1.79)
Weighted average number of common shares outstanding:		
Basic and diluted	1,502,870	1,448,036

	Fiscal Year Ended		
	September 30, 2017	**September 30, 2016**	**September 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	$ (5,030,648)	$ (5,026,080)	$ (2,843,029)
Loss per common share:			
Basic and diluted	$ (3.44)	$ (3.99)	$ (2.50)
Weighted average number of common shares outstanding:			
Basic and diluted	1,462,459	1,260,902	1,136,709

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 our common shares is extremely speculative and there can be no assurance of any return on any such investment.

An investment in our common shares 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.

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.

Although our shares are currently listed on Nasdaq, in the future, we may not be able to meet the continued listing requirements of Nasdaq, which require, among other things, a minimum bid price of $1.00 per share for common shares listed on the exchange. If we are unable to satisfy the Nasdaq criteria for maintaining our listing, our securities could be subject to delisting.

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.

While the Company plans to finance company operations for at least the next twelve months with cash on hand and product sales, management expects to continue incurring losses for the foreseeable future and may need to raise additional capital to pursue our business plan. 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 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 newly-formed 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 manufacturers 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. With respect to 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 in their respective jurisdictions 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 protection on our products. Such a loss of patent protection could harm our business. In addition, in a patent infringement proceeding, a court may decide that our 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 result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly.

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 companies." We may take advantage of these reporting exemptions until we are no longer an "emerging growth company." We will remain an "emerging growth company" until the 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, as amended (the "Securities Act"), (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 Securities Exchange Act of 1934, as amended (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 and the documents we incorporate by reference into this prospectus contain certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of 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 will not receive any proceeds from the resale of our common shares by the selling shareholders. We cannot predict when or if the warrants will be exercised, and it is possible that the warrants may expire and never be exercised. Any proceeds received by us from the exercise of the warrants will be used for general corporate purposes, which may include working capital, capital expenditures, and research and development expenses.

We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds from the exercise of the warrants. Pending any use, as described above, we intend to invest the net proceeds in high-quality, short-term, interest-bearing securities.

SELLING SHAREHOLDERS

In May 2018, we issued warrants in a private placement financing to "accredited investors" as defined in Rule 501(a) under the Securities Act pursuant to an exemption from registration under the Securities Act, including warrants issued to a placement agent in connection with the private placement. The Series A Common Share Purchase Warrants (the "Series A Warrants") became exercisable as of May 29, 2018, with an exercise period of five years. 1,122,076 Series A Warrants are exercisable at a price of $2.65 per share (subject to customary adjustments for share splits and dividends) and 78,545 Series A Warrants are exercisable at $3.3125 per share (subject to customary adjustments for share splits and dividends). The Series B Common Share Purchase Warrants (the "Series B Warrants") became exercisable as of May 29, 2018, with an exercise period of seven months, at an exercise price of $2.65 per share (subject to customary adjustments for share splits and dividends).

We have agreed to register for resale the common shares underlying the Series A Warrants and the Series B Warrants (the "Warrant Shares") under the Securities Act. Pursuant to the warrant exercise agreements with certain purchasers of the warrants (the "Exercise Agreements"), we have agreed to file a registration statement covering the Warrant Shares and have agreed to use commercially reasonable efforts to cause such registration statement to become effective (the "Registration Rights"). The resale registration statement, of which this prospectus is a part, when declared effective by the SEC, permits the resale of the Warrant Shares by the selling shareholders and their permitted assigns into the market from time to time over an extended period. Such registration statement has been filed pursuant to the Registration Rights to register the common shares the selling shareholders listed in the table below may acquire upon the exercise of the Series A Warrants and Series B Warrants, without regard to any restrictions or limitations on the number of common shares issuable upon exercise thereof.

When we refer to the selling shareholders in this prospectus, we mean those persons listed in the table below, as well as the permitted transferees, pledgees, donees, assignees, successors and others who later come to hold any of the selling shareholders' interests other than through a public sale.

The selling shareholders may from time to time offer and sell pursuant to this prospectus any or all of the common shares set forth in the following table. There is no requirement for the selling shareholders to sell their shares, and we do not know when, or if, or in what amount the selling shareholders may offer the common shares for sale pursuant to this prospectus.

The table below has been prepared based on the information furnished to us by the selling shareholders as of June 1, 2018. The selling shareholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the following table is presented in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling shareholders may change from time to time and, if necessary, we will supplement this prospectus accordingly. We are unable to confirm whether the selling shareholders will in fact sell any or all of their common shares.

To our knowledge and except as noted below, none of the selling shareholders has, or within the past three years has had, any material relationships with us or any of our affiliates. Each selling shareholder who is also an affiliate of a broker dealer, as noted below, has represented that: (1) the selling shareholder purchased in the ordinary course of business; and (2) at the time of purchase of the securities being registered for resale, the selling shareholder had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

Selling Shareholders	Beneficial Ownership Before This Offering		Shares Underlying Warrants Offered Hereby	Beneficial Ownership After This Offering	
	Number of Shares Owned	Percentage		Number of Shares Owned[1]	Percentage[1]
Anson Investments Master Fund LP[2] 190 Elgin Ave George Town, Grand Cayman KY1-9005 Cayman Islands	2,056,297(3)	4.99%	1,698,114	358,183	4.14%
Intracoastal Capital, LLC[4] 245 Palm Trail Delray Beach, Florida 33483	1,624,200(5)	9.99%	1,170,000	454,200	5.24%
Sabby Volatility Warrant Master Fund, Ltd. c/o Sabby Management, LLC 10 Mountainview Road, Suite 205 Upper Saddle River, NJ 07458[6]	707,555(7)	4.99%	498,114	209,441	2.45%
Mark Viklund* 430 Park Avenue, 3rd Floor New York, New York 10022	6,714(8)	*	2,356	4,358	*
Noam Rubenstein* 430 Park Avenue, 3rd Floor New York, New York 10022	56,704(9)	1.10%	24,742	31,962	*
Charles Worthman* 430 Park Avenue, 3rd Floor New York, New York 10022	2,238(10)	*	785	1,453	*
Michael Vasinkevich* 430 Park Avenue, 3rd Floor New York, New York 10022	144,370(11)	2.74%	50,662	93,708	1.1%

*Less than 1%

(1) Assumes all shares to be sold in this offering are sold.

(2) Voting and investment power over the shares held by Anson Investments Master Fund LP is exercised by the co-investment advisors to Anson Investments Master Fund LP. The co-investment advisors of Anson Investments Master Fund LP consist of Anson Advisors Inc. and Anson Funds Management LP. Bruce Winson is the managing member of Anson Management GP LLC, which is the general partner of Anson Funds Management LP. Moez Kassam and Amin Nathoo are directors of Anson Advisors Inc. Mr. Winson, Mr. Kassam and Mr. Nathoo each disclaim beneficial ownership of the common shares except to the extent of their pecuniary interest therein.

(3) This amount includes 1,788,516 common shares issuable upon the exercise of warrants (the “Anson Warrants”), which are currently exercisable. The Anson Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(4) Voting and investment power over the shares held by Intracoastal Capital, LLC ("Intracoastal") is exercised by the co-managers of Intracoastal, Mitchell P. Kopin and Daniel P. Asher. As a result, Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership of (as determined under Section 13(d) of the Exchange Act) of the common shares that are held by Intracoastal.

(5) This amount includes 1,274,300 common shares issuable upon the exercise of warrants (the "Intracoastal Warrants"), which are currently exercisable. The Intracoastal Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99 or 9.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(6) Sabby Management, LLC is the investment manager of Sabby Volatility Warrant Master Fund, Ltd. ("Sabby") and shares voting and investment power with respect to the shares held by Sabby in this capacity. As manager of Sabby Management, LLC, Hal Mintz also shares voting and investment power on behalf of Sabby. Each of Sabby Management, LLC and Hal Mintz disclaims beneficial ownership over the securities held by Sabby except to the extent of their pecuniary interest therein.

(7) This amount includes 498,114 common shares issuable upon the exercise of warrants (the "Sabby Warrants"), which are currently exercisable. The Sabby Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(8) This amount includes 6,714 common shares issuable upon the exercise of warrants (the "Viklund Warrants"), which are currently exercisable. The Viklund Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(9) This amount includes 56,704 common shares issuable upon the exercise of warrants (the "Rubenstein Warrants"), which are currently exercisable. The Rubenstein Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(10) This amount includes 2,238 common shares issuable upon the exercise of warrants (the "Worthman Warrants"), which are currently exercisable. The Worthman Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(11) This amount includes 144,370 common shares issuable upon the exercise of warrants (the "Vasinkevich Warrants"), which are currently exercisable. The Vasinkevich Warrants, pursuant to their terms, may not be exercised to the extent such exercise would cause the holder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised.

(12) Those shareholders shown with an asterisk (*) after their name in the "Selling Shareholders" column are registered broker-dealers or affiliates of broker-dealers.

Beneficial ownership of shares and percentage ownership are determined in accordance with the SEC's rules and are based on 5,118,519 common shares issued and outstanding as of June 1, 2018. In calculating the number of shares beneficially owned by an individual or entity and the percentage ownership of that individual or entity, shares underlying options or warrants that are either currently exercisable or exercisable within 60 days from the date of this prospectus are deemed outstanding. These shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other individual or entity.

DESCRIPTION OF SECURITIES WE ARE OFFERING

The selling shareholders are offering 3,444,773 of our common shares. The following is a brief description of the securities the selling shareholders 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.

Common Shares

We are authorized to issue an unlimited number of common shares, no par value. As of June 1, 2018, we had 5,118,519 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.

Description of Outstanding Warrants to Purchase Common Shares pursuant to which the Warrant Shares may be Issued

The following summary of certain terms and provisions of the Series A Warrants and Series B Warrants is not complete and is subject to, and qualified in its entirety by, the provisions of the warrants, the forms of which are filed as exhibit to our Current Report on Form 8-K filed with the SEC on May 29, 2018. 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

1,122,076 Series A Warrants have an initial exercise price per share equal to $2.65 and 78,545 Series A Warrants have an initial exercise price per share equal to $3.3125 per share. Each Series A Warrant became exercisable on May 29, 2018 and expires on May 29, 2023. Each Series B Warrant has an initial exercise price per share equal to $2.65 and became exercisable on May 29, 2018. The Series B Warrants expire on December 31, 2018. The exercise price and number of common shares issuable upon exercise of the Series A Warrants and Series B Warrants 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.

Cashless Exercise

If, at the time a holder exercises its Series A Warrants or Series B 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 Series A Warrant or Series B Warrant, as applicable.

Exercisability

The Series A Warrants and Series B 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 warrant 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 Series A Warrants or Series B 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, the Series A Warrants and Series B Warrants may be transferred at the option of the holder upon surrender of the warrant(s) to us together with the appropriate instruments of transfer.

Fundamental Transaction

In the event of a fundamental transaction which is approved by our Board, the holders of the Series A Warrants and Series B Warrants have the right to require us or a successor entity to redeem the warrants 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 Series A Warrants and Series B Warrants have the right to require us or a successor entity to redeem the warrant(s) for the consideration paid in the fundamental transaction in the amount of the Black Scholes value of the unexercised portion of the warrant(s) on the date of the consummation of the fundamental transaction.

PLAN OF DISTRIBUTION

Each selling shareholder and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their common shares included in the registration statement of which this prospectus is a party, on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the common shares are traded or in private transactions. These sales may be at fixed or negotiated prices.

A selling shareholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchases;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the selling shareholder to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling shareholders may also sell our common shares under Rule 144 under the Securities Act or any other exemption from registration, if available, rather than under this prospectus.

Broker-dealers engaged by the selling shareholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholders (or, if any broker-dealer acts as agent for the purchaser of our common shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121.

In connection with the sale of the common shares or interests therein, the selling shareholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common shares in the course of hedging the positions they assume. The selling shareholders may also sell common shares short and deliver these common shares to close out their short positions, or loan or pledge the common shares to broker-dealers that in turn may sell these common shares. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institutions of common shares offered by this prospectus, which common shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling shareholders and any broker-dealers or agents that are involved in selling the common shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the common shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling shareholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common shares and that there is no underwriter or coordinating broker acting in connection with the proposed sale of the common shares offered hereby by the selling shareholders.

The Company is required to pay certain fees and expenses incurred by it incident to the registration of the common shares. The Company has agreed to indemnify the selling shareholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the common shares offered hereby may not simultaneously engage in market making activities with respect to the common shares for the applicable restricted period, as defined by Regulation M, prior to the commencement of the distribution. In addition, the selling shareholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common shares by the selling shareholders or any other person. We will make copies of this prospectus available to the selling shareholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

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.

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.

EXPERTS

The consolidated financial statements of Stellar Biotechnologies, Inc. incorporated in this Registration Statement on Form S-1 by reference have been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report, which is incorporated by reference herein. Such consolidated financial statements have been so incorporated 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 common shares that the selling shareholders 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, May 7, 2018, May 15, 2018, May 16, 2018, May 23, 2018 and May 30, 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;
- our consolidated financial statements contained in Amendment No. 1 to Registration Statement on Form S-1 (Registration No. 333-224314), together with the notes thereto and the auditor's report thereon, and the related management's discussion and analysis, which was filed with the SEC on May 8, 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.

3,444,773 Common Shares

PROSPECTUS

June 15, 2018