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

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)**

Filed by the Registrant Filed by a party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

Oragenics, Inc.
(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No Fee Required
- Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.
- (1) Title of each class of securities to which transaction applies:
- (2) Aggregate number of securities to which transaction applies:
- (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
- (4) Proposed maximum aggregate value of transaction:
- (5) Total fee paid:
- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- (1) Amount Previously Paid:
- (2) Form Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed:
-



**4902 Eisenhower Blvd., Suite 125
Tampa, Florida 33634**

May 16, 2019

Dear Fellow Shareholders:

You are cordially invited to attend the Annual Meeting of Shareholders of Oragenics, Inc., which will be held on June 20, 2019, beginning at 9:00 a.m., Eastern Time. The meeting will be held at the Tampa Airport Marriott, 4200 George J. Bean Parkway, Tampa, FL, 33607. The purpose of the meeting is to consider and vote upon the proposals explained in the accompanying Notice of Annual Meeting of Shareholders and the Proxy Statement.

A formal notice describing the business to come before the meeting, a proxy statement and a proxy card are enclosed. We have also enclosed our 2018 Annual Report on Form 10-K for your review, which contains detailed information concerning our financial performance and activities during 2018.

It is important that your shares be represented at the Annual Meeting of Shareholders. Whether or not you plan to attend the annual meeting in person, please vote your shares by completing, signing and dating the enclosed proxy card, and returning it in the enclosed, postage-paid envelope. If you later decide to attend the annual meeting and vote in person, or if you wish to revoke your proxy for any reason before the vote at the annual meeting, you may do so and your proxy will have no further effect.

Sincerely,

/s/Alan Joslyn

Alan Joslyn
President and Chief Executive Officer

Enclosures

ORAGENICS, INC.

4902 Eisenhower Blvd., Suite 125
Tampa, Florida 33634

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS TO BE HELD ON JUNE 20, 2019

Notice is hereby given to the shareholders of Oragenics, Inc., a Florida Corporation (the "Company") that the 2018 Annual Meeting of Shareholders of the Company (including any postponements or adjournments thereof, the "Annual Meeting") will be held at the Tampa Airport Marriott, 4200 George J. Bean Parkway, Tampa, FL, 33607 on June 20, 2019, at 9:00 a.m., local time, for the following purposes:

- (i) To elect five (5) Directors of the Company to serve until the next annual meeting of shareholders;
- (ii) To conduct a non-binding advisory vote on the desired frequency of a non-binding advisory vote on executive compensation;
- (iii) To conduct a non-binding advisory vote on executive compensation;
- (iv) To ratify the 2018 amendment to the Company's 2012 Equity Incentive Plan, as amended (the "2012 Equity Incentive Plan") which amendment was previously approved by shareholders at the Company's 2017 Annual Meeting, and increased the number of common shares available for issuance under the 2012 Equity Incentive Plan by 1,500,000 shares;
- (v) To approve an amendment to the Company's 2012 Equity Incentive Plan to increase the number of common shares available for issuance by 6,000,000 shares;
- (vi) To ratify the selection of Mayer Hoffman McCann P.C. as the Company's independent auditors for the year ending December 31, 2019; and
- (vii) To transact such other business as may properly come before the Annual Meeting.

All shareholders are cordially invited to attend the Annual Meeting of Shareholders. Information relating to the Annual Meeting of Shareholders and matters to be considered and voted upon at the Annual Meeting of Shareholders are set forth in the attached Proxy Statement.

Only those shareholders of record at the close of business on April 22, 2019, are entitled to notice of and to vote at the Annual Meeting of Shareholders. A complete list of shareholders entitled to vote at the Annual Meeting of Shareholders will be available for examination by any shareholder at the Annual Meeting of Shareholders and for a period of ten days prior thereto at the executive offices of the Company in Tampa, Florida.

BY ORDER OF THE BOARD OF DIRECTORS,

/s/Michael Sullivan

MICHAEL SULLIVAN

Secretary

Tampa, Florida

May 16, 2019

WHETHER OR NOT YOU EXPECT TO ATTEND THE ANNUAL MEETING, PLEASE VOTE, SIGN, DATE, AND RETURN THE ENCLOSED PROXY PROMPTLY IN THE ENCLOSED BUSINESS REPLY ENVELOPE. IF YOU ATTEND THE ANNUAL MEETING YOU MAY, IF YOU WISH, WITHDRAW YOUR PROXY APPOINTMENT AND VOTE IN PERSON.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE SHAREHOLDERS MEETING TO BE HELD ON JUNE 20, 2019.

This Proxy Statement and our 2018 Annual Report on Form 10-K for the year ended December 31, 2018, which was filed on March 29, 2019, with the Securities and Exchange Commission, except for exhibits, are available at: www.oragenics.com/annualreport.html

TABLE OF CONTENTS

<u>INFORMATION CONCERNING SOLICITATION AND VOTING</u>	1
<i>General</i>	1
<i>Note Regarding Reverse Stock Split</i>	1
<i>Record Date and Voting Securities</i>	1
<i>Quorum Requirement</i>	2
<i>Vote Required</i>	2
<i>Recommendation of the Board of Directors</i>	3
<i>Voting</i>	3
<i>Changing Vote: Revocability of Proxies</i>	4
<i>Effect of Not Casting Your Vote</i>	4
<i>Expenses of Solicitation</i>	4
<i>Shareholder Proposals to Be Presented at Next Annual Meeting of Shareholders</i>	5
<i>Delivery of Proxy Materials to Shareholders</i>	5
<u>PROPOSAL I ELECTION OF DIRECTORS</u>	6
<i>Nominees</i>	6
<i>Vote Required and Board of Directors' Recommendation</i>	6
<i>Information About Nominees</i>	6
<u>PROPOSAL II ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION</u>	9
<u>PROPOSAL III ADVISORY VOTE ON EXECUTIVE COMPENSATION</u>	10
<u>PROPOSAL IV RATIFICATION OF THE 2018 AMENDMENT TO THE ORAGENICS, INC. 2012 EQUITY INCENTIVE PLAN, INCREASING THE NUMBER OF COMMON SHARES AVAILABLE FOR ISSUANCE UNDER THE PLAN BY 1,500,000 SHARES</u>	11
<i>Background</i>	11
<i>Summary of the 2012 Equity Incentive Plan</i>	11
<i>Federal Income Tax Consequences</i>	17
<i>Accounting Treatment</i>	18
<i>Vote Required and Board of Directors' Recommendation</i>	18
<u>PROPOSAL V APPROVAL OF AN AMENDMENT TO INCREASE THE NUMBER OF COMMON SHARES AVAILABLE FOR ISSUANCE UNDER THE 2012 EQUITY INCENTIVE PLAN BY 6,000,000 SHARES</u>	19
<i>Summary</i>	19
<i>Vote Required and Board of Directors' Recommendation</i>	22
<u>PROPOSAL VI RATIFICATION OF THE SELECTION OF MAYER HOFFMAN MCCANN P.C. AS THE COMPANY'S INDEPENDENT AUDITORS</u>	23
<i>Summary</i>	23

<u>Independent Auditors' Fees and Services</u>	23
<u>Pre-Approval Policy</u>	24
<u>Vote Required and Board of Directors' Recommendation</u>	24
<u>REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS</u>	25
<u>CORPORATE GOVERNANCE</u>	26
<u>Corporate Governance Principles</u>	26
<u>Code of Ethics/Standards of Business Conduct</u>	26
<u>Independence of Directors</u>	26
<u>Board Leadership Structure</u>	27
<u>Risk Oversight</u>	27
<u>Meetings of the Board of Directors and Committees</u>	27
<u>Direct Shareholder Communication to Board Members</u>	29
<u>Director Compensation</u>	30
<u>EXECUTIVE COMPENSATION</u>	33
<u>Compensation Practices and Risk</u>	33
<u>Compensation Discussion and Analysis</u>	33
<u>2018 Compensation Decisions</u>	37
<u>Summary Compensation Table</u>	37
<u>Current Executive Officers and Key Employee</u>	38
<u>Incentive Awards</u>	39
<u>Outstanding Equity Awards</u>	40
<u>Employment Contracts and Change in Control Arrangements</u>	41
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u>	45
<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS</u>	48
<u>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</u>	54
<u>OTHER MATTERS</u>	55
<u>APPENDIX A 2012 EQUITY INCENTIVE PLAN, AS AMENDED</u>	A-1
<u>APPENDIX B FOURTH AMENDMENT TO AMENDED AND RESTATED ORAGENICS, INC. 2012 EQUITY INCENTIVE PLAN</u>	B-1
<u>APPENDIX C REQUEST FOR INTERIM FINANCIAL STATEMENTS</u>	C-1
<u>APPENDIX D PROXY CARD</u>	D-1

**ORAGENICS, INC.
PROXY STATEMENT
FOR HOLDERS OF COMMON STOCK
FOR ANNUAL MEETING OF SHAREHOLDERS
TO BE HELD ON JUNE 20, 2019**

INFORMATION CONCERNING SOLICITATION AND VOTING

General

This Proxy Statement is furnished to shareholders, of Oragenics, Inc., a Florida corporation (the “Company”), in connection with the solicitation of proxies by the Company’s Board of Directors from shareholders for use at the 2018 Annual Meeting of Shareholders to be held at 9:00 a.m. local time at the Marriott Tampa Airport, 4200 George J. Bean Parkway, Tampa, FL, 33607 on June 20, 2019 (including any postponements or adjournments thereof, the “Annual Meeting”).

The Annual Meeting will be held for the following purposes:

- (i) To elect five (5) Directors of the Company to serve until the next annual meeting of shareholders;
- (ii) To conduct a non-binding advisory vote on the desired frequency of a non-binding advisory vote on executive compensation;
- (iii) To conduct a non-binding advisory vote on executive compensation;
- (iv) To ratify the 2018 amendment to the Company’s 2012 Equity Incentive Plan, as amended (the “2012 Equity Incentive Plan”) which amendment was previously approved by shareholders at the Company’s 2017 Annual Meeting, and increased the number of common shares available for issuance under the 2012 Equity Incentive Plan by 1,500,000 shares;
- (v) To approve an amendment to the Company’s 2012 Equity Incentive Plan to increase the number of common shares available for issuance by 6,000,000 shares;
- (vi) To ratify the selection of Mayer Hoffman McCann P.C. as the Company’s independent auditors for the year ending December 31, 2019; and
- (vii) To transact such other business as may properly come before the Annual Meeting.

This Proxy Statement and the accompanying Proxy are first being mailed to shareholders of the Company on or about May 16, 2019.

Note Regarding Reverse Stock Split

Effective January 19, 2018, we filed an amendment to our Amended and Restated Articles of Incorporation with the Secretary of State of the State of Florida to effect a reverse split of our authorized and outstanding common stock at a ratio of one for ten. All applicable share and per share amounts reflected in this proxy statement have been adjusted to reflect the reverse stock split.

Record Date and Voting Securities

Only shareholders of record of the Company at the close of business on April 22, 2019 (the “Record Date”) will be entitled to notice of, and to vote at, the Annual Meeting of Shareholders. On the Record Date, there were 46,112,303 shares of common stock issued and outstanding (“Common Stock”). Each share of Common Stock is entitled to one vote for each share of Common Stock held. In addition, on the Record Date we had the following shares of Preferred Stock outstanding:

- 9,417,000 shares of Series A Non-Voting, Convertible Preferred Stock, convertible into 941,700 shares of common stock;
- 6,600,000 shares of Series B Non-Voting, Convertible Preferred Stock convertible into 1,320,000 shares of common stock; and
- 113.941 shares of Series C Non-Voting, Non-Convertible Preferred Stock.

Notwithstanding the Record Date specified above, the Company's stock transfer books will not be closed and shares may be transferred subsequent to the Record Date. However, all votes must be cast in the names of shareholders of record on the Record Date.

Quorum Requirement

The holders of record of a majority of the votes of Common Stock entitled to be voted at the Annual Meeting of Shareholders, present in person or by proxy, are required to establish a quorum for the Annual Meeting and for voting on each matter. A broker non-vote is when a brokerage firm or bank holding shares of record for their customers in street name does not receive specific instructions from their customers, as the beneficial owners, and the brokerage firm or bank advises that it lacks discretionary voting authority on a particular proposal and has not received instructions from the beneficial owner.

Vote Required

PROPOSAL I: Election of Directors. The election of five Directors by the holders of Common Stock will require a plurality of the votes cast by the shares of Common Stock represented and entitled to vote in the election at the Annual Meeting of Shareholders. With respect to the election of Directors, shareholders may (i) vote "for" each of the nominees, (ii) withhold authority for each of such nominees, or (iii) withhold authority for specific nominees but vote for the other nominees. Because the Directors are elected by a plurality of the votes cast by the shares represented and entitled to vote and are running unopposed, any nominee can be elected upon any affirmative vote regardless of whether such nominee receives more than 50% of the shareholder vote. Votes that are withheld or a broker non-vote will have no effect on the outcome of the election of Directors.

PROPOSAL II: To conduct an advisory vote on the desired frequency of a non-binding advisory vote on executive compensation. The proposal regarding the approval, on an advisory basis, of the frequency of future advisory votes on the Company's executive compensation requires the majority of the shares of Common Stock of the Company present in person or represented by proxy and entitled to vote at the Annual Meeting of Shareholders. If no frequency receives the approval of a majority of the Common Stock represented and cast with respect to the proposal, we will consider the option of ONE YEAR, TWO YEARS or THREE YEARS that receives the highest number of votes cast to be the frequency recommended by shareholders.

PROPOSAL III: To conduct an advisory vote on executive compensation. The proposal regarding the approval, on an advisory basis, of the Company's executive compensation requires the affirmative vote of a majority of the shares of Common Stock of the Company present in person or represented by proxy and entitled to vote at the Annual Meeting of Shareholders.

PROPOSAL IV: To ratify the Oragenics' amendment to the 2012 Equity Incentive Plan (the "*2012 Equity Incentive Plan*") as previously approved by stockholders at the Company's 2017 Annual Meeting (the "*2017 Annual Meeting*"), which increased the number of common shares available for issuance under the 2012 Equity Incentive Plan by 1,500,000 shares, requires the affirmative vote of a majority of the shares of Common Stock of the Company present in person or represented by proxy and entitled to vote at the Annual Meeting of Shareholders.

PROPOSAL V: Approval of an amendment to the 2012 Equity Incentive Plan increasing the number of common shares available for issuance under the 2012 Equity Incentive Plan by 6,000,000 shares. Approval requires the affirmative vote of a majority of the shares of Common Stock of the Company present in person or represented by proxy and entitled to vote at the Annual Meeting of Shareholders for approval of the plan amendment. With respect to this proposal, shareholders may (i) vote "for" the proposal, (ii) vote "against" the proposal, or (iii) abstain from voting. Broker non-votes will have no effect on the outcome of the proposal. Abstentions have the same effect as votes against the proposal.

PROPOSAL VI: Ratification of the selection of Mayer Hoffman McCann P.C. as the Company's independent auditors for the year ending December 31, 2019. Approval requires the affirmative vote of a majority of the shares of Common Stock present in person or represented by proxy and entitled to vote at the meeting and entitled to vote on the proposal. Abstentions will not be counted in the ratification of the selection of independent auditors and will have no effect on the outcome of the selection of the independent auditors. The ratification of accountants is a routine proposal on which a broker or other nominee is generally empowered to vote in the absence of voting instructions from the beneficial owner, so broker non-votes are unlikely to result from this proposal.

Recommendation of the Board of Directors

The Board unanimously recommends that you vote your shares:

- **“FOR”** the nominees listed in Proposal I below;
- **“FOR”** every 1 year as the frequency with which shareholders are provided an advisory vote on executive compensation;
- **“FOR”** the approval, on an advisory basis, of the compensation of our named executive officers as disclosed in this Proxy Statement;
- **“FOR”** the ratification of the amendment previously approved by the Company’s shareholders to the Company’s 2012 Equity Incentive Plan to increase the number of common shares authorized for issuance from 750,000 to 2,250,000;
- **“FOR”** the approval of the adoption of an amendment to the Company’s 2012 Equity Incentive Plan to increase the number of common shares authorized for issuance from 2,250,000 to 8,250,000; and
- **“FOR”** the ratification the selection of Mayer Hoffman McCann P.C. as the Company’s independent auditors for the year ending December 31, 2019.

Voting

All shares entitled to vote and represented by properly executed proxies received prior to the Annual Meeting of Shareholders, and not revoked, will be voted at the annual meeting in accordance with the instructions indicated. If you submit a proxy and do not make voting selections, the shares represented by that proxy will be voted as recommended by the Board. If any other matters are properly presented for consideration at the Annual Meeting of Shareholders, including, among other things, consideration of a motion to adjourn the annual meeting to another time or place (including, without limitation, for the purpose of soliciting additional proxies), the persons named as proxies and acting thereunder will have discretion to vote on those matters in accordance with their best judgment. To the extent permitted by Rule 14a-4(c) of the Securities and Exchange Commission, the persons named as proxies on the proxy cards will have discretionary authority to vote in their judgment on any proposals properly presented by shareholders for consideration at the Annual Meeting of Shareholders that were not submitted to the Company within a reasonable time prior to the mailing of these proxy materials. At the time this proxy statement was mailed, we were unaware of any matters proposed to be acted on at the Annual Meeting of Shareholders other than those discussed in this proxy statement.

Shareholders of record — If your shares are registered directly in your name with Oragenics’ transfer agent, Continental Stock Transfer & Trust Company, you are considered, with respect to those shares, the shareholder of record, and the proxy materials and Annual Report have been sent directly to you. As a shareholder of record, you may instruct the proxy holders how to vote your shares by completing, signing, dating and returning the proxy card in the postage pre-paid envelope provided. Proxy cards submitted by mail must be received by the time of the Annual Meeting of Shareholders in order for your shares to be voted. If you sign and return a proxy card without giving specific voting instructions, your shares will be voted as recommended by our Board. If you need assistance in completing your proxy card or have questions regarding the annual meeting, please contact Georgeson LLC at 1-888-505-6583.

If you attend the Annual Meeting of Shareholders, you may also submit your vote in person, and any previous votes that you submitted, will be superseded by the vote that you cast at the Annual Meeting of Shareholders. If you plan to attend the annual Meeting of Shareholders, please bring proof of identification for entrance to the annual Meeting of Shareholders.

Beneficial owners — Many Oragenics shareholders hold their shares through a broker, trustee or other nominee, rather than directly in their own name. If your shares are held in a brokerage account or by a bank or another nominee, you are considered the “beneficial owner” of shares held in “street name,” and the Annual Meeting of Shareholders proxy materials have been forwarded to you by your broker, trustee or nominee who is considered, with respect to those shares, the shareholder of record. As a beneficial owner, you have the right to direct your broker, trustee or other nominee on how to vote your shares, and you will receive instructions from them that you must follow in order to have your shares voted. The instructions from your broker, bank or other nominee will indicate if Internet and telephone voting are available, and if they are available, will provide details regarding Internet and telephone voting.

Because a beneficial owner is not the shareholder of record, you may not vote these shares in person at the Annual Meeting of Shareholders unless you obtain a “legal proxy” from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the Annual Meeting of Shareholders.

Changing Vote; Revocability of Proxies

Subject to any rules your broker, trustee or nominee may have, you may change your proxy instructions at any time before your proxy is voted at the Annual Meeting of Shareholders.

Shareholders of record — If you are a shareholder of record, you may change your vote (1) by delivering to us (Attention: Corporate Secretary, 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634), prior to your shares being voted at the Annual Meeting of Shareholders, a later dated written notice of revocation or a duly executed proxy card, or (2) by attending the Annual Meeting of Shareholders and voting in person (although attendance at the Annual Meeting of Shareholders will not, by itself, revoke a proxy). A shareholder of record that has voted on the Internet or by telephone may also change his or her vote by subsequently making a timely and valid later Internet or telephone vote.

Beneficial owners — If you are a beneficial owner of shares held in street name, you may change your vote (1) by submitting new voting instructions to your broker, trustee or nominee, or (2) if you have obtained a legal proxy from the broker, trustee or nominee that holds your shares giving you the right to vote the shares, by attending the Annual Meeting of Shareholders and voting in person.

Effect of Not Casting Your Vote

Shareholders of record — If you are a shareholder of record and you do not cast your vote, no votes will be cast on your behalf on any of the items of business at the Annual Meeting of Shareholders.

Beneficial owners — If you hold your shares in street name, it is critical that you cast your vote if you want it to count in the election of Directors (Proposal I), to conduct an advisory vote on the desired frequency of a non-binding advisory vote on executive compensation (Proposal II); to conduct an advisory vote on executive compensation (Proposal III), for the ratification of the 2018 amendment which increased the authorized common shares available under the 2012 Equity Incentive Plan (Proposal IV) for the amendment to increase the authorized common shares available under the 2012 Equity Incentive Plan (Proposal V) since those are considered non-routine proposals under applicable NYSE American LLC rules. Under the rules if you do not instruct your broker, bank or other nominee in a timely fashion how to vote your shares (so-called “broker non-votes”) the broker or nominee can vote your shares as it sees fit only on matters that are determined to be routine, and not on any other proposal. The proposal for ratification of the auditors (Proposal VI) is considered to be a routine proposal under NYSE American LLC rules and your nominee can vote on such proposal even if it does not receive voting instructions from you. However, your nominee cannot vote on Proposal I, Proposal II, Proposal III, Proposal IV or Proposal V without your voting instructions. Please be sure to give specific voting instructions so that your vote can be counted.

Expenses of Solicitation

We will bear the entire cost of proxy solicitation, including preparation, assembly, printing and mailing of the Proxy Materials, the Notice, and any additional materials furnished to shareholders. Copies of proxy solicitation material will be furnished to brokerage houses, fiduciaries, and custodians holding shares in their names which are beneficially owned by others to forward to such beneficial owners. In addition, we may reimburse such persons for their cost of forwarding the solicitation material to such beneficial owners. We have retained Georgeson, LLC to assist in the distribution of proxy materials and the solicitation of votes by mail, facsimile or email from brokerage firms, banks, broker-dealers or other similar organizations for the Annual Meeting for a fee of \$10,000, plus additional fees based on the amount and types of services rendered and reimbursement of reasonable expenses. Georgeson may be contacted toll free at 1-888-505-6583. Solicitation of proxies by mail may also be supplemented by one or more of telephone, email, telegram, facsimile, or personal solicitation by our Directors, officers, or regular employees. No additional compensation will be paid for such services.

Shareholder Proposals to Be Presented at Next Annual Meeting of Shareholders

Requirements for shareholder proposals to be considered for inclusion in Oragenics' proxy materials. Shareholders interested in submitting a proper proposal for inclusion in the proxy materials for our next annual meeting may do so by submitting such proposal in writing to our offices located at 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634, Attn: Corporate Secretary. To be eligible for inclusion, stockholder proposals must be received by us not less than 120 days before the one year anniversary on which Oragenics' first mailed its proxy statement to shareholders in connection with the previous year's annual meeting of shareholders, which will be January 1, 2020 for the next annual meeting, and must otherwise comply with the requirements of Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), provided, however, that in the event that the date of the annual meeting has been changed more than 30 days from the one year anniversary of the date of the previous year's meeting, then the deadline for receipt of notice by the shareholder is within a reasonable time before the Company begins to print and send its proxy materials in order to be eligible for inclusion in the Company's Proxy Statement and Proxy relating to that meeting.

Requirements for shareholder business or nominations to be brought before Oragenics' annual meetings. Our bylaws do not establish an advance notice procedure for shareholders who wish to present certain matters, including nominations of persons for election to the Board and shareholder proposals not included in our proxy statement, to be brought before an annual meeting of shareholders. Shareholder proposals, including the nomination of a person for election to the Board, brought before the meeting should consider including, among other things: information as follows: (i) a description of the business desired to be brought before the meeting and the reasons for conducting the business at the meeting, (ii) the name and address, as they appear on the Company's books, of the shareholder submitting the proposal, (iii) the number of shares that are beneficially owned by such shareholder, (iv) the dates on which the shareholder acquired the shares, (v) documentary support for any claim of beneficial ownership, (vi) any material interest of the shareholder in the proposal, (vii) a statement in support of the proposal, and (viii) any other information that may be required by applicable rules and regulations of the Commission.

Shareholders may also submit a recommendation (as opposed to a formal nomination) for a candidate for membership on our Board by following the procedures set forth in "Corporate Governance —Meetings of the Board of Directors — Shareholder Recommendation of Nominees."

Delivery of Proxy Materials to Shareholders

If you share an address with another shareholder, each shareholder may not receive a separate copy of the Notice or Proxy Materials. Shareholders may request to receive a separate copy of the Notice or Proxy Materials, by writing to Oragenics, Inc., 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634, Attention: Corporate Secretary or calling 813-286-7900. Alternatively, shareholders who share an address and receive multiple copies of the Notice or Proxy Materials may request to receive a single copy by following the same instructions.

You may also request additional copies from our proxy solicitor, Georgeson, LLC, or Georgeson, using the following contact information: 1290 Avenue of the Americas, 9th Floor, New York, NY 10104; 1-888-505-6583.

**PROPOSAL I
ELECTION OF DIRECTORS**

Nominees

The Board of Directors currently is comprised of five Board members including Dr. Frederick W. Telling, Robert C. Koski, Charles L. Pope, Dr. Alan Dunton, and Dr. Alan Joslyn. All of our existing Directors are nominated for re-election at the Annual Meeting of Shareholders. If elected, each of the Directors will hold office until the next annual meeting of shareholders and until their successor is elected and qualified, or as otherwise provided by the Company's Bylaws or by Florida law.

If any of the nominees should be unavailable to serve for any reason, the Board of Directors may:

- designate a substitute nominee, in which case the persons named as proxies will vote the shares represented by all valid Proxies for the election of such substitute nominee;
- allow the vacancy to remain open until a suitable candidate is located and nominated; or
- adopt a resolution to decrease the authorized number of Directors.

Vote Required and Board of Directors' Recommendation

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE SHAREHOLDERS VOTE FOR EACH DIRECTOR NOMINEE

If a choice is specified on the Proxy by the shareholder, the shares will be voted as specified. If no specification is made, the shares will be voted FOR the Director nominees. Election of each Director nominee will require the affirmative vote of a plurality of the votes cast by shares of Common Stock represented and entitled to vote at the Annual Meeting of Shareholders.

Information About Nominees

Information about each nominee as of May 16, 2019 is set forth below:

Name	Age	Position
Dr. Frederick W. Telling, Ph.D.	67	Chairman and Director
Alan Joslyn, Ph.D.	60	President, Chief Executive Officer and Director
Robert C. Koski	60	Director
Charles L. Pope	67	Director
Dr. Alan W. Dunton, M.D.	64	Director

Directors of the Company

Dr. Frederick W. Telling. Dr. Telling was elected Chairman of the Board of Directors on February 4, 2011. He has served as a Director since June 2010. Dr. Telling retired from Pfizer Inc. in June 2007 after 30 years of service. At Pfizer Dr. Telling served as its Corporate Vice President and Vice President of Corporate Strategic Planning and Policy. Dr. Telling also serves on the Boards of various civic and non-profit organizations. Dr. Telling holds a B.A. degree in History and Economics from Hamilton College and a MA degree in Industrial and Labor Relations and a PhD in Economics and Public Policy from Cornell University.

Dr. Telling brings to our Board an extensive array of business and industry experience as well as experience as a Director of public companies.

Alan F. Joslyn, Ph.D. Dr. Joslyn has served as a Director of our company since June 2016. Since 2009 he has served as Board member of Synergy Pharmaceuticals (NASDAQ: SGYP). Since 2014, Dr. Joslyn has been a partner in Lazarus Pharmaceuticals, LL. From March 2010 to April 2014, Dr. Joslyn served as CEO and a Director of Sentinella Pharmaceuticals and from August 2009 to October 2012 as CEO and Director of Edusa Pharmaceuticals, both privately held biotechnology companies. From March 2007 to March 2009, Dr. Joslyn served as President and Chief Executive Officer of Mt. Cook Pharma and as Senior Vice President of Research & Development at Penwest Pharmaceuticals from 2004 to 2007. From 1995 to 2004, Dr. Joslyn held a number of leadership positions within Johnson & Johnson focusing on development of gastroenterology products including Propulsid®, Motilium®, Aciphex® and prucalopride. Dr. Joslyn received his B.S. in medicinal chemistry, B.A. in biology and Ph.D. in biochemical pharmacology from the State University of New York at Buffalo.

Dr. Joslyn brings to our Board over two decades of experience in the pharmaceutical industry and extensive expertise in gastroenterology and infectious disease product development.

Charles L. Pope. Mr. Pope has served as a Director since June 2010. Mr. Pope served as the Chief Financial Officer of Palm Bancorp, Inc. from June 2009 to June 2012. From September 2007 through June 2009, Mr. Pope served as the Chief Financial Officer of Aerosonic Inc., a manufacturer of aviation products. Mr. Pope served as the Chief Financial Officer of Reptron Inc., a manufacturer of electronic products, from March 2005 through June 2007. From March 2002 to March 2005, Mr. Pope served as Chief Financial Officer of SRI/Surgical Express, Inc. From February 2001 to March 2002, Mr. Pope served as Chief Financial Officer of Innovaro, Inc. (formerly UTEK Corporation NYSE AMERICAN: INV) a public company. Mr. Pope served as a Director of Innovaro, Inc. from March 2010 to August 2012. Mr. Pope also served as a Director of Inuvo, Inc. from July 2008 through July 2018. Prior to this time, Mr. Pope served as a Partner in the Audit and Financial Advisory Consulting Divisions of PricewaterhouseCoopers LLP, and he was also a Partner in the Accounting and SEC Directorate in PricewaterhouseCoopers LLP's New York City office. Mr. Pope holds a B.S. degree in Economics and Accounting from Auburn University and is a Certified Public Accountant in Florida.

Mr. Pope brings to our Board over three decades of experience in the finance and accounting fields. In addition, Mr. Pope also has experience serving as a Director of public companies.

Dr. Alan W. Dunton. Dr. Dunton has served as a Director of Oragenics, Inc. since April 2011. He is the principal owner of Danerius, LLC, a biotechnology consulting company which he founded in 2006. In addition to Oragenics, he is currently a Director of the public biotechnology company, Palatin, Inc. (AMEX: PTN). Dr. Dunton is also a member of the Board of Members or Directors of Cytogel Pharma, a privately-held firm in Darien, Connecticut. He previously served as a Director of Sancilio and Company, MediciNova and Targacept, Inc. Dr. Dunton is also a member of the Board of Directors of CorMedix, Inc. (CRMD), a publicly traded biotechnology company in Berkeley Heights, New Jersey since March 2019. Dr. Dunton has held significant senior positions in major pharmaceutical companies. Most recent was from November 2015 through March 2018 as the Senior Vice President of Research, Development and Regulatory Affairs of Purdue Pharma L.P., a private pharmaceutical company. From January 2007 until March 2009, Dr. Dunton served as President and Chief Executive Officer of Panacos Pharmaceuticals, Inc. He was the non-Executive Chairman and Director of EpiCept, Inc. (OTC MKTS: EPCT) a public biotechnology company developing products for cancer, pain and inflammatory conditions. In 2005, Dr. Dunton served as the Non-Executive Chairman of the Board of Directors of ActivBiotics, Inc., a private biopharmaceutical company. Previously, he was the President and Chief Executive Officer of Metaphore Pharmaceuticals, Inc. from 2003 until 2006, when it merged with ActivBiotics. From 2004 until 2005, Dr. Dunton served as a member of the Board of Directors of Vicuron Pharmaceuticals until it was acquired by Pfizer, Inc. In 2002, Dr. Dunton served as President, Chief Operating Officer and a Director of Emisphere Technologies, Inc., a biopharmaceutical company. From 1994 to 2001, Dr. Dunton was a senior executive in various capacities in the Pharmaceuticals Group of Johnson & Johnson. From 1999 to 2001, Dr. Dunton was President and Managing Director of The Janssen Research Foundation, a Johnson & Johnson company. From 1998 to 1999, he served as Group Vice President of Global Clinical Research and Development of Janssen. Prior to joining Janssen, Dr. Dunton was Vice President of Global Clinical Research and Development at the R.W. Johnson Pharmaceutical Research Institute, also a Johnson & Johnson company. Prior to joining Johnson & Johnson, Dr. Dunton held positions in clinical research and development at Syntex Corporation, CIBA-GEIGY Corporation and Hoffmann La Roche Inc. Dr. Dunton holds a MD degree from New York University School of Medicine, where he completed his residency in internal medicine. He also was a Fellow in Clinical Pharmacology at the New York Hospital/Cornell University Medical Center.

Dr. Dunton brings to our Board a significant depth of experience in the pharmaceutical industry that will be invaluable to the Company as we continue to develop biotechnology assets.

Robert C. Koski. Mr. Koski has served as a Director since June 2009. Mr. Koski has practiced as an attorney with the Koski Firm, a sole proprietorship located in Atlanta, Georgia since 1992, where his practice includes litigation and tax law. Mr. Koski has also served as a partner in the Koski Family Limited Partnership, which beneficially owns an interest in the Company, and as a Director of the Koski Family Foundation since December 1996. Mr. Koski holds a B.A. degree in Philosophy and English from Colgate University, a JD from Emory School of Law and an LLM degree in Taxation and Litigation from Emory University.

Mr. Koski brings to our Board over two decades of experience in the legal field as a practicing attorney. In addition to his legal experience, Mr. Koski's educational background provides a foundation for leadership and consensus-building.

See "Corporate Governance" below for additional information regarding the Board.

PROPOSAL II
ADVISORY VOTE ON THE FREQUENCY OF FUTURE
ADVISORY VOTES ON EXECUTIVE COMPENSATION

Summary

Section 14A of the Securities and Exchange Act of 1934, as amended (the “Exchange Act”) requires us to submit a non-binding, advisory vote to shareholders at least once every six years to allow shareholders to express their opinion as to whether advisory votes on executive compensation should be held every one, two or three years. In 2013, our shareholders voted in favor of holding the advisory votes on executive compensation every year, and the Company adopted this standard. In accordance with the SEC requirement, shareholders are again being asked to vote, on a non-binding basis, on the frequency of future advisory votes on executive compensation in 2019.

After careful consideration of this proposal, our Board has determined that an advisory vote on executive compensation that occurs every year is the most appropriate alternative for us, and, therefore, our Board recommends that you vote for a one-year interval for the advisory vote on our named executive officers’ compensation.

In formulating its recommendation, our Board considered that an annual advisory vote on named executive officer compensation will allow our shareholders to provide us with their direct and timely input on our compensation philosophy, policies and practices as disclosed in the proxy statement every year. You may cast your vote on your preferred voting frequency by choosing the option of one year, two years, three years or you may abstain from voting.

The option of one year, two years or three years that receives the highest number of votes cast by shareholders will be the frequency for the advisory vote on named executive officer compensation that has been selected by shareholders. However, because this vote is advisory and not binding on the Company, the Board may decide that it is in the best interests of the Company and our shareholders to hold an advisory vote on executive compensation more or less frequently than the option approved by our shareholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR “EVERY 1 YEAR” IN PROPOSAL II AS THE FREQUENCY WITH WHICH SHAREHOLDERS ARE PROVIDED AN ADVISORY VOTE ON EXECUTIVE COMPENSATION.

**PROPOSAL III
ADVISORY VOTE ON EXECUTIVE COMPENSATION**

Summary

As provided in the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (“Dodd-Frank Act”) and as required by Section 14A of the Exchange Act, we provided our shareholders the opportunity to advise our Compensation Committee and Board of Directors regarding the compensation of our named executive officers as described in our proxy statement pursuant to the compensation disclosure rules of the Securities and Exchange Commission (“say on pay”). Our shareholders also were asked to indicate how frequently we should seek a “say on pay” advisory vote. The shareholders were able to indicate whether they would prefer an advisory vote on named executive officer compensation once every one, two, or three years. In 2013, our shareholders voted in favor of holding the advisory votes on executive compensation every year, and the Company adopted this standard. Therefore, we provide our shareholders the opportunity to advise our Compensation Committee and Board of Directors regarding the compensation of our named executive officers as described in this Proxy Statement. In accordance with the SEC requirements, shareholders are again being asked to vote, on a non-binding basis, on the frequency of future advisory votes on executive compensation in 2019 through Proposal II.

As described under the heading “Executive Compensation – Compensation Discussion and Analysis,” our executive compensation programs are designed to attract and retain highly qualified leadership personnel, providing them attractive long-term career opportunities. Our compensation philosophy is to provide executives with a competitive total compensation package which motivates superior job performance, the achievement of our business objectives, and the enhancement of shareholder value. Rather than basing compensation on a series of specific performance objectives, we encourage initiative, teamwork and innovation, and each executive is enabled to use his or her abilities and particular area of responsibility to strengthen our overall performance. Please read the “Compensation Discussion and Analysis” of this Proxy Statement for a detailed description and analysis of our executive compensation programs, including information about the fiscal year 2018 compensation of our named executive officers.

It is the philosophy of the Board of Directors to align the interests of our executive officers and shareholders by integrating the executives’ compensation opportunities with our long-term corporate strategic and financial objectives. Our general approach to compensating executive officers is to pay cash salaries which generally are competitive within ranges of salaries paid to executives of other healthcare companies, particularly those of similar size and stage of development. Our compensation committee sets overall compensation at a level it believes to be fair, based upon a subjective analysis of the individual executive’s experience and past and potential contributions to us.

We are asking our shareholders to indicate their support for our named executive officer compensation as described in this Proxy Statement. This proposal, commonly known as a “say-on-pay” proposal, gives our shareholders the opportunity to express their views on our named executive officers’ compensation. This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement. We will ask our shareholders to vote “**FOR**” the following resolution at the Annual Meeting of Shareholders.

“**RESOLVED**, that the shareholders approve, on an advisory basis, the compensation of the Company’s named executive officers, as disclosed in the Compensation Discussion and Analysis section, the tabular disclosure regarding such compensation and the accompanying narrative disclosure set forth in the Company’s 2018 Proxy Statement.”

This say-on-pay vote is advisory, and therefore not binding on the Company, the Compensation Committee or our Board. Our Board and our Compensation Committee value the opinions of our shareholders and to the extent there is any significant vote against the named executive officer compensation as disclosed in this proxy statement, we will consider the outcome of the vote when making future executive compensation decisions.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THE
APPROVAL OF PROPOSAL III, ON AN ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS AS DESCRIBED IN THIS
PROXY STATEMENT.**

PROPOSAL IV
RATIFICATION OF THE 2018 AMENDMENT TO THE
ORAGENICS, INC. 2012 EQUITY INCENTIVE PLAN,
INCREASING THE NUMBER OF COMMON SHARES AVAILABLE FOR ISSUANCE UNDER THE PLAN BY 1,500,000 SHARES

Background

At our 2017 Annual Meeting, the Company's shareholders approved an increase in the number of common shares available for issuance under our 2012 Equity Incentive Plan by 1,500,000 shares (the "**2018 Amendment**"). The 2018 Amendment received the affirmative support of 97.4% of the votes cast at our 2017 Annual Meeting on June 22, 2018. Accordingly, we increased the number of shares authorized for issuance under the 2012 Equity Incentive Plan by 1,500,000 common shares on the books and records of the Company and registered these shares with the Securities and Exchange Commission.

It subsequently came to our attention that the summary of the 2012 Equity Incentive Plan included in our 2018 proxy statement proposal for the 2018 Amendment, incorrectly reflected the annual individual award limits as 100,000 shares instead of the actual annual individual award limits of 1,000,000 shares. The annual individual award limit amounts were not adjusted by the Company as a result of the Company's January 2018 one-for-ten reverse stock split and remained at 1,000,000 shares as set forth in the Company's 2012 Equity Incentive Plan. The summary of the 2012 Equity Incentive Plan in the 2018 proxy statement was qualified by reference to the Company's 2012 Equity Incentive Plan which accurately reflected the 1,000,000 annual individual award limits. Following the approval of last year's proposal, in September 2018 the Board approved option awards for each non-employee Director of 125,000 shares and awarded options to Dr. Joslyn, Mr. Sullivan and Dr. Handfield of 400,000, 250,000 and 220,000, respectively, which were each consistent with the 1,000,000 annual individual award limit that remained in place (the "September 2018 Awards"). Although the annual individual award limits of 1,000,000 shares under the 2012 Equity Incentive Plan had not been changed, as a result of the incorrect reference in the 2018 proxy statement plan summary on the annual individual award limit amounts, the Company is seeking shareholder ratification of the previously-approved 2018 Amendment.

Summary of the 2012 Equity Incentive Plan

The following is a summary of the principal features of the 2012 Equity Incentive Plan inclusive of the 2018 Amendment and its operation. Because it is not a complete description of all of the terms and conditions of the 2012 Equity Incentive Plan, the summary is qualified in its entirety by reference to the full text of the 2012 Equity Incentive Plan, as provided in **Appendix A** (with amendments prior to the Company's 1 for 10 reverse stock split on January 19, 2018 subject to adjustments to give effect to the reverse split).

Background and Purpose of the 2012 Equity Incentive Plan

The 2012 Equity Incentive Plan is intended to continue to attract, motivate and retain employees, consultants and non-employee Directors and to encourage their stock ownership in the Company thereby aligning their interests with those of the Company's shareholders. The increase in authorized common shares contemplated by the 2018 Amendment to the 2012 Equity Incentive Plan was intended to enable the Company to continue to be able to make awards to eligible employees.

The purpose of the 2012 Equity Incentive Plan is to give the Company a competitive advantage in attracting, retaining and motivating officers, employees, non-employee Directors, and consultants, and to provide the Company with a stock plan that could provide incentives linked to the financial results of the Company's business and to increases in shareholder value.

Types of Awards Granted under the 2012 Equity Incentive Plan

The 2012 Equity Incentive Plan permits the grant of the following types of incentive awards: (1) stock options, including incentive stock options and nonqualified stock options, (2) stock appreciation rights, (3) restricted stock, (4) restricted stock units and (5) cash awards (each, an "Award").

Administration of the 2012 Equity Incentive Plan

The Board is authorized to appoint a committee of at least two non-employee members of the Board (the “Committee”) to administer the 2012 Equity Incentive Plan. To make grants to certain of the Company’s officers and key employees, the members of this Committee must qualify as “non-employee Directors” under Rule 16b-3 of the Securities Exchange Act of 1934 (the “Exchange Act”). In addition, the terms of the 2012 Equity Incentive Plan require the members of this Committee to qualify as “outside Directors” under Section 162(m) of the Internal Revenue Code (so that the Company could qualify for a federal tax deduction for certain compensation paid under the 2012 Equity Incentive Plan in years prior to 2018). The Board has delegated general administrative authority for the 2012 Equity Incentive Plan to the Compensation Committee of the Board (the “Compensation Committee”).

Subject to the terms of the 2012 Equity Incentive Plan, the Committee has the discretion to select the employees, consultants and Directors who will receive Awards, to determine the terms and conditions of such Awards (for example, the number of shares subject to an Award, the exercise price, and vesting schedule), to interpret the provisions of the 2012 Equity Incentive Plan and outstanding Awards, to amend outstanding Awards (including the authority to accelerate vesting), to extend an option’s post-termination exercise period (but not beyond the original option term), and to adopt, interpret, amend or revoke rules for the administration, interpretation and application of the 2012 Equity Incentive Plan.

Except to the extent the Board has reserved the authority to review and approve grants to named executive officers or to approve and ratify other actions of the Committee, the Committee may delegate any part of its authority and powers under the 2012 Equity Incentive Plan to one or more of the Company’s Directors and/or officers, but only the Committee itself can make Awards to participants who are the Company’s executive officers. References to the Committee in this proposal include the Committee and any Directors or officers to whom the Committee properly delegates authority.

Authorized Shares

The aggregate number of shares of our common stock currently authorized pursuant to the 2012 Equity Incentive Plan is 2,250,000 shares. As of May 16, 2019 240,750 shares have been issued under the 2012 Equity Incentive Plan. As a result of such issuances, there is currently an aggregate of 2,009,250 shares available for issuance under the 2012 Equity Incentive Plan, of which 1,862,133 shares are covered by outstanding stock option awards and 147,117 shares are available for future awards under the 2012 Equity Incentive Plan (plus shares subject to outstanding awards that might in the future be returned to the 2012 Equity Incentive Plan as a result of cancellations or expirations of awards). As of May 16, 2019, stock options outstanding under the 2012 Equity Incentive Plan have a weighted average per share exercise price of \$1.86.

If the 2018 Amendment to the 2012 Equity Incentive Plan is ratified, the aggregate number of shares of the Company’s common stock that currently may be issued pursuant to Awards under the 2012 Equity Incentive Plan will continue to be 2,009,250 shares (subject to further increase from shareholder approval of Proposal V) and the September 2018 Awards made by the Compensation Committee and Board will remain in effect. To the extent the shareholders fail to approve Proposal IV such September 2018 Awards will still remain in effect but the Company may be unable to issue shares upon exercise of such awards until a future increase in the shares available for issuance under the 2012 Equity Incentive Plan has been approved (inclusive of an approval of Proposal V) as no shares have been issued pursuant to the September 2018 Awards.

In addition, the maximum number of shares that may be subject to stock options and stock appreciation rights granted under the 2012 Equity Incentive Plan to any individual in a calendar year would be 1,000,000 shares, and the maximum number of shares that may be subject to awards intended to qualify as “performance-based compensation” under Section 162(m) of the Internal Revenue Code (other than stock options and stock appreciation rights) granted under the 2012 Equity Incentive Plan to any individual in a calendar year would be 1,000,000 shares.

If an Award is settled in cash, or is cancelled, terminates, expires, or lapses for any reason (with the exception of the termination of a tandem stock appreciation right upon exercise of the related option, or the termination of a related option upon exercise of the corresponding tandem stock appreciation right), any shares subject to such Award again shall be available for subsequent Awards under the 2012 Equity Incentive Plan. Shares that are exchanged by a participant or withheld by the Company as full or partial payment in connection with any Award under the 2012 Equity Incentive Plan, as well as any shares exchanged by a participant or withheld by the Company or one of its affiliates to satisfy the tax withholding obligations related to any Award, shall not be available for subsequent Awards under the 2012 Equity Incentive Plan. To the extent that shares are delivered pursuant to the exercise of a stock appreciation right or option granted under the 2012 Equity Incentive Plan, the number of underlying shares as to which the exercise related shall be counted against the applicable share limits above, as opposed to only counting the shares issued. (For purposes of clarity, if a stock appreciation right relates to 100,000 shares and is exercised at a time when the payment due to the participant is 15,000 shares, 100,000 shares shall be charged against the applicable share limits under the 2012 Equity Incentive Plan with respect to such exercise.)

In the event that any dividend or other distribution (whether in the form of cash, the Company's common stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of the Company's common stock or other securities, or other change in the Company's corporate structure affecting the Company's common stock occurs such that an adjustment is determined by the Committee (in its sole discretion) to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the 2012 Equity Incentive Plan, the Committee shall, in such manner as it may deem equitable, (a) adjust the number and class of shares (or other securities) available for issuance under the 2012 Equity Incentive Plan and the number, class, and price of shares (or other securities) subject to outstanding Awards or (b) make provision for a cash payment or for the assumption, substitution or exchange of any or all outstanding Awards or the cash, securities or property deliverable to the holder of any or all outstanding Awards, based upon the distribution or consideration payable to holders of the Company's common stock upon or in respect of such event.

Eligibility to Receive Awards

The Committee selects the employees (including executive officers), consultants and Directors who will be granted Awards under the 2012 Equity Incentive Plan. As of April 30, 2019, the Company had seven (7) officers and employees, including all of the Company's named executive officers who are still serving in that capacity as of April 30, 2019, and four non-employee Directors who were eligible to receive Awards under the 2012 Equity Incentive Plan. The actual number of individuals who will receive an Award under the 2012 Equity Incentive Plan cannot be determined in advance because the Committee has the discretion to select the participants.

Stock Options

A stock option is the right to acquire shares of the Company's common stock at a fixed exercise price for a fixed period of time. Under the 2012 Equity Incentive Plan, the Committee may grant nonqualified stock options and/or incentive stock options. The Committee will determine the number of shares covered by each option.

The exercise price of the shares subject to each option is set by the Committee but generally cannot be less than 100% of the fair market value on the date of grant. In addition, the exercise price of an incentive stock option must be at least 110% of fair market value (on the grant date) if the participant owns stock possessing more than 10% of the total combined voting power of all classes of the Company's stock and any of the Company's subsidiaries. However, the Company may grant certain options with exercise prices equal to less than the fair market value of the Company's common stock on the date of grant in connection with its acquisition of another company. The fair market value of the Company's common stock is generally the last quoted sales price for the shares traded on NYSE American on the applicable date.

As of April 30, 2019, the closing price of our common stock was \$0.53 per share. The aggregate fair market value of the shares (determined on the grant date) covered by incentive stock options which first become exercisable by any participant during any calendar year may not exceed \$100,000. Any shares in excess of this limit will be treated as subject to a nonqualified stock option. If the employee holds more than one incentive stock option, the incentive stock options are considered in the order in which they were granted.

An option granted under the 2012 Equity Incentive Plan cannot generally be exercised until it becomes vested. The Committee establishes the vesting schedule of each option at the time of grant. The Committee may, in its discretion, condition the vesting of any option granted under the Plan on satisfaction of (i) any minimum period of continued employment or other continued service with the Company the Committee deems appropriate, or (ii) satisfaction of one or more performance goals the Committee deems appropriate, or (iii) a combination of service vesting and satisfaction of performance goals set by the Committee. After an option is granted, the Committee may, in its sole discretion, modify or accelerate the vesting of the option.

Options vest and become exercisable at the times and on the terms established by the Committee at the time of grant. Options granted under the 2012 Equity Incentive Plan expire at the times established by the Committee, but not later than 10 years after the grant date (such term is limited to five years in the case of an incentive stock option granted to a participant who owns stock possessing more than 10% of the total combined voting power of all classes of the Company's stock and any of the Company's subsidiaries). The Committee may determine the effect of termination of employment or service on the rights and benefits under options and in doing so may make distinctions based upon the cause of termination or other factors.

The exercise price of each option granted under the 2012 Equity Incentive Plan must be paid in full in cash or its equivalent at the time of exercise. The Committee also may permit payment through the tender of shares that are already owned by the participant, or by any other form of legally permissible consolidation which the Committee determines to be consistent with the purpose of the 2012 Equity Incentive Plan.

Stock Appreciation Rights

Awards of stock appreciation rights may be granted in tandem with or in connection to all or any part of an option, either concurrently with the grant of an option or at any time thereafter during the term of the option, or may be granted independently of options. The Committee has complete discretion to determine the number of stock appreciation rights granted to any employee, consultant or Director.

The Committee determines the terms of stock appreciation rights, except that the exercise price of a stock appreciation right that is granted independently of an option may not be less than 100% of the fair market value of the shares on the date of grant and the exercise price of a stock appreciation right that is granted in tandem with or in connection to an option may not be less than the exercise price of the related option. In addition, the Committee may determine the effect of termination of employment or service on the rights and benefits under stock appreciation rights and in doing so may make distinctions based upon the cause of termination or other factors.

A stock appreciation right granted in tandem with an option will entitle the participant to exercise the stock appreciation right by surrendering to the Company a portion of the unexercised related option. The participant will receive in exchange from the Company an amount equal to the excess of the fair market value of the shares on the date of exercise of the stock appreciation right covered by the surrendered portion of the related option over the exercise price of the shares covered by the surrendered portion of the related option. When a stock appreciation right granted in tandem with an option is exercised, the related option, to the extent surrendered, will cease to be exercisable. A stock appreciation right granted in connection with an option will be exercisable until, and will expire no later than, the date on which the related option ceases to be exercisable or expires. A stock appreciation right granted in connection with an option will automatically be deemed exercised after the related option is exercised.

Stock appreciation rights may also be granted independently of options. Such a stock appreciation right will entitle the participant, upon exercise, to receive from the Company an amount equal to the excess of the fair market value of the shares on the date of exercise over the exercise price. A stock appreciation right granted without a related option will be exercisable, in whole or in part, at such time as the Committee will specify in the stock appreciation right agreement. Stock appreciation rights granted under the 2012 Equity Incentive Plan expire at the times established by the Committee, but not later than ten years after the date of grant.

The Company's obligation arising upon the exercise of a stock appreciation right may be paid in shares, in cash, or any combination thereof, as the Committee may determine.

Restricted Stock and Restricted Stock Units

Awards of restricted stock are shares that vest in accordance with the terms and conditions established by the Committee. Restricted stock units represent a promise to deliver shares of the Company's common stock, or an amount of cash or property equal to the underlying shares, at a future date. The Committee will determine the number of shares subject to a restricted stock Award or restricted stock unit Award granted to any employee, consultant or Director, and the other terms of the Award (including the purchase price, if any, and transfer restrictions).

In determining whether an Award of restricted stock or restricted stock units should be made, and/or the vesting schedule for any such Award, the Committee may impose whatever conditions to vesting as it determines to be appropriate or determine that fully-vested shares should be awarded. The Committee may, in its discretion, condition the vesting of any restricted stock or restricted stock units granted under the 2012 Equity Incentive Plan on satisfaction of (i) any minimum period of continued employment or other continued service with the Company the Committee deems appropriate, or (ii) satisfaction of one or more performance goals the Committee deems appropriate, or (iii) a combination of service vesting and satisfaction of performance goals set by the Committee. For example, the Committee may determine to grant an Award of restricted stock or restricted stock units that will vest only if the participant continues employment and certain performance goals established by the Committee are satisfied.

The Committee may also provide that Awards of restricted stock or restricted stock units include rights to receive dividends or dividend equivalents based on the amount of dividends paid on outstanding shares of the Company's common stock, provided that as to any dividend equivalent rights granted in connection with an Award granted under the 2012 Equity Incentive Plan that is subject to performance-based vesting requirements, no dividend equivalent payment will be made unless the related performance-based vesting conditions of the Award are satisfied (or, in the case of a restricted stock or similar Award where the dividend must be paid as a matter of law, the dividend payment will be subject to forfeiture or repayment, as the case may be, if the related performance-based vesting conditions are not satisfied).

Cash Awards

Cash awards may be granted either alone, in addition to, or in tandem with other Awards granted under the 2012 Equity Incentive Plan. After the Committee determines that it will offer a cash award, it shall advise the participant, by means of an award agreement, of the terms, conditions and restrictions related to the cash award. The grant or vesting of a cash award may be made contingent on the achievement of performance goals established by the Committee. Nothing in the 2012 Equity Incentive Plan prevents the Company from granting cash awards outside of the 2012 Equity Incentive Plan in any amount to any employee or other service provider.

Performance Goals

Awards under the 2012 Equity Incentive Plan may be made subject to performance conditions as well as time-vesting conditions. Awards that are intended to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code may include performance conditions that are established and administered in accordance with the requirements of Section 162(m) of the Internal Revenue Code and based on an objective formula or standard utilizing one or more of the following factors and any objectively verifiable adjustment(s) thereto permitted and pre-established by the Committee in accordance with Section 162(m) of the Internal Revenue Code: annual revenue, cash position, earnings per share, individual objectives, net income, operating cash flow, operating income, regulatory approvals, return on assets, return on investment, return on sales, stock price and total shareholder return. Performance goals may differ from participant to participant and from Award to Award.

Change of Control

In the event of a "change of control" of the Company, the Committee may provide for the successor corporation to either assume or provide a substitute award for each outstanding stock option and stock appreciation right. If the successor corporation assumes or provides a replacement Award and the participant is terminated by the successor corporation for reasons other than "misconduct" during the 12-month period following the change of control, then such participant's options and stock appreciation rights will immediately vest and become exercisable as to all of the shares subject to such Award.

Additionally, in the event of a “change of control” of the Company, the Committee may provide for any vesting conditions or Company repurchase or reacquisition rights with respect to restricted stock and restricted stock units to be assigned to the successor corporation. In the event the successor corporation refuses to assume any such vesting conditions or repurchase or reacquisition rights, such vesting conditions or repurchase or reacquisition rights will lapse and the participant will be fully vested in such shares of restricted stock or restricted stock units. If the vesting conditions or repurchase or reacquisition rights are assigned to the successor corporation and the participant is terminated by the successor corporation for reasons other than “misconduct” during the 12-month period following such change of control, then any vesting conditions or repurchase or reacquisition rights will lapse with respect to such participant’s restricted stock and restricted stock units (or the property for which the restricted stock and restricted stock units were converted upon the change of control) and the participant will be fully vested in such restricted stock and restricted stock units (or the property for which the restricted stock and restricted stock units were converted upon the change of control). The Committee may also provide in the Award agreement or other agreements that one or more Awards will be subject to different vesting rules than those described above in connection with a change of control of the Company.

In the event the successor corporation refuses to assume the outstanding stock option or SAR awards, or to provide substitute awards, the Committee may notify affected participants that the options or stock appreciation rights under the 2012 Equity Incentive Plan will immediately vest and become exercisable as to all of the shares subject to such Award in connection with the transaction, and, in the Committee’s discretion, provide that any stock options and stock appreciation rights which have not been exercised by the effective date may be cancelled in exchange for the right to receive a cash payment from the Company equal to the excess of the value of the transaction consideration to be paid to shareholders over the exercise price for the option or stock appreciation rights, and that such options and stock appreciation rights will terminate upon the completion of the change of control and receipt of such cash payments. Similarly, if the successor corporation refuses to assume outstanding restricted stock units or provide substitute awards, the Committee may provide that any outstanding restricted stock units be cancelled in exchange for the right to receive a cash payment from the Company equal to the excess of the value of the transaction consideration to be paid to shareholders in the transaction.

The Committee may provide for cash awards to be assumed or an equivalent cash award substituted by the successor corporation in the event of a “change of control.” In the event that the successor corporation refuses to assume or substitute for the cash award, the participant will become fully vested in the cash award. If the cash award is assumed or substituted for and within 12 months following the “change of control” the participant is terminated by the successor corporation for reasons other than “misconduct,” the participant will become fully vested in the cash award.

Limited Transferability of Awards

Awards granted under the 2012 Equity Incentive Plan generally may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will or by the applicable laws of descent and distribution. However, participants may, in a manner specified by the Committee, transfer nonqualified stock options (a) pursuant to a court-approved domestic relations order relating to child support, alimony payments or marital property rights and (b) by bona fide gift to (1) a member of the participant’s immediate family; (2) a trust or other entity for the sole benefit of the participant and/or his or her immediate family; (3) a partnership, limited liability company or other entity whose members are the participant and/or his or her immediate family; or (4) certain limited tax-qualified charities.

Amendment and Termination of the 2012 Equity Incentive Plan

The Board generally may amend, suspend or terminate the 2012 Equity Incentive Plan at any time and for any reason (subject to shareholder consent as may be required by applicable law). However, no amendment or termination of the 2012 Equity Incentive Plan may alter or impair the rights of a participant with respect to an outstanding Award without his or her consent; provided that such consent shall not be required if the Board determines, in its sole and absolute discretion, that the amendment, suspension or termination (a) is required or advisable in order for the Company, the 2012 Equity Incentive Plan or the Award to satisfy applicable law, to meet the requirements of any accounting standard or to avoid any adverse accounting treatment, or (b) in connection with any change of control event, is in the best interests of the Company or its shareholders.

Unless terminated by the Board, the 2012 Equity Incentive Plan does not have a term. However, no incentive stock option may be granted under the 2012 Equity Incentive Plan after ten years from the latest date the Company’s

shareholders approve the 2012 Equity Incentive Plan, including any subsequent amendment or restatement of the 2012 Equity Incentive Plan approved by the Company's shareholders. Outstanding Awards generally will continue following the expiration or termination of the 2012 Equity Incentive Plan until they expire pursuant to the terms of such Awards.

Federal Income Tax Consequences

The following is a brief summary of the general federal income tax consequences to U.S. taxpayers and the Company with respect to the grant, vesting and exercise of Awards granted under the 2012 Equity Incentive Plan. This summary does not purport to be complete and does not discuss the tax consequences of a participant's death, the tax consequences of an Award that is subject to but does not satisfy the deferred compensation rules of Section 409A of the Internal Revenue Code, or the tax laws of any locality, state or foreign country in which the participant may reside. Tax consequences for any particular individual may be different.

Nonqualified Stock Options. No taxable income is recognized when a nonqualified stock option is granted to a participant. Upon exercise of a nonqualified stock option with respect to vested shares, the participant will recognize ordinary income in an amount equal to the excess of the fair market value (on the exercise date) of the shares purchased over the exercise price of the option. Any taxable income recognized in connection with exercise of a nonqualified stock option would be added to the tax basis of the shares and, with respect to an employee, is subject to tax withholding by the Company. Any additional gain or loss recognized upon any later disposition of the shares would be either long-term or short-term capital gain or loss, depending on how long the stock was held.

Incentive Stock Options. No taxable income is recognized when an incentive stock option is granted or exercised, although the excess (if any) of the fair market value of the shares at exercise over the exercise price paid is treated as an item of income for alternative minimum tax purposes in the year of the exercise, and may subject the participant to alternative minimum tax. Alternative minimum tax is an alternative method of calculating the income tax that must be paid each year, which includes certain additional items of income and tax preferences and disallows or limits certain deductions otherwise allowable for regular tax purposes. Alternative minimum tax is payable only to the extent that the alternative minimum tax exceeds "ordinary" federal income tax for the year (computed without regard to certain credits and special taxes).

If the participant exercises the incentive stock option and then later sells or otherwise disposes of the shares more than two years after the grant date and more than one year after the exercise date, the difference between the sale price and the exercise price will be taxed as long-term capital gain or loss. If the participant exercises the option and then later sells or otherwise disposes of the shares before the end of the two- or one-year holding periods described above, (a) if the sale price exceeds the exercise price, he or she generally will have ordinary income at the time of the sale equal to the fair market value of the shares on the exercise date (or the sale price, if less) minus the exercise price of the option, and the excess (if any) between the sales price and the fair market value of the shares on the exercise date will be taxed as capital gain or (b) if the sale price is less than the exercise price, the participant will recognize a capital loss equal to the difference between the exercise price and the sale price.

In the case of both nonqualified stock options and incentive stock options, special federal income tax rules apply if the Company's common stock is used to pay all or part of the option exercise price, and different rules than those described above will apply if unvested shares are purchased on exercise of the option.

Stock Appreciation Rights. No taxable income is recognized when a stock appreciation right is granted to a participant. Upon exercise of a stock appreciation right, the participant will recognize ordinary income in an amount equal to the amount of cash received and the fair market value of any shares received by the participant as of the payment date. Any additional gain or loss recognized upon any later disposition of the shares would be either long-term or short-term capital gain or loss, depending on how long the stock was held.

Restricted Stock and Restricted Stock Units. No taxable income is generally recognized when restricted stock or restricted stock units are granted to a participant if the shares are subject to vesting requirements. Upon vesting (or at grant as to any shares that are vested at grant), the participant will generally recognize income in an amount equal to the excess of the fair market value of the shares over any amount the participant paid for the shares.

A participant who receives unvested shares of restricted stock under a stock Award may make an election under Section 83(b) of the Code at the time of transfer of the shares to recognize income based upon the fair market

value of the stock on the date of transfer. Any additional gain or loss recognized upon any later disposition of the shares would be either long-term or short-term capital gain or loss, depending on how long the stock was held.

The ordinary income on an Award of restricted stock or restricted stock units recognized by an employee will be subject to tax withholding by the Company.

Cash Awards. Upon receipt of cash, the recipient will have taxable ordinary income, in the year of receipt, equal to the cash received. Any cash received by an employee will be subject to tax withholding by the Company.

Tax Effect for the Company. The Company generally will be entitled to a tax deduction in connection with an Award under the 2012 Equity Incentive Plan in an amount equal to the ordinary income realized by a participant at the time the participant recognizes such income (for example, upon the exercise of a nonqualified stock option). Special rules limit the deductibility of compensation paid to the chief executive officer and to certain of the Company's other executive officers. However, pursuant to Section 162(m) of the Internal Revenue Code, the Company may not deduct compensation paid to such an individual to the extent that aggregate compensation exceeds \$1,000,000 per individual in any tax year. For tax years prior to 2018, the Company could be permitted to deduct compensation attributable to Awards to such individuals in excess of the \$1,000,000 limit to the extent such compensation was "performance-based" within the meaning of Code Section 162(m), but that exemption for performance-based compensation has been repealed for tax years beginning after December 31, 2017. Furthermore, if an Award is accelerated under the 2012 Equity Incentive Plan in connection with a "change in control" (as this term is used under the Internal Revenue Code), the Company may not be permitted to deduct the portion of the compensation attributable to the acceleration ("parachute payments") if it exceeds certain threshold limits under the Internal Revenue Code (and certain related excise taxes may be triggered).

Accounting Treatment

The Company will recognize compensation expense in connection with Awards granted under the 2012 Equity Incentive Plan as required under applicable accounting standards. The Company currently amortizes compensation expense associated with equity Awards over an Award's requisite service period and establishes the fair value of equity Awards in accordance with applicable accounting standards.

Vote Required and Board of Directors' Recommendation

Ratification of the 2018 Amendment to the 2012 Equity Incentive Plan requires the affirmative vote of the holders of a majority of the shares of our common stock that are voting on this Proposal IV in person or by proxy and entitled to vote at the Annual Meeting of Shareholders. In the event the shareholders fail to ratify the 2018 Amendment to the 2012 Equity Incentive Plan, the existing 2012 Equity Incentive Plan will continue in operation pursuant to its terms. Even if the 2018 Amendment to the 2012 Equity Incentive Plan is approved, the Board of Directors may, pursuant to the terms of the 2012 Equity Incentive Plan and subject to any applicable exchange where the Company may be listed, make any other changes to the 2012 Equity Incentive Plan that it feels would be in our and our shareholders' best interests.

Because each of our Directors and executive officers are eligible to participate in the 2012 Equity Incentive Plan, the ratification of the 2018 Amendment to the 2012 Equity Incentive Plan impacts each of our Directors and executive officers and thus each of our Directors and executive officers has a personal interest in this proposal and its approval by our shareholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE 2018 AMENDMENT TO THE 2012 EQUITY INCENTIVE PLAN.

PROPOSAL V
APPROVAL OF AN AMENDMENT TO INCREASE THE NUMBER OF COMMON SHARES
AVAILABLE FOR ISSUANCE UNDER THE 2012 EQUITY INCENTIVE PLAN BY 6,000,000 SHARES

Summary

We are asking our shareholders to approve an amendment to our 2012 Equity Incentive Plan to increase the shares authorized to be issued thereunder by 6,000,000 shares from 2,250,000 to 8,250,000.

In October of 2012 our shareholders approved the amendment, restatement and retitling of our prior stock option and incentive plan, as amended, to the 2012 Equity Incentive Plan currently in place. In addition, at that time, our shareholders also approved an amendment to increase the number of shares authorized for issuance to 4,000,000 shares (the equivalent of 400,000 shares after giving effect to the impact of the January 19, 2018 reverse stock split) (the “Plan”).

On March 16, 2017, our Board of Directors approved an amendment to the Plan (the “First Amendment”), increasing the number of shares authorized for issuance under the 2012 Equity Incentive Plan by 1,500,000 shares from 4,000,000 to 5,500,000 shares (the equivalent of 550,000 shares after giving effect to the impact of the January 19, 2018 reverse stock split) and On May 4, 2017 the shareholders approved the increase in authorized shares.

On November 14, 2017, our Board of Directors approved an amendment to the Plan and on December 1, 2017, the Company shareholders approved by written consent the amendment to an increase in the number of authorized shares for issuance under the Plan by 2,000,000 shares (the “Second Amendment”) from 5,500,000 shares to 7,500,000 share (the equivalent of 750,000 shares after giving effect to the impact of the January 19, 2018 reverse stock split).

As discussed in Proposal IV above, on June 22, 2018, the Company’s shareholders approved an increase in the number of authorized shares for issuance under the by 1,500,000 shares (the “Third Amendment”) from 750,000 shares to 2,250,000 shares. A copy of the 2012 Equity Incentive Plan is attached hereto as **Appendix A**.

On April 25, 2019, our Board of Directors approved an amendment to the 2012 Equity Incentive Plan (the “Fourth Amendment”) further increasing the number of shares authorized for issuance under the 2012 Equity Incentive Plan by 6,000,000 shares from 2,250,000 to 8,250,000 shares subject to shareholder approval. The Board of Directors has recommended that the Fourth Amendment be submitted to our shareholders for their approval. A copy of the Fourth Amendment is attached hereto as **Appendix B**.

In reviewing our compensation practices, including in light of various evolving market practices, as well as to enhance the Company’s flexibility to make awards, our Board of Directors determined to make the above change to the 2012 Equity Incentive Plan. In addition, the proposed amendment increasing the number of shares authorized for issuance under the 2012 Equity Incentive Plan ensures our ability to continue to grant stock options and other awards, which are vital to our ability to attract and retain outstanding and highly skilled individuals in the extremely competitive labor markets in which we must compete. Our employees are our most valuable asset, and such awards are crucial to our ability to motivate individuals in our service to achieve our goals. We believe strongly that the approval of the Fourth Amendment to our 2012 Equity Incentive Plan, as proposed, is instrumental to our continued success.

In March 2019, the Compensation Committee of our Board of Directors retained Korn Ferry (US) (“Korn Ferry”) as its independent compensation consultant. Korn Ferry provides no service to the Company other than its advice to the Compensation Committee on Executive and Director compensation matters. The Compensation Committee determined that the services provided by Korn Ferry does not present any conflicts of interest and the Compensation Committee is satisfied with the independence of Korn Ferry. Korn Ferry assisted the Compensation Committee in developing a peer group of companies for the purpose of analyzing competitive levels of overhang and dilution, the results of which were used to establish the proposed increase in the number of shares authorized for issuance under the 2012 Equity Incentive Plan. A peer group of 20 similarly-situated microcap, clinical stage companies was selected based upon the following criteria:

- Sector (biotechnology, pharmaceutical, biopharma, specialty pharma)
- Market Capitalization (less than ~\$150 million)

- Headcount (less than ~80 employees)
- Revenue (nominal or nil)
- Exchange (equity traded on U.S. exchange)
- Location (U.S. headquarters)

The peer group consisted of the following companies:

Actinium Pharmaceuticals, Inc.	Hemispherx Biopharma, Inc.
Capricor Therapeutics, Inc.	iBio, Inc.
Catabasis Pharmaceuticals, Inc.	Matinas BioPharma Holdings, Inc.
CEL-SCI Corporation	Miragen Therapeutics, Inc.
Chimerix, Inc.	NanoViricides, Inc.
Cidara Therapeutics, Inc.	Proteon Therapeutics, Inc.
Citius Pharmaceuticals, Inc.	Regulus Therapeutics Inc.
ContraVir Pharmaceuticals, Inc.	Soligenix, Inc.
Evoke Pharma, Inc.	Xenetic Biosciences, Inc.
Fibrocell Science, Inc.	XOMA Corporation

The analysis prepared by Korn Ferry, indicated that a 6,000,000 share increase to the 2012 Equity Incentive Plan, proposed in the Fourth Amendment would place the Company at approximately the 50th percentile (median) relative to the peer group.

The following table presents the shares covered by the options contemplated to be awarded under the 2012 Equity Incentive Plan, to our named executive officers and to our non-employee Directors pursuant to the terms of our current Director Compensation Program.

New Plan Amendment Benefits
2012 Equity Incentive Plan

Name and Position	Number of Shares	Dollar Value (2)
Dr. Alan Joslyn President and Chief Executive Officer	—	—
Michael Sullivan Chief Financial Officer, Secretary and Treasurer	—	—
Dr. Martin Handfield Senior Vice President of Discovery Research	—	—
All Directors (other than the executive officers) as a group (four persons) (1)	48,000	—
All employees, excluding executive officers, as a group (11 persons)	—	—

- (1) Represents the annual awards to non-employee Directors pursuant to our current non-employee Director compensation program in which each of our four non-employee Directors are to receive (i) an annual option award of 8,000 shares, and (ii) an annual restricted stock award of 4,000 shares. There are enough shares currently authorized under the Company's 2012 Equity Incentive Plan (assuming proposal IV is approved) to make these awards without the additional shares being sought by the instant Proposal V.
- (2) The dollar value is not able to be determined until such time as the contemplated awards are made.

Other than the awards described for our non-employee Directors, the number, amount and type of awards to be received by or allocated to eligible persons under the 2012 Equity Incentive Plan cannot be determined at this time. The Company is not currently considering any specific additional awards under the 2012 Equity Incentive Plan other than as reflected in the table. For information regarding stock options and restricted stock awards granted to executive officers of the Company during fiscal 2018, see the information provided under the heading "Executive Compensation" in this proxy statement.

Summary of the 2012 Equity Incentive Plan

A summary of the principal features of the 2012 Equity Incentive Plan (inclusive of the previously approved 2018 Amendment being the subject of ratification in Proposal IV) is set forth in Proposal IV and is incorporated herein by reference except as modified below and is qualified by reference to the 2012 Equity Incentive Plan provided in **Appendix A** (inclusive of the 2018 Amendment) to the Proxy Statement:

Authorized Shares

The aggregate number of shares of our common stock currently authorized pursuant to the 2012 Equity Incentive Plan is 2,250,000 shares. As of May 16, 2019 there have been 240,750 shares issued under the 2012 Equity Incentive Plan. As a result of such issuances, assuming the 2018 Amendment is ratified by the shareholders pursuant to Proposal IV, there is currently an aggregate of 2,009,250 shares available for issuance under the 2012 Equity Incentive Plan, of which 1,862,133 shares are covered by outstanding option awards and 147,117 shares are available for future awards under the 2012 Equity Incentive Plan (plus shares subject to outstanding awards that might in the future be returned to the 2012 Equity Incentive Plan as a result of cancellations or expirations of awards). As of May 16, 2019, options outstanding under the 2012 Equity Incentive Plan have a weighted average per share exercise price of \$1.86.

If this proposed amendment to the 2012 Equity Incentive Plan is approved, together with Proposal IV, the aggregate number of shares of the Company's common stock that currently may be issued pursuant to Awards under the 2012 Equity Incentive Plan will be 8,009,250 shares. If Proposal IV concerning ratification of the 2018 Amendment is not approved by shareholders and this Proposal V is approved the aggregate number of shares of the Company's common stock that currently may be issued pursuant to Awards under the 2012 Equity Incentive Plan will be 6,509,250 shares.

If neither Proposal IV or Proposal V are approved the aggregate number of shares of the Company's common stock that currently may be issued pursuant to Awards under the 2012 Equity Incentive Plan will be 509,250 shares and the September 2018 Awards will not be able to be exercised until a further increase in the 2012 Equity Incentive Plan is approved by shareholders.

Securities Authorized for Issuance under Equity Compensation Plans

Our 2012 Equity Incentive Plan, which is currently our only equity compensation plan, has been approved by our stockholders. The following table sets forth certain information as of December 31, 2018 with respect to the 2012 Equity Incentive Plan:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options (A)	Weighted- Average Exercise Price of Outstanding Options (B)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A)) (C)
Equity compensation plans approved by stockholders:			
2012 Equity Incentive Plan	1,812,133	\$ 1.89	197,117
Equity compensation plans not approved by stockholders: (1)			
None	—	\$ —	—
Total:	<u>1,812,133</u>	<u>\$ 1.89</u>	<u>197,117</u>

(1) The Company does not have any equity compensation plans that have not been approved by shareholders.

Vote Required and Board of Directors' Recommendation

Approval of the Fourth Amendment to the 2012 Equity Incentive Plan requires the affirmative vote of the holders of a majority of the shares of our common stock that are voting on this Proposal V in person or by proxy and entitled to vote at the Annual Meeting of Shareholders. In the event the shareholders fail to approve the Fourth Amendment to the 2012 Equity Incentive Plan, the existing 2012 Equity Incentive Plan will continue in operation pursuant to its terms. Even if the Fourth Amendment to the 2012 Equity Incentive Plan is approved, the Board of Directors may, pursuant to the terms of the 2012 Equity Incentive Plan and subject to any applicable exchange where the Company may be listed, make any other changes to the 2012 Equity Incentive Plan that it feels would be in our and our shareholders' best interests.

Because each of our Directors and executive officers are eligible to participate in the 2012 Equity Incentive Plan, the approval of the Fourth Amendment to the 2012 Equity Incentive Plan impacts each of our Directors and executive officers and thus each of our Directors and executive officers has a personal interest in this proposal and its approval by our shareholders.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE APPROVAL OF THE FOURTH AMENDMENT TO THE 2012 EQUITY INCENTIVE PLAN.

PROPOSAL VI
RATIFICATION OF THE SELECTION OF MAYER HOFFMAN MCCANN P.C.
AS THE COMPANY'S INDEPENDENT AUDITORS

Summary

Mayer Hoffman McCann P.C. served as the Company's independent auditors and independent registered public accounting firm for the completion of the Company's audit for the year ended December 31, 2018. The Audit Committee has again approved the appointment of Mayer Hoffman McCann P.C. as the Company's independent auditors for the year ending December 31, 2019 and the Board has further directed that the Company submit the selection of independent auditors and independent registered public accounting firm for 2019 for ratification by the shareholders at this shareholder meeting.

Representatives of Mayer Hoffman McCann P.C., who are expected to be present at the shareholder meeting, will have an opportunity to make a statement if they so desire and are expected to be available to respond to appropriate questions.

Although ratification is not required by the Bylaws or otherwise, the Company is submitting the selection to its shareholders for ratification as a matter of good corporate practice and because the Company values its shareholders' views. In the event the shareholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee in its discretion may direct the appointment of a different auditor/independent accounting firm at any time during the year if the Audit Committee feels that such a change would be in the Company's and the Company's shareholders' best interests.

Mayer Hoffman McCann P.C. leases substantially all of its personnel, who work under the control of Mayer Hoffman McCann P.C. shareholders, from wholly owned subsidiaries of CBIZ, Inc., in an alternative practice structure.

Independent Auditors' Fees and Services

The following table provides the aggregate fees billed for professional services rendered by the Company's principal accountants, Mayer Hoffman McCann P.C. ("MHM"), in the categories indicated during each of the past two fiscal years ended December 31:

Services Rendered	2018	2017
Audit Fees (1)	\$ 155,000	\$ 130,500
Audit-Related Fees (2)	—	—
Tax Fees (3)	9,250	9,000
All Other Fees (4)	—	—
	<u>\$ 164,250</u>	<u>\$ 139,500</u>

- (1) *Audit Fees.* This category includes fees for professional services provided in conjunction with the audit of the Company's financial statements and with the audit of management's assessment of internal control over financial reporting and the effectiveness of internal control over financial reporting, review of the Company's quarterly financial statements, assistance and review of documents filed with the Securities and Exchange Commission, consents, and comfort letters and attestation services provided in connection with statutory and other regulatory filings and engagements.
- (2) *Audit-Related Fees.* This category includes fees for assurance and related professional services associated with due diligence related to mergers and acquisitions, consultation on accounting standards or transactions, internal control reviews and assistance with internal control reporting requirements, services related to the audit of employee benefit plans, and other attestation services not required by statute or regulation.
- (3) *Tax Fees.* This category includes fees for professional services provided related to tax compliance, tax planning and tax advice.
- (4) *All Other Fees.* There were no other fees paid to Mayer Hoffman McCann P.C.

Pre-Approval Policy

The Audit Committee approves in advance all audit and non-audit services to be performed by the Company's independent registered public accounting firm. The Audit Committee considers whether the provision of any proposed non-audit services is consistent with the Securities and Exchange Commission rules on auditor independence and has pre-approved certain specified audit and non-audit services to be provided by MHM for up to twelve (12) months from the date of the pre-approval. If there are any additional services to be provided, a request for pre-approval must be submitted by management to the Audit Committee for its consideration.

Vote Required and Board of Directors' Recommendation

Ratification of the selection of Mayer Hoffman McCann P.C. as the Company's independent auditors for the year ending December 31, 2019 requires the affirmative vote of the holders of a majority of the shares of common stock voting on this Proposal VI in person, or by proxy at the Annual Meeting of Shareholders. Abstentions will not be counted in the ratification of the selection of independent auditors and will have no effect on the outcome of the selection of the independent auditors.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE
RATIFICATION OF THE SELECTION OF MAYER HOFFMAN MCCANN P.C. AS THE COMPANY'S
INDEPENDENT AUDITORS.**

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The information contained in this report shall not be deemed to be “soliciting material” or to be “filed” with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that we specifically incorporate it by reference in such filing.

The following is the report of the Audit Committee with respect to our audited financial statements for the fiscal year ended December 31, 2018, and the notes thereto.

Review with Management

The Audit Committee reviewed and discussed with management our audited financial statements for the fiscal year ended December 31, 2018 and the notes thereto. Management represented to the Audit Committee that our financial statements were prepared in accordance with generally accepted accounting principles.

Review and Discussions with Independent Registered Public Accounting Firm

The Audit Committee discussed with Mayer Hoffman McCann P.C. the matters required to be discussed by Public Company Accounting Oversight Board Auditing Standard 1301, which includes, among other items, matters related to the conduct of the audit of our financial statements.

The Audit Committee also received and reviewed written disclosures and the letter from Mayer Hoffman McCann P.C. as required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant’s communications with the audit committee concerning independence and has discussed with Mayer Hoffman McCann P.C. their independence from us.

Conclusion

Based on the review and discussions referred to above, the Audit Committee recommended to our Board of Directors that our audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2018 for filing with the Securities and Exchange Commission.

Submitted by the Audit Committee:

Charles L. Pope (Chair)
Dr. Frederick W. Telling
Dr. Alan Dunton

CORPORATE GOVERNANCE

Oragenics' current corporate governance practices and policies are designed to promote shareholder value, and Oragenics is committed to the highest standards of corporate ethics and diligent compliance with financial accounting and reporting rules. Our Board provides independent leadership in the exercise of its responsibilities. Our management oversees a system of internal controls and compliance with corporate policies and applicable laws and regulations, and our employees operate in a climate of responsibility, candor and integrity. You can access information regarding our corporate governance practices on our web site at www.oragenics.com/governance.html

Corporate Governance Principles

Our Board has adopted Board of Directors Corporate Governance Policy, which sets forth the principles that guide the Board's exercise of its responsibility to oversee corporate governance, maintain its independence, evaluate its own performance and the performance of our executive officers and set corporate strategy. Our Corporate Governance Policy, states that currently different individuals fill the roles of Chairman and Chief Executive Officer. Our Board may refine our Corporate Governance Principles from time to time. You can access our Corporate Governance Principles on our web site at www.oragenics.com/governance.html.

Code of Ethics/Standards of Business Conduct

It is our policy to conduct our operations in compliance with all applicable laws and regulations and to operate our business under the fundamental principles of honesty, integrity and ethical behavior. This policy can be found in our Company Operating Principles, which is applicable to all of our Directors, officers and employees, and which complies with the Securities and Exchange Commission's requirements and with listing standards of the NYSE American we have adopted.

Our Company Operating Principles are designed to promote honest and ethical conduct and compliance with all applicable laws, rules and regulations and to deter wrongdoing. Our Company Operating Principles are also aimed at ensuring that information we provide to the public (including our filings with and submissions to the Securities and Exchange Commission) is accurate, complete, fair, relevant, timely and understandable. Our Company Operating Principles can be accessed on our web site at www.oragenics.com/governance. We intend to disclose amendments to certain provisions of our Company Operating Principles, or waivers of such provisions granted to Directors and executive officers, on our web site in accordance with applicable Securities and Exchange Commission requirements.

Independence of Directors

Our common stock is listed on a national securities exchange, the NYSE American. Accordingly, in determining whether our Directors are independent, we are required to comply with the rules of the NYSE American. We also expect to continue to comply with securities and other laws and regulations regarding the independence of directors, including those adopted under Section 301 of the Sarbanes-Oxley Act and Rule 10A-3 under the Securities and Exchange Act of 1934 with respect to the independence of Audit Committee members. The NYSE American listing standards define an "independent director" generally as a person, other than an officer of a company, who does not, in the view of the company's Board of Directors, have a relationship with the company that would interfere with the director's exercise of independent judgment. The Board has affirmatively determined that each of the following directors, constituting a majority of the Board, is independent within the meaning of the NYSE American listing standards:

Dr. Frederick W. Telling
Charles L. Pope
Dr. Alan Dunton

Such independence definition includes a series of objective tests, including that the director is not an executive officer employee of the company and has not engaged in various types of business dealings with the company. In addition, as further required by the NYSE American listing standards, the Board has made a subjective determination as to each independent director that no relationships exist which, in the opinion of the Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. As of June 24, 2016, the Board determined that Robert Koski no longer met the NYSE requirements for independence as a result of the Company's sale of its consumer probiotic business to ProBiora Health, a company owned and controlled by, Christine Koski, a former Director, and sister of Robert Koski.

Board Leadership Structure

We currently separate the positions of Chief Executive Officer and Chairman of the Board. Since February 2011, Dr. Telling, one of our independent Directors, has served as our non-executive Chairman of the Board. The responsibilities of the Chairman of the Board include: setting the agenda for each Board meeting, in consultation with the Chief Executive Officer; presiding at executive sessions; facilitating and conducting, with the Nominating Committee, the annual self-assessments by the Board and each standing committee of the Board, including periodic performance reviews of individual Directors; and conducting, with the Compensation Committee, a formal evaluation of the Chief Executive Officer and other executive officers in the context of the annual compensation review.

Separating the positions of Chief Executive Officer and Chairman of the Board allows our Chief Executive Officer to focus on our day-to-day business, while allowing the Chairman of the Board to lead the Board in its fundamental role of providing advice to and independent oversight of management. The Board believes that having an independent Director serve as Chairman of the Board is the appropriate leadership structure for the Company at this time and demonstrates our commitment to good corporate governance.

In addition, as described in more detail below, our Board has three standing committees, each chairman and each member of which is an independent Director. Our Board delegates substantial responsibility to each Board committee, which reports their activities and actions back to the Board. We believe that our independent Board committees and their chairmen are an important aspect of our Board leadership structure.

Risk Oversight

Our Board, as a whole and through its committees, has responsibility for the oversight of risk management. With the oversight of our Board, our officers are responsible for the day-to-day management of the material risks Orogenics faces. In its oversight role, our Board has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed. The involvement of the Board in setting our business strategy at least annually is a key part of its oversight of risk management, its assessment of management's appetite for risk and its determination of what constitutes an appropriate level of risk for Orogenics. The Board regularly receives updates from management and outside advisors regarding certain risks the Company faces, including potential litigation and various operating risks.

In addition, our Board committees each oversee certain aspects of risk management. For example, our Audit Committee is responsible for overseeing risk management of financial matters, financial reporting, the adequacy of our risk-related internal controls, and internal investigations; our Compensation Committee oversees risks related to compensation policies and practices; and our Nominating Committee oversees governance related risks, such as Board independence and conflicts of interest, as well as management and Director succession planning. Our Board committees report their findings to the Board.

Senior management attends Board and Board committee meetings and is available to address any questions or concerns raised by the Board on risk management-related and any other matters. The Board holds periodic strategic planning sessions with senior management to discuss strategies, key challenges, and risks and opportunities for the Company.

Meetings of the Board of Directors and Committees

Board of Directors. Our property, affairs and business are under the general management of our Board of Directors as provided by the laws of the State of Florida and our Bylaws. The Board of Directors conducts its business through meetings of the full Board and through committees of the Board. The Board of Directors has appointed standing Audit, Compensation and Nominating Committees of the Board of Directors. The Board periodically reviews the size of the Board and recommends any changes it determines to be appropriate given our needs. Under our Bylaws, the number of members on the Board may be increased or decreased by resolution of the Board.

The Board currently consists of five members. The Board has no formal policy regarding board member attendance at the Annual Meeting of Shareholders. All of our existing Directors attended the prior year's annual meeting and all of our Directors are expected to attend the current Annual Meeting of Shareholders. The Board of Directors met or unanimously consented to resolutions twenty-three times during the year ended December 31, 2018 ("Fiscal 2018"). All Directors attended at least 75% of the aggregate number of meetings of the Board of Directors and Committees during Fiscal 2018. In conjunction with regularly scheduled meetings, our "independent" Directors met in separate executive sessions.

Audit Committee: The Audit Committee members currently consist of Mr. Charles Pope, Dr. Frederick Telling and Dr. Alan Dunton with Mr. Pope serving as Chairman. The Board has affirmatively determined that each such person met the independence requirements for audit committee purposes based on the more stringent independence standards imposed by applicable NYSE AMERICAN and Securities and Exchange Commission rules. In addition, the Board of Directors has determined that Mr. Pope is an “audit committee financial expert” as that term is defined in Item 407(d)(5) of Regulation S-K promulgated under the Securities and Exchange Act of 1934. In March 2004, the Audit Committee adopted a written charter which was modified on April 24, 2007 and on December 29, 2009. The Company believes that its Audit Committee Charter complies with the requirements related to Sarbanes-Oxley and a current copy of the Audit Committee Charter is available on our website at www.oragenics.com. The Audit Committee met or unanimously consented to resolutions four times during Fiscal 2018.

The Audit Committee has the sole authority to engage and discharge, review the independence, qualifications, activities and compensation of the Company’s independent registered certified public accountants. The Audit Committee reports to the Board the appointment of the independent registered certified public accountants. The Audit Committee must assure regular rotation of the lead and concurring audit partners. The Audit Committee is responsible for the oversight of the Company’s financial policies, control procedures, accounting staff, and reviews and approves the Company’s financial statements. The Audit Committee is responsible for the review of transactions between the Company and any Company officer, Director or entity in which a Company officer or Director has a material interest. The Audit Committee must develop and maintain procedures for the submission of complaints and concerns about accounting and auditing matters. The Audit Committee must assure CEO and CFO certifications meet their obligations by performing a review and evaluation of the Company’s disclosure controls and procedures. The Audit Committee has the authority to engage the services of an outside advisor when required. The Audit Committee must receive reports from the independent registered certified public accountants on critical accounting policies, significant accounting judgments and estimates, off-balance sheet transactions and non-Generally Accepted Accounting Principles financial measures.

Compensation Committee: The Compensation Committee consists of Directors Dr. Alan Dunton, Dr. Frederick Telling and Mr. Charles Pope with Dr. Dunton serving as Chairman. The Board has determined that each current member of the Compensation Committee meets the applicable requirements for independence. None of the Compensation Committee members has ever been an officer or employee of the Company. The Compensation Committee is responsible for establishing the compensation of the Company’s Directors, Chief Executive Officer and all other executive officers, including salaries, bonuses, severance arrangements, and other executive officer benefits. The Committee also administers the Company’s various incentive and stock option plans and designates both the persons receiving awards and the amounts and terms of the awards. The Compensation Committee adopted a charter in March 2004 to outline its compensation, benefits and management development philosophy and to communicate to shareholders the Company’s compensation policies and the reasoning behind such policies as required by the Securities and Exchange Commission. The Charter was modified on April 24, 2007, on December 29, 2009 and again on June 6, 2013. A current copy of the compensation Committee charter is available on our website at www.oragenics.com. The Compensation Committee met five times during Fiscal 2018.

Nominating Committee: The Nominating Committee consists of Directors Charles Pope, Dr. Alan Dunton and Dr. Frederick Telling with Mr. Pope serving as Chairman. The Board has determined that each current member of the Nominating Committee meets the applicable requirements for independence. The Nominating Committee met two times during Fiscal 2018. The Board adopted a nominating committee charter. The charter was updated on February 12, 2014. A current copy of the Nominating Committee’s charter is available on our website. In addition to recommending candidates to the Board for election at the Annual shareholder Meeting, the Nominating Committee oversees the evaluation of the Board as a whole and its committees, as well as individual evaluations of those Directors who are being considered for possible re-nomination to the Board. The evaluation process occurs annually and has, to date, been informal.

The Nominating Committee has not established specific minimum age, education, and years of business experience or specific types of skills for potential Director candidates, but, in general, expects qualified candidates will have ample experience and a proven record of business success and leadership. The Nominating Committee also believes it is appropriate for a member of the Company's management to participate as a member of the Board of Directors, although at present no such management member serves on the Board of Directors. The Nominating Committee will consider as candidates for Director individuals who possess a high level of ethics, integrity and values, and who are committed to representing the long-term interests of our shareholders. Such candidates must be able to make a significant contribution to the governance of the Company by virtue of their business and financial expertise, educational and professional background. The business discipline that may be sought at any given time will vary depending on the needs and strategic direction of the Company, and the disciplines represented by incumbent Directors. In evaluating candidates for nomination as a Director, the Nominating Committee will also consider other criteria, including geographical representation, independence, practical wisdom, mature judgment and having sufficient time to devote to the affairs of the Company in order to carry out the responsibilities of a Director. One or more of our Directors is required to possess the education or experience required to qualify as an audit committee financial expert as defined in the applicable rules of the Securities and Exchange Commission. The Nominating Committee does not have a formal policy with respect to diversity; however, the Board of Directors and the Nominating Committee believe that it is essential that the members of the Board of Directors represent diverse viewpoints and a diverse mix of the specific criteria above. The entire Board of Directors is polled for suggestions as to individuals meeting the aforementioned criteria. Research may also be performed to identify qualified individuals. To date the Company has not engaged third parties to identify or evaluate or assist in identifying potential nominees.

Shareholder Recommendation of Nominees. The Board does not currently have a policy with regard to the consideration of any Director candidates recommended by security holders. Given the Company's current size, stage of development, and size of the Board, the Board believes that it is not currently appropriate to establish a separate policy for security holders to submit such recommendations. Notwithstanding the lack of a formal policy regarding security holder nominations, the Board may from time to time consider candidates proposed for consideration for service on the Company's Board by security holders. The Nominating Committee will consider qualified Director nominees recommended by shareholders when such recommendations are submitted in accordance with applicable law, rule or regulation regarding Director nominations. Shareholders may submit candidates for nomination to our Board of Directors by writing to: Nominating Committee of the Board of Directors, Oragenics, Inc., 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634.

When submitting a nomination to us for consideration, a shareholder must provide certain information about each person whom the shareholder proposes to nominate for election as a Director, including: (i) the name, age, business address and residence address of the person; (ii) the principal occupation or employment of the person; (iii) the class or series and number of shares of our capital stock owned beneficially or of record by the person; and (iv) any other information relating to the person that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of Directors pursuant to Section 14 of the Securities Exchange Act of 1934, or the Exchange Act, and the rules and regulations promulgated thereunder. Such notice must be accompanied by the proposed nominee's written consent to be named as a nominee and to serve as a Director if elected. The Board has not set any specific minimum qualifications that must be met by a nominee presented for consideration to the Board by a security holder. A Board member may become aware of a potential nominee and present such nominee to the full Board for consideration at a Board meeting. The Board would evaluate the candidate and determine whether such person should be considered for Board service based on a variety of criteria including but not limited to, whether the individual has experience in the Company's industry, potential conflicts, and the person's ability to work with existing Board members and expected contributions. The Board would evaluate a nominee submitted by a security holder in the same or similar manner as one recommended by the Nominating Committee.

Direct Shareholder Communication to Board Members

The Company does not currently have a formal process for direct security holder communications to the Board. The basis for the Board's view that it is appropriate for the Company to not have such a formal process includes but is not limited to the following: the Company's limited financial and personnel resources, the Company's stage of operations and development and the ability for security holders to communicate with Board members informally.

Shareholders with questions about the Company are encouraged to contact the Company's Corporate Secretary. However, if shareholders feel their questions have not been addressed, they may communicate with the Company's Board of Directors by sending their communications to an individual Director(s) or to the Company's Board of Directors, c/o Corporate Secretary, Oragenics, Inc., 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634. All shareholder communications received by the Company's Corporate Secretary in this manner will be delivered to the individual Director(s) or to the Company's Board of Directors.

The Chairman of the Board of Directors, Dr. Frederick Telling, is an independent Director and has been designated by the Board of Directors to preside at the executive sessions of the independent Directors. If interested parties wish to make a concern known to the independent Directors, they may do so in a writing addressed to the Chairman of the Board, Oragenics, Inc., 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634.

Director Compensation

The Director Compensation program for 2018 consisted of the following:

Non-employee Directors

Cash Compensation. The Director compensation program for 2018 provided that all non-employee Directors would receive an annual base fee for service on the Board of \$45,000. In addition, the Chairperson of the Board and of our Audit Committee, Compensation Committee and Nominating Committee would also receive annual fees of \$40,000, \$20,000, \$15,000 and \$10,000 respectively. All non-employee Directors serving on our Audit Committee, Compensation Committee and Nominating Committee (other than as the Chairperson) would receive an annual fee of \$10,000, \$7,500, and \$5,000, respectively, in connection with such committee service. In addition, from time to time, the Board may establish special committees and in connection therewith determine the cash compensation that would be paid to the Directors serving on a special committee at the time of the establishment of such committee. All fees for Board service are generally paid on or before the last business day of each quarter.

The Board is expecting to meet in-person for a minimum of four meetings each year. To the extent, the Board meets in excess of six in-person meetings an additional per meeting fee would also be considered to be paid to each Director by the Board for such additional in-person meeting. To the extent the Board determines to establish a special committee or a special committee was previously established and continues to function, the Board would determine the cash compensation payable to each Director serving on any such special committee.

Equity Compensation-New Director. Equity compensation is issued to Directors upon joining our Board. Non-employee Directors receive a stock option for the purchase of 500 shares of our common stock at an exercise price per share equal to the fair market value per share on date they became a Director, which will immediately vest and be exercisable for ten years, subject to early termination under the terms of the 2012 Equity Incentive Plan.

Annual Equity Compensation Awards. As part of the Director Compensation Program each non-employee Director receives an annual award of (i) 4,000 shares of restricted stock and (ii) an award of 8,000 stock options. On June 22, 2018, the Board approved as part of the Director Compensation Program an annual award of 4,000 restricted shares common stock to each of the Company's non-employee Directors, under the 2012 Equity Incentive Plan. Pursuant to the terms of the award, the restricted shares were immediately vested. In addition, and substantially consistent with the Director Compensation Program, on June 22, 2018, the Board approved stock option awards in the amount of 14,000 to each of the Company's non-employee Directors, under the 2012 Equity Incentive Plan at an exercise price of \$1.52 per share, the closing price on June 22, 2018, the date of the grant. The Board determined to increase the annual award of options by 6,000 shares due to the significant amount of additional time the non-employee Directors were required to spend on Company business and financing matters. The options are subject to time-based vesting in equal annual installments over a one-year period on the anniversary of the date of the grant, provided that the recipient remains a Director of the Company through the vesting date. The stock option and restricted stock awards are subject to the standard terms and conditions of the Company's form of stock option and restricted stock agreements which include earlier vesting upon a change in control of the Company.

Discretionary Awards. As part of the Director Compensation Program, the Board may also make discretionary equity-based awards from time to time under our 2012 Equity Incentive Plan. On September 27, 2018, the Board of Directors approved one-time discretionary stock option award under the 2012 Equity Incentive Plan providing the right to acquire 125,000 shares of common stock, to each of the Company's non-employee Directors, under the 2012 Equity Incentive Plan at an exercise price of \$0.73 per share, the closing price on September 27, 2018, the date of grant. The options vest immediately. The Board determined to make the award of options due to the extraordinary amount of time that was devoted by the Board to the Company's public offering in July 2018.

Minimum dollar value stock ownership requirements. Each non-employee Director receiving the above equity-based awards will be subject to a minimum dollar value stock ownership holding requirement with respect to the awards received as well as all prior equity awards under the 2012 Equity Incentive Plan which requirement is intended to align the ability to sell shares with the performance of the Company's stock price. The non-employee Directors will each be subject to a minimum dollar value stock ownership requirement equal to six times the annual Board retainer (\$270,000) which dollar threshold they would be precluded from selling shares of Company stock acquired from the Company under its 2012 Equity Incentive Plan.

Reimbursement of Expenses. Non-employee Directors are also reimbursed for expenses incurred in connection with their attendance at Board or committee meetings and reasonable out-of-pocket business expenses associated with their Board service.

Long-term Incentive Compensation. The Company did not have a Long-Term Incentive Compensation plan in place performance in 2018 for its Non-Employee Directors.

The following table sets forth the compensation of our non-employee Directors in 2018. For Dr. Joslyn, our Chief Executive Officer and only management Director, no separate compensation is paid for his service as a Director. For a summary of Dr. Joslyn's compensation see the Summary Compensation Table.

Director Compensation Table

Name	Fees earned or paid in cash (1)	Stock Awards (2)	Option awards (3)	All other compensation (4)	Total
Dr. Frederick W. Telling	\$ 113,125	\$ 6,080	\$ 111,140	\$ —	\$ 230,345
Robert C. Koski	\$ 45,000	\$ 6,080	\$ 111,140	\$ —	\$ 162,220
Charles L. Pope	\$ 82,500	\$ 6,080	\$ 111,140	\$ —	\$ 199,720
Dr. Alan W. Dunton	\$ 69,375	\$ 6,080	\$ 111,140	\$ —	\$ 186,595

- (1) Amounts represent cash compensation earned by our Non-employee Directors during 2018 in connection with their Board service.
- (2) As part of the Company's non-employee Director compensation program, each non-employee Director was granted an award of 4,000 restricted shares of Company common stock under the Company's 2012 Equity Incentive Plan. The restricted shares vested immediately. The grant date fair value of these shares was \$1.52 per share.
- (3) The amounts in this column represent the aggregate grant date fair value computed in accordance with Financial Accounting Standards Board Accounting Standards Codification, Topic 718, Compensation—Stock Compensation (ASC 718). As part of the Company's non-employee Director Compensation Program, each non-employee Director was awarded 8,000 stock options in 2018 and an additional 6,000 options, under the Company's 2012 Equity Incentive Plan at an exercise price of \$1.52 per share, the closing price on the June 22, 2018, the date of grant. The options are subject to time-based vesting over a one-year period on the anniversary of the date of the grant provided that the recipient remains a Director of the Company through the vesting date. The stock option awards are subject to the standard terms and conditions of the Company's form of stock option agreement which includes earlier vesting upon a change in control of the Company. As part of the Company's Non-employee Director Compensation Program, the Board made a discretionary award to each non-employee Director of 125,000 stock options in 2018, under the Company's 2012 Equity Incentive Plan at an exercise price of \$0.73 per share, the closing price on September 27, 2018, the date of grant. The options vest immediately. The stock option awards are subject to the standard terms and conditions of the Company's form of stock option agreement. As of the end of the year non-employee Directors, Telling, Koski, Pope and Dunton have aggregate options to acquire, 169,500, 169,000, 169,500 and 169,500, respectively and there are no stock awards outstanding for any non-employee Director.
- (4) No other compensation was paid to the non-employee Directors except for reimbursement for travel expenses to Board meetings and other Board related meetings.

Our Compensation Committee and our Board of Directors use market data as one means of evaluating and establishing Board remuneration. In 2018, the Committee did not complete a formal compensation study or have a formal bench marking policy, but instead relied upon its general knowledge of this industry when reviewing and considering market data. In March 2019, the Compensation Committee engaged Korn Ferry (US), as a compensation consultant (“Korn Ferry”), and has assessed Korn Ferry’s independence pursuant to SEC rules and concluded that no conflict of interest exists that would prevent Korn Ferry from independently advising the Compensation Committee. Korn Ferry advises the Compensation Committee on matters related to executive compensation, Board remuneration and related governance matters. The Compensation Committee and Board will incorporate a more formal review of the competitive market into its 2019 Director compensation process.

Employee Directors

The Director Compensation Program provides that employee Directors receive no additional compensation in connection with their Board service. There was one employee Director in 2018.

EXECUTIVE COMPENSATION

Compensation Practices and Risk

The following “Compensation Discussion and Analysis” section describes generally our compensation policies and practices that are applicable for executive and management employees. We use common variable compensation designs across all of our business units and divisions, with a significant focus on corporate and business financial performance as generally described in this Proxy Statement.

Compensation Discussion and Analysis

Throughout this section of the Proxy Statement, the individuals who served as the Company’s chief executive officer and chief financial officer, as well as the other individuals included in the Summary Compensation Table herein, are referred to as the “named executive officers.”

Overview of Compensation Program

The Compensation Committee of the Company’s Board of Directors is responsible for establishing and evaluating the Company’s policies governing the compensation of its executive officers, including its named executive officers. The Compensation Committee reviews and proposes recommendations to the Board of Directors regarding the compensation to be paid to the Chief Executive Officer. In addition, the Compensation Committee reviews and approves the compensation to be paid to all other executive officers. The Compensation Committee ensures that the total compensation paid to the Company’s executive officers is fair, reasonable and competitive.

Compensation Objective

The Company’s executive compensation programs are designed to achieve the following objectives:

- Attract and retain talented and experienced executive officers;
- Motivate and reward executive officers whose knowledge, skills, performance and business relationships are critical to the Company’s success;
- Align the interests of the Company’s executive officers and shareholders by motivating executive officers to ultimately increase shareholder value;
- Compensate the Company’s executive officers to manage the Company’s business to meet its short term and long-range goals;
- Ensure fairness among the executive officers by recognizing the contributions each executive officer makes to the Company’s success; and
- Provide a competitive compensation package which includes some pay for performance factors.

Role of Others in Compensation Decisions

The Compensation Committee makes all of the decisions with respect to the compensation received by the Company’s executive officers other than the Company’s chief executive officer which the Committee reviews and proposes recommendations to the Board of Directors. The Compensation Committee meets outside the presence of all of the Company’s executive officers to consider appropriate compensation recommendations for the Company’s chief executive officer. For all other executive officers, the Compensation Committee meets outside the presence of all executive officers except for the Company’s chief executive officer. The Company’s chief executive officer periodically reviews each of the other executive officers’ performance with the Compensation Committee and makes recommendations to the Compensation Committee with respect to any appropriate changes in base salary, bonus and grants of long-term equity incentive awards for the executive officers, excluding himself. Based in part on these recommendations and other considerations, the Compensation Committee reviews and approves such compensation arrangements of the Company’s executive officers other than the Company’s chief executive officer. The Compensation Committee also annually analyzes the chief executive officer’s performance and determines his salary, annual cash bonus and grants of long-term equity incentive awards and makes recommendations to the Board of Directors. The Compensation Committee reviews and makes recommendation to the Board of Directors regarding all new equity related incentive plans for senior management.

Our Compensation Committee and our Board of Directors use market data as one means of evaluating and establishing executive pay. In 2018, the Committee did not complete a formal compensation study or have a formal benchmarking policy, but instead relied upon its general knowledge of this industry when reviewing and considering market data. In March 2019, the Compensation Committee engaged Korn Ferry (US), as a compensation consultant (“Korn Ferry”), and has assessed Korn Ferry’s independence pursuant to SEC rules and concluded that no conflict of interest exists that would prevent Korn Ferry from independently advising the Compensation Committee. Korn Ferry advises the Compensation Committee on matters related to executive compensation, Board remuneration and related governance matters. The Compensation Committee will incorporate a more formal review of the competitive market into its 2019 executive compensation process.

Our Compensation Committee believes that, given the competitiveness of our industry and our Company culture, our base compensation, annual cash bonuses and equity programs are flexible enough to reward the achievement of clearly defined corporate goals and are sufficient to retain our existing executive officers and to hire new executive officers with the appropriate qualifications and experience.

Consideration of Most Recent Shareholder Advisory Vote on Executive Compensation

The Compensation Committee also considers the results of the Company’s most recent shareholder advisory vote on executive compensation. At the Company’s previous annual meeting, the Company’s shareholders voted in favor of the compensation of our named executive officers: approximately 98.3% of the shares represented in person or by proxy having voted in favor of the program. In light of these results, the Compensation Committee decided to substantially continue to continue the executive compensation program in 2018. The Board of Directors previously determined that future shareholder advisory votes on executive compensation will be submitted to shareholders of the Company annually until the next required advisory vote on the frequency of conducting advisory votes on executive compensation.

Clawback Policy

In order to further align management’s interests with those of shareholders and to support the Company’s governance practices, the Board of Directors adopted a recoupment policy applicable to annual bonuses and other short-term and long-term incentive compensation based on financial targets (“Incentive Compensation”) received by current and former executive officers of the Company and such other senior executives/employees of the Company who may from time to time be deemed subject to the policy by the Board of Directors (“Covered Executive”). The policy provides that if, as a result of a restatement of the Company’s financial statements due to the Company’s material noncompliance with any financial reporting requirement under the securities laws, a Covered Executive received more Incentive Compensation than the Covered Executive would have received absent the incorrect financial statements, the Company shall recover said excess Incentive Compensation (defined as the excess of (i) the actual amount of Incentive Compensation paid to the Covered Executive over (ii) the Incentive Compensation that would have been paid based on the restated financial results during the three-year period preceding the date on which the Company is required to prepare such restatement). The policy also provides that if the Board of Directors makes a determination in its sole discretion that a Covered Executive engaged in Misconduct (as defined below), the Board of Directors may require reimbursement or forfeiture of all or part of the Incentive Compensation received by the Covered Executive. The Board of Directors may use its judgment in determining the amount to be recovered. Misconduct is defined as (i) conviction of a felony, (ii) material breach of any agreement with the Company, (iii) material breach of any Company policy or code, (iv) act of theft, embezzlement or fraud, (v) misrepresentation or misstatement of financial or performance results, and (vi) any other act or event that the Board of Directors has determined that recoupment is appropriate.

2018 Executive Compensation Components

For the fiscal year ended December 31, 2018, the principal components of compensation for the Company’s executive officers were:

- Annual base salary;
- Bonus;

- Long-term equity-based incentive compensation;
- Other benefits.

Annual Base Salary

Base salary is designed to attract and retain experienced executive officers who can drive the achievement of the Company's goals. While the initial base salary for the Company's executive officers was determined by an assessment based upon the responsibilities of the position, the expected contribution of the position to our business, the experience and skill required for the position, and competition in the marketplace for the talent; the factors used in determining increases in base salary include individual performance, changes in role and/or responsibility and changes in the competitive market environment. The Compensation Committee periodically reviews the base salary for each executive officer.

Bonus

The Company established performance-based bonus targets for its named executive officers in 2018. See "Bonus Plan 2018" below.

Long-Term Equity Incentive Compensation

The Company awards long-term equity incentive awards to executive officers, including the named executive officers, as part of its total compensation package. These awards are consistent with the Company's pay for performance principles and align the interests of the executive officers to the interests of the Company's shareholders. The Compensation Committee reviews and approves the amount of each award to be granted to each named executive officer. Long-term equity incentive awards are made pursuant to the 2012 Equity Incentive Plan.

The Company's long-term equity incentives are currently in the form of options to acquire its common stock. Stock option awards provide the Company's executive officers with the right to purchase shares of its common stock at a fixed exercise price for a period of up to ten years under the 2012 Equity Incentive Plan. Stock options are granted under the 2012 Equity Incentive Plan at a price not less than the prevailing market value at the time of grant and will have realizable value only if the Company's stock price increases. Stock options are earned on the basis of continued service to the Company and generally vest over a number of years or based upon other specific performance-based criteria.

The Company's long-term equity incentive also can be in the form of restricted share awards of the Company's common stock under the 2012 Equity Incentive Plan. Restricted stock awards provide the Company's executive officers with the shares of its common stock subject to certain restrictions and/or vesting requirements. Restricted stock shares will be earned on the basis of continued service to the Company and will vest as set forth in the separate award agreements.

The Compensation Committee determines the amount and features of the stock options and/or restricted stock, if any, to be awarded to executive officers. The Compensation Committee evaluates a number of criteria, including the past service of each such executive officer to the Company, the present and potential contributions of such executive officer to the Company's success and such other factors as the Compensation Committee shall deem relevant in connection with accomplishing the purposes of the 2012 Equity Incentive Plan, including the executive officer's current stock holdings, years of service, position with the Company and other factors. The Compensation Committee will not apply a formula assigning specific weights to any of these factors when making its determination.

Other Benefits

Retirement Benefits. The Company maintains a Simple Individual Retirement Arrangement plan in which all full-time employees, including the Company's named executive officers, are eligible to participate. The Company provides this plan to help its employees save some amount of their cash compensation for retirement in a tax efficient manner. The Company does not provide an option for its employees to invest in the Company's stock under the 401k plan. The Company matches 100% of the employee's contribution up to a maximum of 3% of the employee's compensation.

Health and Welfare Benefits. All full-time employees, including our named executive officers, may participate in the Company's health and welfare benefit programs, including medical, dental and vision care coverage as may be provided and applicable to all employees.

Perquisites. We do not provide perquisites or other personal benefits to our named executive officers other than those that we provide to our employees.

Employment Agreements

During 2018, the Company had employment agreements in effect with Dr. Alan Joslyn, Mr. Michael Sullivan, and Dr. Martin Handfield. The Company entered into employment agreements with these officers to ensure that they would perform their respective roles with the Company for an extended period of time. In addition, the Company also considered the critical nature of each of their positions and the Company's need to retain them when the Company committed to these agreements. See "Employment Contracts and Change in Control Arrangements."

Bonus Plan 2018

On June 22, 2018, the Board of Directors (the "Board") of Orogenics approved the 2018 cash bonus program for Dr. Alan Joslyn, Mr. Michael Sullivan, and Dr. Martin Handfield recommended by the Compensation Committee. Under such cash bonus program, Dr. Joslyn, Mr. Sullivan, and Dr. Handfield are eligible for cash bonuses of up to \$175,000, \$76,650 and \$48,900 respectively, equaling up to 50%, 35% and 25% of their respective base salaries (each a "Bonus Target").

The bonuses payable to Dr. Joslyn are to be based upon the achievement of the following objectives:

- (i) Up to 55% of the Bonus Target for financial performance objectives related to the Company's raising capital, strategic initiatives and budgeting and management;
- (ii) Up to 30% of the Bonus Target for objectives related to AG013 clinical trials; and
- (iii) Up to 15% of the Bonus Target for objectives related to lantibiotic program developments.

The bonuses payable to Mr. Sullivan are to be based upon the achievement of the following objectives:

- (i) Up to 85 % of the Bonus Target for financial performance objectives related to the Company's raising capital, strategic initiatives, and budgeting and management;
- (ii) Up to 10% of the Bonus Target for objectives related to AG013 clinical trials; and
- (iii) Up to 5% of the Bonus Target for objectives related to lantibiotic program developments.

The bonuses payable to Dr. Handfield are to be based upon the achievement of the following objectives:

- (i) Up to 15% of the Bonus Target for objectives related to the Company's strategic initiatives and management; and
- (ii) Up to 85% of the Bonus Target for objectives related to lantibiotic program developments.

2018 Compensation Decisions

The Company believes that the total compensation paid to its named executive officers for the fiscal year ended December 31, 2018 achieved the overall objectives of its executive compensation program. In accordance with its overall objectives, executive compensation for 2018 was competitive with other similarly-sized companies. The Compensation Committee took the following key compensation actions in 2018:

- **Determination of Annual Base Salaries**

The Compensation Committee did not authorize or approve any changes in the annual salary for any of the Company's named executive officers during 2018.

- **Determination of Equity Awards:**

We made stock option grants to Dr. Joslyn, Mr. Sullivan, and Dr. Handfield of 28,000, 18,000, and 16,000 shares of common, respectively, under the Company's 2012 Equity Incentive Plan at an exercise price of \$1.52 per share, the closing price on the June 22, 2018, the date of grant. The options are subject to time-based vesting on the one-year anniversary of the date of the grant. In addition, we made stock option grants to Dr. Joslyn, Mr. Sullivan, and Dr. Handfield of 400,000, 250,000, and 220,000 shares of common stock, respectively, under the Company's 2012 Equity Plan at an exercise price of \$0.73 per share, the closing price of the Company's common stock on September 27, 2018, the date of the grant. One-third of the options vested immediately, with the remainder vesting in equal annual installments over a two-year period on the first and second anniversaries of the date of the grant.

- **Determination of Cash Bonus-2018**

We made performance-based cash bonus awards pursuant to the terms of the Bonus Plan 2018 to Dr. Joslyn, Mr. Sullivan, and Dr. Handfield of \$140,000, \$72,818, and \$39,120, respectively, based upon their performance during 2018. These performance-based cash bonus awards were made in December of 2018.

2017 Compensation Decisions

- **Determination of Cash Bonus-2017:**

We made discretionary cash bonus awards to Dr. Joslyn, Mr. Sullivan, and Dr. Handfield of \$105,000, \$53,655, and \$20,000, respectively, based upon their performance during 2017. These discretionary cash bonus payments were determined and made in May of 2018 after the Company was able to raise additional capital.

Summary Compensation Table

The following table sets forth the aggregate compensation in 2018 and 2017 for services in all capacities paid or accrued by the Company to Dr. Alan Joslyn, Mr. Michael Sullivan, our Chief Financial Officer, and our next most highly compensated officers who earned more than \$100,000 in total salary and bonus during the fiscal year ended December 31, 2018 (the "Named Executive Officers").

Name and principal position	Year	Salary	Bonus(1)	Stock Awards (2)	Option Awards (2)	All Other Compensation (3)	Total
Dr. Alan Joslyn President and Chief Executive Officer	2018	\$ 350,000	\$ 140,000	\$ —	\$ 330,280	\$ 14,703	\$ 834,983
	2017	\$ 350,000	\$ 105,000	\$ 2,462	\$ 93,607	\$ 10,500	\$ 561,569
Michael O. Sullivan Chief Financial Officer	2018	\$ 219,000	\$ 72,818	\$ —	\$ 207,180	\$ 6,570	\$ 505,568
	2017	\$ 219,000	\$ 53,655	\$ —	\$ 84,974	\$ 6,570	\$ 364,199
Dr. Martin Handfield Senior Vice President Discovery Research	2018	\$ 195,600	\$ 39,120	\$ —	\$ 182,560	\$ 5,868	\$ 423,148
	2017	\$ 195,600	\$ 20,000	\$ —	\$ 15,948	\$ 5,868	\$ 237,416

- (1) The amounts in this column for 2018 represent a performance-based cash bonus award made pursuant to the terms of the Bonus Plan 2018 which was earned and paid in 2018. The amounts reflected for 2017 reflect a discretionary cash bonus award based upon the executive's performance during 2017 that was not determined and paid until May 2018 and as such the 2017 amounts have been updated to reflect these payments.

- (2) The amounts in this column represent the aggregate grant date fair value computed in accordance with Financial Accounting Standards Board Accounting Standards Codification, Topic 718, Compensation—Stock Compensation (ASC 718). On June 22, 2018, Dr. Joslyn, Mr. Sullivan, and Dr. Handfield were awarded stock options of 28,000, 18,000, and 16,000 shares of common, respectively, under the 2012 Equity Incentive Plan at an exercise price of \$1.52 per share, the closing price on the June 22, 2018, the date of grant. The options are subject to time-based vesting in equal annual installments over a one-year period on the anniversary of the date of the grant, provided that each of Dr. Joslyn, Mr. Sullivan and Dr., Handfield continued their employment with the Company through such dates. In addition, we made stock option grants to Dr. Joslyn, Mr. Sullivan, and Dr. Handfield of 400,000, 250,000, and 220,000 shares of common, respectively, under the 2012 Equity Incentive Plan at an exercise price of \$0.73 per share, the closing price on the September 27, 2018, the date of grant. One-third of the options vested immediately, with the remainder vesting in equal annual installments over a two-year period on the first and second anniversaries of the date of the grant, provided that each of Dr. Joslyn, Mr. Sullivan and Dr., Handfield continued their employment with the Company through such dates. Under Securities and Exchange Commission rules relating to executive compensation disclosure, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Fair values relating to share grants have been determined under ASC 718 and were calculated using the common stock closing price on the date of grant and multiplying that price by the number of shares subject to the share grant. The equity-based compensation expense relating to the stock grants is recognized over the requisite service period of the grant. For option awards, we utilize the Black-Scholes option pricing model to determine the fair value on the date of the grant multiplied by the number of options subject to the option grants in accordance with ASC 718. The stock-based compensation expense relating to the stock option grants is recognized over the requisite service period of the grant and the amounts included in the Option Awards column do not reflect compensation actually received by the named executive officers. For information on the assumptions used to calculate the fair value of stock option grants, refer to Footnote 8 - "Stock Compensation Plan" in our financial statements for the year ended December 31, 2018.
- (3) Amounts in this column for Dr. Joslyn, Mr. Sullivan and Dr. Handfield represent the Company's matching contributions to our Simple IRA retirement plan. The retirement plan requires us to match employee contributions up to the first 3% of compensation earned. For Dr. Joslyn, the amount reflected includes \$4,203 amount reimbursed by the Company for Dr. Joslyn's expense in commuting to the Company's headquarters in Tampa, Florida. Such reimbursement amount is included in Dr. Joslyn's compensation.

The Compensation Committee believes that our future success depends, in large part, upon our ability to maintain a competitive position in attracting, retaining and motivating key personnel. The Compensation Committee utilizes the 2012 Equity Incentive Plan to provide incentives to employees. We do not have any separate long-term incentive plans that provide compensation intended to serve as incentives for performance other than awards contemplated under, or pursuant to, our 2012 Equity Incentive Plan.

Current Executive Officers and Key Employee

We are led by a team of executives that are chosen by the Board of Directors. Currently, we have three executive officers, set forth below is biographical information for executive officers and certain identified key employees.

Executive Officers

Alan F. Joslyn, Ph.D. The biography of Dr. Joslyn is included above under Proposal I "Information About Nominees."

Michael Sullivan. Mr. Sullivan, age 62, has served as our Interim Principal Executive Officer from October 30, 2014 until June 5, 2016 and served as our Chief Financial Officer, Secretary and Treasurer since February 6, 2012. Mr. Sullivan has held senior level financial positions for several publicly and privately held businesses including Utek Corporation, eANGLER, and HSN Direct International Limited. Most recently, he was the Group Financial Officer for the Investigative Services and Litigation Consulting Services segment of First Advantage Corporation a firm specializing in talent acquisition solutions where he streamlined the employee recruitment process. Mr. Sullivan is a Florida Certified Public Accountant. He graduated from the Florida State University with a Bachelor of Science in Accounting and a Master of Business Administration.

Key Employee

Dr. Martin Handfield. Dr. Handfield, age 47, is, the Company's Senior Vice President of Discovery Research and previously has served as our Director of Research and Development. Dr. Handfield has served the Company since January 2009. Prior to joining our Company, Dr. Handfield held a position as Tenured Associate Professor at the Center for Molecular Microbiology and the Department of Oral Biology at the University of Florida College of Dentistry, where he co-invented IVIAT and co-founded *ivi* Gene Corp. and Epicure Corp. to commercialize this and related technologies. Dr. Handfield holds a B.S. degree in Biochemistry, and a MS degree and PhD in Microbiology and Immunology from the Université Laval College of Medicine in Canada, and did postdoctoral training at the University of Florida.

Our executive officers serve at the pleasure of our Board of Directors until their successors are elected or qualified and subject, in certain cases to employment agreements we have entered into with our officers. Our new chief Executive Officer and President Dr. Alan Joslyn and Mr. Sullivan, our Chief Financial Officer and Dr. Handfield, our Senior Vice President of Discovery Research, each have employment agreements with us. See "Executive Compensation—Employment Contracts and Change in Control Arrangements."

Incentive Awards

The Compensation Committee believes that our future success depends, in large part, upon our ability to maintain a competitive position in attracting, retaining and motivating key personnel. The Compensation Committee utilizes the 2012 Equity Incentive Plan to provide incentives to employees. We do not have any separate long-term incentive plans that provide compensation intended to serve as incentives for performance other than awards contemplated under, or pursuant to, our 2012 Equity Incentive Plan. During the year ended December 31, 2018, Dr. Joslyn, Mr. Sullivan and Dr. Handfield were awarded stock options of 28,000, 18,000, and 16,000 shares of common, respectively, under the 2012 Equity Incentive Plan at an exercise price of \$1.52 per share, the closing price on the June 22, 2018, the date of grant. In addition, Dr. Joslyn, Mr. Sullivan, and Dr. Handfield were awarded stock options of 400,000, 250,000, and 220,000 shares of common, respectively, under the 2012 Equity Incentive Plan at an exercise price of \$0.73 per share, the closing price on the September 27, 2018, the date of grant. No other awards were made to our executive officers in 2018.

Outstanding Equity Awards

The following table provides information concerning unexercised options outstanding as of December 31, 2018:

Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable		Option exercise price (\$)	Option expiration date
Dr. Alan Joslyn President and Chief Executive Officer	133,333	266,667	(1)	0.73	9/27/2028
		28,000	(3)	1.52	6/22/2028
	4,667	9,333	(2)	3.70	6/22/2027
	30,000			5.50	6/6/2026
Michael O. Sullivan Chief Financial Officer	83,333	166,667	(1)	0.73	9/27/2028
		18,000	(3)	1.52	6/22/2028
	5,834	11,666	(2)	3.70	6/22/2027
	20,000			13.20	3/16/2025
	4,000			8.80	12/8/2024
	2,500			8.60	10/30/2024
Dr. Martin Handfield Senior Vice President of Discovery Research	4,500			12.00	2/10/2022
	73,333	146,667	(1)	0.73	9/27/2028
		16,000	(3)	1.52	6/22/2028
	4,667	9,663	(2)	3.70	6/27/2027
	15,000			13.20	3/16/2025
	4,000			8.80	12/8/2024
	1,680			15.00	9/27/2021
	1,250			54.00	12/1/2019
	428		54.00	12/1/2019	
	250		54.00	12/1/2019	

- (1) Represents awards that are time vested with each award vesting evenly on an annual basis over two years, subject to earlier vesting upon a change in control as defined in the award agreements.
- (2) Represents awards that are time vested with each award vesting evenly on an annual basis over three years, subject to earlier vesting upon a change in control as defined in the award agreements.
- (3) Represents awards that are time vested with each award vesting evenly on an annual basis over one year, subject to earlier vesting upon a change in control as defined in the award agreements.

Employment Contracts and Change in Control Arrangements

Employment Agreement—Dr. Joslyn

We have entered into an Executive Employment Agreement dated as of June 6, 2016, with Dr. Alan Joslyn pursuant to which Dr. Joslyn serves as our President and Chief Executive. The employment term is a one-year term with an automatic 12-month extension thereafter unless either party provides the other 30 days' prior written notice of its intention not to renew the employment agreement.

Dr. Joslyn received a one-time signing bonus of \$25,000 upon execution of the employment agreement and is currently entitled to receive an annual base salary of \$350,000 which is subject to annual review and adjustment by the Company's Board of Directors. He is eligible to receive annual performance bonus from the Company of up to fifty percent (50%) of his annual base salary based upon appropriate Company-based and individual-based targets specified by the Compensation Committee of the Board, in its discretion, as approved by the full Board of Directors. Dr. Joslyn is also entitled to participate in our employee benefit plans on terms comparable to other full-time employees as well as four weeks paid vacation annually.

The employment agreement also provided for Dr. Joslyn to be granted equity awards under the Company's 2012 Equity Incentive Plan consisting of (i) stock options to purchase 30,000 shares of the Company's common stock at an exercise price equal to \$5.50 per share which stock options shall vest in six installments of 5,000 shares each every six months after June 6, 2016, provided that he has continued his employment with the Company through such dates, and (ii) 3,000 shares of restricted stock of the Company, vesting in two installments on the six month and twelve month anniversaries of June 6, 2016. All of the performance bonuses, as well as any equity awards which are granted to Dr. Joslyn or which become vested as a result of the satisfaction of financial performance goals of the Company, are subject to the Company's policy on recoupment or clawback of executive incentive compensation.

Dr. Joslyn is subject to a covenant not to disclose our confidential information during his employment term and an assignment of intellectual property rights. Also, during his employment term and for a period of 12 months thereafter, Dr. Joslyn covenants not to compete with us and not to solicit any of our customers, vendors or employees. If Dr. Joslyn breaches any of these covenants, the Company will be entitled to injunctive relief.

If Dr. Joslyn's employment is terminated by us for Cause (as defined in his employment agreement) or by Dr. Joslyn during the term of the agreement, he will be entitled to receive his (i) his then-current annual base salary through the date of termination; (ii) any reimbursable expenses for which he has not yet been reimbursed as of the date of termination; and (iii) any other rights and vested benefits (if any) provided under employee benefit plans and programs of the Company, determined in accordance with the applicable terms and provisions of such plans and programs ("Accrued Compensation").

If Dr. Joslyn's employment is terminated by us without "Cause", subject to his execution of a release of claims against us, and in addition to the payment of the Accrued Compensation, the Company is obligated to make payments to Dr. Joslyn within 60 days after his termination date equal to six months of his annual base salary, as in effect at the termination date, plus any earned but unpaid bonus (the "Additional Severance Payments").

The employment agreement also contains change of control provisions providing that if Dr. Joslyn's employment with the Company is terminated by the Company without Cause during the period of ninety (90) days following a Change in Control (as that term is defined below) of the Company, in lieu of the Additional Severance Payments described above, Dr. Joslyn will be entitled to receive a severance payment equal to the sum of (i) six (6) months of his annual base salary, at the higher of the base salary rate in effect on the date of termination or the base salary rate in effect immediately before the effective date of the Change of Control, and (ii) his Performance Bonus for the year which includes the effective date of the Change in Control, payable at the target level of performance, which will be paid in a single lump sum after his execution and non-revocation of the Release. In addition, he will also receive in the same payment the amount of any performance bonus that, as of the date of termination, has been earned by Dr. Joslyn but has not yet been paid by the Company. If Dr. Joslyn holds any stock options or other stock awards granted under the Company's 2012 Equity Incentive Plan which are not fully vested at the time his employment with the Company is terminated by the Company without Cause during the period of ninety (90) days following a Change in Control, such equity awards shall become fully vested as of the termination date. For purposes of the employment agreement, the term "Change in Control" means a transaction or series of transactions which constitutes a sale of control of the Company, a change in effective control of the Company, or a sale of all or substantially all of the assets of the Company, or a transaction which qualifies as a "change in ownership" or "change in effective control" of the Company or a "change in ownership of substantially all of the assets" of the Company under the standards set forth in Treasury Regulation section 1.409A-3(i)(5).

Dr. Joslyn's employment agreement also provides that each of the payments and benefits under the agreement are subject to compliance with Section 409A of the Code and it includes time of payment language intended to comply with Section 409A requirements.

Amendment to Dr. Joslyn's Employment Agreement

On June 8, 2018 we entered into an amendment to Dr. Joslyn's employment agreement which extended the term of his agreement to June 6, 2020. All other terms of his employment agreement remained in full force and effect.

Employment Agreements—Mr. Sullivan and Dr. Handfield

We have entered into employment agreements with our Chief Financial Officer, Mr. Michael Sullivan and Dr. Martin Handfield, our Senior Vice-President of Research and Development (the "Employment Agreements"). The annual base salaries provided in the Employment Agreements are payable in installments consistent with our normal payroll practices. Mr. Sullivan and Dr. Handfield are also eligible under the Employment Agreements to receive annual bonuses during the term at the discretion of the Compensation Committee and the Board of Directors with Mr. Sullivan's employment agreement providing for such a discretionary bonus of up to 35% of his base salary and with Dr. Handfield's employment agreement providing for a discretionary bonus component, which the Compensation Committee has set as up to 25% of his base salary.

The Employment Agreements are terminable at any time by either party and if the executive officer is involuntarily terminated by us, he shall receive his base salary and vacation pay each accrued through the date of termination, and any nonforfeitable benefits earned and payable to him under the terms of the employee handbook (which applies to all employees) and benefits available under any applicable incentive plan in which the executive participates. In addition, if the executive officer's separation from employment is not voluntary and without cause, we would be obligated to pay the executive officer six months of his annual base salary as severance and the executive shall be entitled to out placement services. If the executive officer is terminated for cause, he shall be entitled to receive his base salary and accrued vacation due through the date of termination and any nonforfeitable benefits already earned and payable to the executive under the terms of the employee handbook or other applicable incentive plans maintained by us. Cause is defined in the Employment Agreements as any action that is illegal, immoral, or improper that reflects on the Company, the employee, or the ability of either to function optimally. If the executive officer voluntarily resigns, he shall be entitled to this base salary and accrued vacation due through the date of termination (including any mutually agreed upon notice period) and any nonforfeitable benefits already earned and payable to the executive officer employee under the terms of the employee handbook or other incentive plans maintained by us.

If the executive officer dies during the term of employment with us, his estate shall be paid his salary as it would have accrued over a period of thirty days after the executive officer's death. We shall also extend the executive officer's right to exercise vested stock options for six months. In the event the executive officer becomes disabled (as defined in the then applicable short and long-term disability insurance policies) we shall pay to the executive officer his salary as it would have accrued over a period of 30 days after the executive became so disabled and we shall extend the executive officer's right to exercise vested stock options for six months.

The Employment Agreements also each include non-disclosure and Company ownership of invention provisions, as well as a provision providing for the Company to defend and indemnify the executive if the executive is named as a defendant in any lawsuit regarding any action taken within the scope of employment.

In the event of a change in control, any stock options or other awards granted (other than performance awards) under our 2012 Equity Incentive Plan shall become immediately vested in full and, in the case of stock options, exercisable in full. If the change in control results in an involuntary separation from employment of the executive officer within 180 days following a change in control, the executive officer would be entitled to (i) receive six months of salary and the extension of his benefits (excluding vacation time and paid time off) and (ii) exercise vested options for six months from the date of separation. Under the Employment Agreements, "involuntary separation of employment" means (i) termination without cause, (ii) any reduction in responsibilities of office altering the status of the executive officer as an employee, or (iii) the duplication of the executive officer's position by an equivalent executive in an acquiring entity; and "change in control" means the sale of the entire company, or substantially all of its assets, or the sale of the business unit employing an individual which results in the termination of employment or subsequent transfer of the employment relationship to another legal entity, or entity, or single party acquiring more shares than are owned by the Koski Family Limited Partnership, including its members and their immediate families, including spouses and their children.

On February 20, 2015, we entered into an amended and restated employment agreement, effective January 1, 2015, with Mr. Sullivan. The terms of Mr. Sullivan's amended and restated employment agreement were substantially similar to those of the previous agreement disclosed above except for:

1. The percentage of base salary eligible for bonus awards was set as previously disclosed for Mr. Sullivan at up to 35% of base salary.
2. A provision was added in Mr. Sullivan's agreement to provide for the clawback of bonuses pursuant to the Board's adoption of a clawback policy. In the A&R Employment Agreement Mr. Sullivan acknowledges and agrees that any incentive-based compensation paid to him will be subject to clawback or repayment to the extent such clawback or repayment is required by the terms of the Company's recoupment, clawback or similar policy as may be in effect from time to time, or as required by law.
3. A provision was added whereby Mr. Sullivan would be required to release the Company as a condition to receiving any severance benefit provided by his A&R Employment Agreement with the form of release added and attached as an exhibit to his A&R Employment Agreement.
4. The definition of a change of control in the prior agreement was revised to align it with the definition of a change in control set forth in the Company's 2012 Equity Incentive Plan as follows:
 - (i) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) becomes the "beneficial owner" (as defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities;
 - (ii) The consummation of the sale or disposition by the Company of all or substantially all of the Company's assets;

- (iii) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the Directors are Incumbent Directors. "Incumbent Directors" means Directors who either (A) are Directors as of the effective date of this Agreement, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of Directors to the Company); or
- (iv) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS
AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The following table sets forth information about beneficial ownership of our Common Stock as of May 16, 2019 (unless otherwise noted) by (i) each shareholder that has indicated in public filings that the shareholder beneficially owns more than five percent of the Common Stock, (ii) each of the Company's Directors and named officers and (iii) all Directors and officers as a group. Except as otherwise noted, each person listed below, either alone or together with members of the person's family sharing the same household, had, to our knowledge, sole voting and investment power with respect to the shares listed next to the person's name.

Name and address(1)	Number of shares beneficially owned	Percentage of ownership (2)
5% shareholders		
CVI Investments, Inc. (3)	4,000,000	8.7%
Anson Funds Management LP (4)	4,000,000	8.7%
Intracoastal Capital LLC (5)	3,858,977	7.8%
Koski Family Limited Partnership (6)	2,580,365	5.5%
Randall J. Kirk (7)	1,548,165	3.4%
Directors and officers		
Alan Joslyn (8)	337,000	*
Robert C. Koski (9)(6)	2,328,344	5.0%
Charles L. Pope (10)	197,608	*
Dr. Alan Dunton (11)	230,761	*
Dr. Frederick W. Telling (12)	709,038	1.5%
Michael Sullivan (13)	158,255	*
(All Directors and officers as a group 6 persons) (14)	3,961,006	8.3%

* Beneficial ownership percentage is less than 1%.

- (1) Except as indicated, the address of the person named in the table is c/o Oragenics, Inc., 4902 Eisenhower Blvd., Suite 125, Tampa, Florida 33634.
- (2) In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of the Common Stock subject to options or warrants held by that person that are currently exercisable or will become exercisable within 60 days after May 16, 2019, are deemed outstanding, while the shares are not deemed outstanding for purposes of computing percentage ownership of any other person. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of the Common Stock held by them. Applicable percentage ownership is based on 46,124,803 shares of the Common Stock outstanding as of May 16, 2019. The inclusion in the table above of any shares deemed beneficially owned does not constitute an admission of beneficial ownership of those shares.
- (3) Based upon information provided by CVI Investments, Inc. ("CVI"), in its Schedule 13G filing with the SEC on March 29, 2019, 4,000,000 shares of our common stock held directly by CVI. Heights Capital Management, Inc., the authorized agent of CVI has discretionary authority to vote and dispose of the shares held by CVI and may be deemed to be the beneficial owner of these shares. The address for CVI Investments, Inc. is P.O. Box 309GT, Ugland House, South Church Street, George Town Grand Cayman, KY1-1104 Cayman Islands. Excludes 4,000,000 warrants that are subject to a 4.99% ownership blocker, pursuant to which shares of our common stock may not be issued to the extent such issuance would cause CVI to beneficially own more than 4.99% of our outstanding common stock. The address for Heights Capital Management, Inc. is 101 California Street, Suite 3250, San Francisco, California 94111.

- (4) Based upon information provided by Anson Funds Management LP (Anson Funds) in its Schedule 13G filing with the SEC on March 29, 2019, 4,000,000 shares of our common stock are held directly by Anson Funds. Anson Funds Management LP and Anson Advisors Inc. serve as co-investment advisors (the "Fund"). Anson Funds Management LP and Anson Advisors Inc. serve as co-investment advisors to the Fund and may direct the vote and disposition of the 4,000,000 shares of Common Stock held by the Fund. As the general partner of Anson Funds Management LP, Anson Management GP LLC may direct the vote and disposition of the 4,000,000 shares of Common Stock held by the Fund. As the principal of Anson Fund Management LP and Anson Management GP LLC, Mr. Bruce Winson may direct the vote and disposition of the 4,000,000 shares of Common Stock held by the Fund. As Directors of Anson Advisors Inc., Mr. Amin Nathoo and Mr. Moez Kassam may each direct the vote and disposition of the 4,000,000 shares of Common Stock held by the Fund. Excludes 4,000,000 warrants that are subject to a 4.99% ownership blocker, pursuant to which shares of our common stock may not be issued to the extent such issuance would cause Anson Funds to beneficially own more than 4.99% of our outstanding common stock. The address for Anson Funds Management LP, Anson Management GP LLC and Mr. Winson is 5950 Berkshire Lane, Suite 210, Dallas, Texas 75225. The address for Anson Advisors Inc., Mr. Nathoo and Mr. Kassam is 155 University Ave, Suite 207, Toronto, Ontario, M5H 3B7.
- (5) Based upon information provided by Intracoastal Capital LLC ("Intracoastal") in its Schedule 13G filing with the SEC on April 1, 2019, Intracoastal is the beneficial owner of 3,858,977 shares of Common Stock, which consisted of (i) 525,643 shares of Common Stock held by Intracoastal, (ii) 1,666,667 shares of Common Stock issuable upon exercise of Series 1 Warrant and (iii) 1,666,667 shares of Common Stock issuable upon exercise of Series 2 Warrant. Mr. Mitchell P. Kopin is the manager of Intracoastal and the Schedule 13G is filed on behalf of Mr. Daniel Asher, Mr. Kopin and Intracoastal. The warrants are also subject to a 9.99% ownership blocker, pursuant to which shares of our common stock may not be issued to the extent such issuance would cause Intracoastal to beneficially own more than 9.99% of our outstanding common stock. The principal business office of Mr. Kopin and Intracoastal is 245 Palm Trail, Delray Beach, Florida 33483. The principal business office of Mr. Asher is 111 W. Jackson Boulevard, Suite 2000, Chicago, Illinois 60604.
- (6) Based upon information provided by the Koski Family Limited Partnership, or KFLP, in the amendment to its Schedule 13D filing with the SEC on February 14, 2019 and Form 4 filing of September 18 and October 1, 2018, includes (i) 1,286,483 shares held directly by the KFLP, and (ii) 157,254 shares held directly by KFLP partner Christine Koski, (iii) 277,839 shares held directly by KFLP partner Robert Koski, (iv) 2,800 shares held directly by KFLP partner Koski Management, Inc. (solely owned by Beverly Koski), (v) 91,967 shares held directly by KFLP partner, Thomas Koski, and (vi) 53,086 shares held in trusts which Robert Koski serves as sole trustee (See Note 6 below), (vii) 169,000 option shares able to be acquired upon the exercise of currently exercisable stock options granted pursuant to our Director Compensation program to Robert Koski through May 16, 2019, (viii) 300,000 shares able to be acquired by the KFLP upon conversion of Series B Convertible Preferred Stock, and (ix) 241,936 shares able to be acquired by the KFLP upon exercise of warrants. Christine L. Koski, Robert C. Koski, Thomas L. Koski and Beverly Koski (as sole owner of Koski Management, Inc.) share voting and investment powers as general partners of the KFLP. The address for the KFLP is 3525 Turtle Creek Boulevard, Unit 19-B, Dallas, Texas 75219.
- (7) Based upon information provided by Schedule 13D filings with the SEC, dated June 12, 2012, August 3, 2012, October 2, 2013, November 2, 2013, December 26, 2013 and November 13, 2017 and Form 4 dated July 5, 2016 the number of shares includes (i) 1,448,109 shares owned directly by Intrexon Corporation ("Intrexon") that is controlled by Mr. Randal J. Kirk, and (ii) 100,056 shares owned directly by NRM VII Holdings, I, LLC, a Virginia Limited Liability Company that is also controlled by Mr. Kirk. Mr. Kirk is the Chairman and Chief Executive Officer of Intrexon and over which Mr. Kirk, directly and through certain affiliates, has voting and dispositive power of a majority of the outstanding capital stock. Mr. Kirk may therefore be deemed to have voting and dispositive power over the 100,056 shares of common stock owned by NRM Holdings and the 1,448,109 shares of common stock owned by Intrexon. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein. Mr. Kirk's principal business office is The Governor Tyler, 1881 Grove Avenue, Radford, Virginia 24141. Intrexon's address as reflected in Schedule 13D is 20358 Seneca Meadows Parkway, Germantown, Maryland 20876. Excluded from the shareholdings reflected in the table are 113,941 shares of Series C, Non-Voting, Non-Convertible, Preferred Stock owned by Intrexon with a stated value of \$33,847 per share. These shares have an accruing dividend of 12% per year payable in additional shares of Series C Preferred Stock. On January 25, 2018 we paid a dividend on our Series C Preferred Stock to Intrexon of 1.733 shares for the portion of the 2017 the Series C Preferred that was outstanding. In January of 2019, we paid a dividend on our Series C Preferred Stock to Intrexon of 12.208 shares of the Company's Series C Preferred Stock. The accruing dividend on the Series C Preferred Stock automatically increases to 20% per year after May 10, 2019. The Series C Preferred Stock ranks senior to Common Stock, Series A Preferred Stock, Series B Preferred Stock and to all other equity securities issued by the Corporation from time to time as to rights upon liquidation, dissolution or winding up of the Company, whether voluntarily or involuntarily.

- (8) Includes 200,667 shares able to be acquired pursuant to currently exercisable stock options, 66,666 shares able to be acquired upon the exercise of warrants and excludes 271,333 shares subject to options that vest thereafter.
- (9) In addition to the shares reflected as directly owned by the KFLP, described in Note 3, the share amounts also includes: (i) 277,839 shares owned directly by Mr. Koski, and (ii) 53,086 shares owned directly by trusts for which Mr. Koski serves as sole trustee as follows: the Robert Clayton Koski Trust for the benefit of Anthony James Hunter (10,760 shares); The Robert Clayton Koski Trust for the benefit of Hunter Buchanan Koski (10,760 shares); The Robert Clayton Koski Trust for the benefit of Clayton Ward Bennett (10,000 shares); and The Robert Clayton Koski Trust for the benefit of Robert Edward Koski (10,760 shares) and the Robert Clayton Koski Trust for the benefit of Elyse Margaux Koski (10,806 shares).
- (10) Includes 169,500 shares able to be acquired pursuant to currently exercisable stock options through May 16, 2019.
- (11) Includes (i) 169,500 shares able to be acquired pursuant to currently exercisable stock options through May 16, 2019 and (ii) 20,000 shares able to be acquired upon the exercise of warrants.
- (12) Includes (i) 169,500 shares able to be acquired pursuant to currently exercisable stock options through May 16, 2019 and (ii) 200,000 shares able to be acquired upon the exercise of warrants.
- (13) Includes 144,000 shares able to be acquired pursuant to currently exercisable stock options through May 16, 2019 and excludes 172,500 shares subject to options that vest thereafter.
- (14) Excludes 157,254 shares owned directly by Christine Koski, 2,800 shares owned directly by Koski Management, Inc. (solely owned by Beverly Koski), and 91,967 shares owned directly by Thomas Koski, which are not Directors or employees of the Company, but are general partners of the KFLP. If such shares were included the beneficial ownership percentage of the group would be 8.9%.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Audit Committee of the Board of Directors (or, to the extent applicable, our disinterested Directors) is responsible for reviewing all transactions between the Company and any officer or Director of the Company or any entity in which an officer or Director has a material interest. Any such transactions must be on terms no less favorable than those that could be obtained on an arms-length basis from independent third parties.

Financing Transactions

The Lantibiotic Exclusive Channel Collaboration Agreement with Intrexon Corporation (“Intrexon”)

On June 5, 2012, we entered into the Lantibiotic ECC with Intrexon that governs a “channel collaboration” arrangement in which we will use Intrexon’s advanced transgene and cell engineering platforms for the development and production of lantibiotics, a class of peptide antibiotics that are naturally produced in Gram-positive bacteria and contain the characteristic polycyclic thioether amino acids lanthionine and methylanthionine (collectively, the “Lantibiotics Program”). The Lantibiotic ECC establishes committees comprised of our representatives and Intrexon representatives that will govern activities related to the Lantibiotics Program in the areas of project establishment, chemistry, manufacturing and controls matters, clinical and regulatory matters, commercialization efforts and intellectual property matters. Currently, the Joint Steering Committee has established projects for the Lantibiotics Program and established the priorities, as well as approved the budgets for such projects.

The Lantibiotic ECC grants us an exclusive worldwide license to use patents and other intellectual property of Intrexon in connection with the research, development, use, importing, exporting, manufacture, sale, and offer for sale of drug products involving the direct administration to humans or companion animals of a lantibiotic for the prevention or treatment of infectious disease (“Oragenics Products”). Such license is exclusive with respect to any clinical development, selling, offering for sale or other commercialization of Oragenics Products, and otherwise is non-exclusive. Subject to limited exceptions, we may not sublicense the rights described without Intrexon’s written consent.

Under the Lantibiotic ECC, and subject to certain exceptions, we are responsible for, among other things, funding the further anticipated development of lantibiotics toward the goal of commercialization, conducting nonclinical and clinical development of candidate lantibiotics, as well as for other aspects of manufacturing and the commercialization of the product(s). Among other things, Intrexon is responsible for technology discovery efforts, cell-engineering development, certain aspects of the manufacturing process, and costs of filing, prosecution and maintenance of Intrexon’s patents. Under the Lantibiotic ECC Intrexon has the option to perform any manufacturing activities in connection with the Lantibiotic Program that relate to the use of Intrexon material, the manufacture of bulk drug products, the manufacturing of bulk quantities, other components of Oragenics Products, or any earlier steps in the manufacturing process for Oragenics Products. To the extent Intrexon so elects, a separate manufacturing and supply agreement may be entered into between Intrexon and the Company.

In November of 2017 we amended the Lantibiotic ECC to: (i) consolidate the development milestone payments into one payment of \$25,000,000, being due six months after receiving FDA approval of a New Drug Application, (ii) reduce the sublicense revenue percentage we would have had to pay from 50% to 25% of sublicensing revenue, (iii) reduce the royalty rate from 25% of Product Profit to 10% of Net Sales, (iv) revise the form of milestone payments from being share based or cash at our election to only cash, and (v) commit that Diligent Efforts (as defined in the Lantibiotic ECC) in pursuing the Lantibiotic Program would be deemed satisfied in 2018 provided that at least \$1,200,000 was expended for the advancement of the Lantibiotic Program.

Pursuant to the terms of the amendment, we will pay Intrexon on a quarterly basis 10% of Net Sales derived in that quarter from the sale of products developed from the Lantibiotic ECC, calculated on an Oragenics Product-by-Oragenics Product basis and we will pay Intrexon on a quarterly basis 25% of revenue obtained in that quarter from a sublicensor in the event of a sublicensing arrangement.

We have agreed to indemnify and hold Intrexon harmless from any damages caused as a result of (i) our negligence or willful misconduct, (ii) the use, handling, storage, or transport of Intrexon Materials (as defined in the Lantibiotic ECC), (iii) our breach of a material representation, warranty or covenant in the Lantibiotic ECC, or (iv) the design, development, manufacture, regulatory approval, handling, storage, transport, distribution, sale or other disposition of any Oragenics Product.

Intrexon may terminate the Lantibiotic ECC if we fail to use diligent efforts to develop and commercialize Oragenics Products or if we elect not to pursue the development of a Lantibiotics Program identified by Intrexon that is a "Superior Therapy" as defined in the Lantibiotic ECC. We may voluntarily terminate the Lantibiotic ECC at any time upon 90 days written notice to Intrexon.

Upon termination of the Lantibiotic ECC, we may continue to develop and commercialize any Oragenics Product that has been, at the time of termination:

- commercialized by us;
- approved by regulatory authorities;
- a subject of an application for regulatory approval that is pending before the applicable regulatory authority; or
- the subject of at least an ongoing Phase 1, Phase 2 or Phase 3 clinical trial in the Field (in the case of a termination by Intrexon due to an uncured material breach by the Company or a voluntary termination by us).

Our obligation to pay 10% of Net Sales, 25% of sublicensing revenue and the milestone payments described below with respect to these "retained" products as well as to use diligent efforts to develop and commercialize these "retained" Oragenics Products will survive termination of the Lantibiotic ECC.

In addition, in partial consideration for each party's execution and delivery of the Lantibiotic ECC, we entered into a Stock Issuance Agreement with Intrexon. Pursuant to the Stock Issuance Agreement, we issued to Intrexon 439,243 shares of our common stock as an initial technology access fee, in consideration for the execution and delivery of the Lantibiotic ECC and granted Intrexon certain equity participation rights and registration rights.

The registration rights granted to Intrexon in the Stock Issuance Agreement by us consisted of "piggyback registration" rights which permit Intrexon to participate in any firm commitment underwritten offering of securities by us, subject to underwriter cutbacks and lockups. In addition, we are precluded from granting registration rights in connection with a private placement unless (i) all shares held by Intrexon are, at the time of such private placement, included on a registration statement, or (ii) we agree, in connection with such private placement, to grant Intrexon the right to include on the registration statement a number of Intrexon's Company shares equal to one half of the number of shares to be registered on behalf of the other holders or prospective holders.

Pursuant to the Stock Issuance Agreement, Intrexon is also entitled, at its election, to participate in future securities offerings by us that constitute "qualified financings" and purchase securities equal to 30% of the number of shares of common stock or other securities sold in such offering (exclusive of Intrexon's purchase). For this purpose, a "qualified financing" means a sale of common stock or equity securities convertible into common stock in a public or private offering, raising gross proceeds of at least \$1,000,000, where the sale of shares is either registered under the Securities Act of 1933, as amended, at the time of issuance or we agree to register the resale of such shares.

In November of 2017, the Stock Issuance Agreement and the Lantibiotic ECC were amended. Under the terms of the amendment, the Company has agreed to make certain payments, in cash, to Intrexon upon our achievement of designated milestones. The milestone events and amounts payable are as follows:

- (i) a one-time payment of twenty-five million United States dollars (\$25,000,000) within six (6) months of the achievement of the Regulatory Approval Milestone Event meaning receiving approval from the FDA of a New Product Application for an Oragenics Product (or equivalent regulatory action in a foreign jurisdiction);
- (ii) a one-time payment of five million United States dollars (\$5,000,000) within six (6) months of the achievement of the New Indication Milestone Event meaning receiving approval from the FDA of a Supplemental FDA Application (or an equivalent filing with another equivalent regulatory agency) which Supplemental FDA Application sought approval of an indication for use of the Oragenics Product other than the current regulatory-approved indication; and
- (iii) a one-time payment of five million United States dollars (\$5,000,000) within six (6) months of the achievement of the New Product Milestone Event meaning receiving approval from the FDA of a New Product Application that is deemed to be a different drug product than the first Oragenics Product that was clinically pursued under the Lantibiotics Program.

None of the Lantibiotic ECC milestones had been achieved as of December 31, 2018.

On July 21, 2016, the Lantibiotics ECC was amended to revise the definition of Field in view of a provisional patent application filing between Intrexon and Oragenics and to further clarify Oragenics' rights under the Lantibiotic ECC to genetically modified *Streptococcus mutans* that express Lantibiotic(s).

During the year ended December 31, 2018 we paid cash of \$-0-, and during the year ended December 31, 2017, we paid cash of \$594 and issued Series C Preferred Stock with a value of \$1,188, to Intrexon relating to work performed under the Lantibiotics ECC.

June 2015-The Oral Mucositis Exclusive Channel Collaboration Agreement with Intrexon and Intrexon Actobiotics NV

On June 9, 2015, we entered into an Oral Mucositis ECC with Intrexon and Actobiotics, a wholly-owned subsidiary of Intrexon, through which we intend to research, develop and commercialize products, including the continued development and commercialization of AG013, for use in the treatment of oral mucositis in humans through the administration of an effector via genetically modified bacteria, but, in any case, excluding the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (collectively, the "Program"). Contemporaneously with the Oral Mucositis ECC, we and Intrexon also entered into a Stock Issuance Agreement (the "SIA") which authorized the issuance of the Technology Access Fee and the future stock issuance of our Common Stock to Intrexon upon the achievement of designated milestones. We issued a Convertible Note in the amount of \$5,000,000 as payment of the technology access fee associated with the Oral Mucositis ECC which was payable, at our option, in cash or shares of our common stock. The convertible note, including accrued interest, was repaid in December 2015 through the issuance of 338,101 shares of our common stock.

The Oral Mucositis ECC governs the "channel collaboration" arrangement in which we will use Intrexon's proprietary technology relating to the identification, design and production of genetically modified bacteria for the purpose of developing the Program. The Oral Mucositis ECC provides for the establishment of committees comprised from us and Intrexon representatives that will govern activities in the areas of project establishment, chemistry, manufacturing and controls, clinical and regulatory matters, commercialization efforts, and intellectual property.

The Oral Mucositis ECC grants us an exclusive worldwide license to utilize Intrexon's and Actobiotics' intellectual property to develop and commercialize products, including the continued development and commercialization of AG013, for use in the treatment of oral mucositis in humans through the administration of an effector via genetically modified bacteria, but, in any case, excluding the delivery of anti-cancer effectors for the purpose of treatment or prophylaxis of cancer (the "Field"). It also grants us an exclusive license in the Field under all Information Controlled by Actobiotics (or otherwise by Intrexon) and existing as of the Effective Date relating to the regulatory approval of AG013, including regulatory filings, data, clinical trial reports, and rights thereunder.

Under the Oral Mucositis ECC, and subject to certain exceptions, we are responsible for, among other things, funding the further anticipated development of products toward the goal of commercialization, conducting preclinical and clinical development of candidate products, as well as for other aspects of manufacturing and the commercialization of the product(s). Among other things, Intrexon is responsible for technology discovery efforts, cell-engineering development, and certain aspects of the manufacturing process.

In November of 2017 we amended the Oral Mucositis ECC to: (i) consolidate the development milestone payments into one payment of \$27,500,000 being due within six months after receiving FDA approval of a New Product Application; (ii) reduce the sublicense revenue percentage we would have had to pay from 50% to 25% of sublicense revenue; and (iii) revise the field in which we have exclusive rights to our Oral Mucositis product candidate for the treatment of Oral Mucositis to clarify that we have an exclusive for the treatment of Oral Mucositis in humans regardless of etiology.

Pursuant to the terms of the Oral Mucositis ECC, as amended, we are obligated to pay Intrexon on a quarterly basis 12% of the net sales derived from the sale of products developed from the exclusive channel collaboration. We are also obligated to pay Intrexon on a quarterly basis 25% of revenue obtained in that quarter from a sublicense in the event of a sublicense arrangement.

We have agreed to indemnify and hold Intrexon harmless from any damages caused as a result of (i) our negligence or willful misconduct, (ii) the use, handling, storage, or transport of Intrexon Materials (as defined in the Oral Mucositis ECC) or materials that are Actobiotics IP (as defined in the Oral Mucositis ECC), (iii) our breach of a material representation, warranty or covenant in the Oral Mucositis ECC, or (iv) the design, development, manufacture, regulatory approval, handling, storage, transport, distribution, sale or other disposition of any Oragenics Product.

We may voluntarily terminate the Oral Mucositis ECC upon 90 days written notice to Intrexon. Intrexon may also terminate the Oral Mucositis ECC if we breach and fail to cure the breach within 60 days or we do not pursue development of a Superior Therapy identified by Intrexon that is a “Superior Therapy” as defined in the Oral Mucositis ECC.

Upon termination of the ECC, we may continue to develop and commercialize any Oragenics Product that, at the time of termination that satisfies at least one of the following criteria:

- (i) the particular Oragenics Product is being sold by the Company triggering profit sharing payments under the Oral Mucositis ECC to Intrexon;
- (ii) the particular Oragenics Product has received regulatory approval;
- (iii) the particular Oragenics Product is a subject of an application for regulatory approval in the Field covered by the ECC that is pending before the applicable regulatory authority;
- (iv) the particular Oragenics Product is AG013, and such Oragenics Product has been the subject of at least one completed Phase 2 clinical trial (as such is defined by relevant FDA guidelines) during the Term; or
- (v) the particular Oragenics Product other than AG013 and such Oragenics Product is the subject of at least an ongoing Phase 1, Phase 2 or Phase 3 clinical trial in the Field.

Our obligation to pay 12% of net sales, 25% of sublicensing revenue and the milestone payments described below with respect to these “retained” products as well as to use diligent efforts to develop and commercialize these “retained” Oragenics Products will survive termination of the Oral Mucositis ECC.

In November of 2017, the Stock Issuance Agreement and the Oral Mucositis ECC were amended. Under the terms of the amendment, the Company has agreed to make certain payments to Intrexon upon our achievement of designated milestones in the form of shares of our Common Stock (based upon the fair market value of the shares otherwise required to be issued) unless the issuance of such shares would reasonably likely cause Intrexon to consolidate our financial statements with Intrexon’s financial statements, or at our option make a cash payment to Intrexon. The milestone events and amounts payable are as follows:

- (i) a one-time payment of twenty-seven million five hundred thousand United States dollars (\$27,500,000) within six (6) months of the achievement of the Regulatory Approval Milestone Event meaning receiving approval from the FDA of a New Product Application for an Oragenics Product (or equivalent regulatory action in a foreign jurisdiction);
- (ii) a one-time payment of five million United States dollars (\$5,000,000) within six (6) months of the achievement of the New Indication Milestone Event meaning receiving approval from the FDA of a Supplemental FDA Application (or an equivalent filing with another equivalent regulatory agency) which Supplemental FDA Application sought approval of an indication for use of the Oragenics Product other than the current regulatory-approved indication; and
- (iii) a one-time payment of five million United States dollars (\$5,000,000) within six (6) months of the achievement of the New Product Milestone Event meaning receiving approval from the FDA of a New Product Application that is deemed to be a different drug product that the first Oragenics Product that was clinically pursued under the Lantibiotics Program.

None of the Oral Mucositis ECC milestones had been achieved as of December 31, 2018.

During the year ended December 31, 2018 we paid cash of \$ 460,056, and during the year ended December 31, 2017, we paid cash of \$524,026 and issued Series C Preferred Stock with a value of \$763,189, to Intrexon under the Oral Mucositis ECC to develop and commercialize AG013.

Effective January 1, 2018, Intrexon assigned its interest in the Oral Mucositis ECC and Stock Issuance Agreement (excluding Intrexon's standstill obligation) to its wholly owned subsidiary, ActoBio Therapeutics, Inc.

The June 30, 2016 Private Placement

On June 30, 2016, the Company closed on a private placement of 904,568 shares of its common stock to three accredited investors. The investors in the private placement consisted of Company shareholders, the Koski Family Limited Partnership ("KFLP") (581,508 shares) and Intrexon Corporation ("Intrexon") (226,142 shares), as well as the Company's Chairman, Dr. Frederick Telling (96,918 shares). Approximately \$4.667 million was raised of which \$2,000,000 was payable by the KFLP under a note payable on or before September 30, 2016. On September 15, 2016, the note payable with the KFLP was amended. Under the terms of the amendment, the KFLP paid \$1,000,000 on September 30, 2016 which was first applied to accrued interest and then to the outstanding principal balance. In addition, the amendment extended the maturity date on the remaining principal balance of the note payable to December 31, 2016 and increased the interest rate on the note payable from 3% per annum to 6% per annum. On December 29, 2016, the KFLP made a payment of \$1,000,000 which was first applied to accrued interest and then to the outstanding principal balance. The note was paid in full in March of 2017. The private placement was approved by the Company's audit committee and disinterested Directors.

Sale of Consumer Probiotics Business

On June 27, 2016, the Company completed the sale of its consumer probiotics business to ProBiora Health, LLC, ("ProBiora Health") an entity owned by Ms. Christine L. Koski, a Director at the time of the transaction. The purchase price was \$1,700,000 in cash of which \$1,250,000 was paid at closing and \$450,000 was payable on or before July 31, 2016. The note accrued interest at the rate of 1% per annum and was paid in full on July 29, 2016. In connection with the sale, ProBiora Health assumed certain liabilities. ProBiora Health is obligated to pay the Company contingent consideration annually over a 10-year period based on a percentage of sales of products using the Purchased Assets, with a maximum obligation to the Company of \$2,000,000. The Company has received no contingent consideration from ProBiora Health in 2018 and 2017.

The transaction was approved by a special committee of the Company's Board of Directors consisting solely of disinterested Directors and Griffin Securities rendered a fairness opinion in connection with the transaction. Ms. Koski, a Director since 2009, and a significant shareholder of the Company through the Koski Family Limited Partnership, resigned as a Director of the Company upon completion of the sale. In addition, the Company entered into a Transition Services Agreement (the "Transition Agreement") with ProBiora Health. Under the terms of the Transition Agreement, the Company will provide accounting, inventory management, shipping, logistics, customer, vendor, supplier, general business support, IT, pharmacovigilance, quality assurance, regulatory, and clinical services to ProBiora Health. In exchange for the services, ProBiora Health paid the Company three percent (3%) of its net sales of all ProBiora3 products sold during the term of the Transition Agreement. The term of the Transition Agreement was for a ninety-day (90) period. The Company also sublet space to ProBiora Health at the rate of \$1,623 per month through February 2017. The Company also provided fulfillment services to ProBiora Health during the term that the sublease is in effect. The Company received compensation for those services in an amount equal to the direct costs in providing such services. During the twelve months ended December 31, 2018 and 2017, we received \$-0- and \$10,388, respectively, from ProBiora Health pursuant to such arrangements.

Intrexon Debt Conversion into Series C Non-Convertible Stock and ECC Amendments

In November of 2017, the Company entered into a Debt Conversion Agreement (the "Intrexon Debt Conversion Agreement") with Intrexon pursuant to which Intrexon exchanged a \$2.4 million unsecured non-convertible promissory note previously issued by the Company to Intrexon (the "Intrexon Note"), the accrued interest on the Intrexon Note and trade payables owed by the Company (collectively the "Debt") in the aggregate amount of approximately \$3.4 million for equity in the form of 100 shares of Series C, Non-Voting, Non-Convertible Preferred Stock (the "Series C Non-Convertible Preferred Stock") issued by the Company to Intrexon. The Series C, Non-Voting, Non-Convertible, Preferred Stock have a stated value of \$33,847 per share. These shares have an accruing dividend of 12% per year. On January 25, 2018 we paid a dividend on our Series C Preferred Stock to Intrexon of 1.733 shares for the portion of the 2017 the Series C Preferred was outstanding. In January of 2019, we paid a dividend on our Series C Preferred Stock to Intrexon of 12.208 shares of the Company's Series C Preferred Stock. The accruing dividend increases to 20% per year after May 10, 2019. The Intrexon Debt Conversion Agreement includes customary representations, warranties and covenants.

Simultaneously with the Intrexon Debt Conversion Agreement, the Company and Intrexon amended the Oral Mucositis ECC and the Oral Mucositis Stock Issuance Agreement, and the Lantibiotic ECC and Lantibiotic ECC Stock Issuance Agreement as described above.

The July 17, 2018 Underwritten Public Offering

On July 17, 2018, we closed an underwritten public offering of units for gross proceeds of approximately \$13.8 million, which includes the full exercise of the underwriter's over-allotment option to purchase additional shares and warrants, prior to deducting underwriting discounts and commissions and offering expenses payable by us. The Company's non-employee Directors, Frederick Telling and Alan Dunton participated in the Public Offering through the purchase of 100,000 shares and 20,000 shares, respectively, of the Company's common stock and warrants to purchase 100,000 shares and 20,000 shares, respectively, of the Company's common stock.

The offering was comprised of Class A Units, priced at a public offering price of \$1.00 per unit, with each unit consisting of one share of common stock and a seven-year warrant to purchase one share of common stock with an exercise price of \$1.00 per share (each, a "Warrant" and collectively, the "Warrants"), and Class B Units, priced at a public offering price of \$1.00 per unit, with each unit comprised of one share of series D preferred stock (the "Series D Preferred Stock"), which is convertible into one share of common stock, and a Warrant. The conversion price of the Series D Preferred Stock issued in the transaction as well as the exercise price of the Warrants are fixed and do not contain any variable pricing features or any price based anti-dilutive features. The Series D Preferred Stock issued in this transaction included a beneficial ownership blocker but has no dividend rights (except to the extent that dividends are also paid on the common stock), liquidation preference or other preferences over common stock, and, with certain exceptions, has no voting rights. The securities comprising the units were immediately separable and have been issued separately.

At the closing of our underwritten public offering, a total of 4,436,000 shares of common stock, 9,364,000 shares of Series D Preferred Stock convertible into 9,364,000 shares of common stock, and warrants to acquire 13,800,000 shares of common stock were issued inclusive of the underwriter's exercise of their over-allotment option to purchase 1,800,000 shares of common stock and warrants to acquire 1,800,000 shares of common stock at \$1.00 per share.

Since the closing of our underwritten public offering all of the shares of Series D Preferred Stock that were issued have been converted into shares of our common stock in accordance with the terms for conversion and 9,505,500 warrants were exercised for cash generating approximately \$9.5 million in proceeds to us.

The March 25, 2019 Underwritten Public Offering

On March 25, 2019 we closed on an underwritten public offering of 16,666,668 shares of our common stock, par value \$0.001 per share (the "Common Stock"), together with Series 1 Warrants to purchase up to an aggregate of 8,333,334 shares of our common stock (the "Series 1 Warrants") and Series 2 Warrants to purchase up to an aggregate of 8,333,334 shares of our common stock (the "Series 2 Warrants"), at a price to the public of \$0.75 per share and related warrants (the "Public Offering"). We also granted the Underwriter a 30-day option to purchase up to an additional 2,500,000 additional shares of common stock (the "Option Shares") and/or Series 1 Warrants to purchase up to 1,250,000 shares of common stock and Series 2 Warrants to purchase up to 1,250,000 shares of common stock (the "Option Warrants").

Each Series 1 Warrant has an exercise price of \$0.75 per share of common stock and will expire on the earlier of (1) the eighteen-month anniversary of the date of issuance and (2) twenty-one trading days following the Company's release of top-line data related to its Phase 2 double blind, placebo controlled clinical trial of AG013. Each Series 2 Warrant has an exercise price of \$0.90 per share of common stock and will expire five years following the date of issuance.

Dr. Frederick Telling, Dr. Alan Joslyn, participated in the Public Offering through the purchase of 100,000 shares and 66,667 shares, respectively, of the Company's common stock and Series 1 warrants to purchase 50,000 shares and 33,333 shares, and Series 2 warrants to purchase 50,000 shares and 33,333 shares respectively, of the Company's common stock. Dr. Telling and Dr. Joslyn's participation was approved by our Audit Committee.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's officers and Directors and any persons who beneficially own more than ten percent of the Company's Common Stock to file reports of ownership and changes in ownership of such securities with the Securities and Exchange Commission. Officers, Directors and beneficial owners of more than ten percent of the Common Stock are required by applicable regulations to furnish the Company with copies of all Section 16(a) forms they file. Based solely on its review of copies of forms furnished to the Company and written representations from the executive officers, Directors and holders of ten percent or more of the Company's Common Stock, the Company believes, all person's subject to the reporting requirements with regard to the Common Stock complied with the applicable filing requirements during 2018.

OTHER MATTERS

Interim Corporate Mailings

In accordance with National Instrument 54-102 of the Canadian Securities Administrators, registered and beneficial shareholders of the Company may elect annually to receive interim corporate mailings, including interim financial statements of the Company, if they so request. If you wish to receive such mailings, please complete the form in **Appendix C** and mail as instructed on the form.

Availability of Annual Report on Form 10-K

Accompanying this Proxy Statement is a copy of the Company's Annual Report on Form 10-K for 2018. Shareholders who would like additional copies of the Annual Report on Form 10-K should direct their requests in writing to:

Oragenics, Inc.
4902 Eisenhower Blvd., Suite 125
Tampa, Florida 33634
Attention: Michael Sullivan, Secretary.

Miscellaneous

Management does not know of any matters to be brought before the Annual Meeting of Shareholders other than as described in this Proxy Statement. Should any other matters properly come before the Annual Meeting of Shareholders, the persons designated as proxies will vote in accordance with their best judgment on such matters.

BY ORDER OF THE
BOARD OF DIRECTORS

/s/Michael Sullivan

Michael Sullivan,
Secretary

Tampa, Florida
May 16, 2019

APPENDIX A
2012 EQUITY INCENTIVE PLAN, AS AMENDED

AMENDED AND RESTATED
ORAGENICS, INC.
2012 EQUITY INCENTIVE PLAN

SECTION 1
BACKGROUND AND PURPOSE

1.1 Background. The Plan permits the grant of Nonqualified Stock Options, Incentive Stock Options, SARs, Restricted Stock, Restricted Stock Units and Cash Awards.

1.2 Purpose of the Plan. The Plan is intended to attract, motivate, and retain (a) employees of the Company and its Affiliates, (b) consultants who provide significant services to the Company and its Affiliates, and (c) Directors of the Company who are employees of neither the Company nor any Affiliate. The Plan also is designed to encourage stock ownership by Participants, thereby aligning their interests with those of the Company's shareholders.

1.3 Effective Date. This Plan was approved by the Board of Directors on August 6, 2012, but will become effective on the date of the 2012 Annual Meeting of Shareholders, upon approval of the Plan by the Shareholders of the Company.

SECTION 2
DEFINITIONS

The following words and phrases shall have the following meanings unless a different meaning is plainly required by the context:

2.1 "1934 Act" means the Securities Exchange Act of 1934, as amended. Reference to a specific section of the 1934 Act or regulation thereunder shall include such section or regulation, any valid regulation promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

2.2 "Affiliate" means any corporation or any other entity (including, but not limited to, partnerships and joint ventures) controlling, controlled by, or under common control with the Company.

2.3 "Affiliated SAR" means an SAR that is granted in connection with a related Option, and which automatically will be deemed to be exercised at the same time that the related Option is exercised.

2.4 "Award" means, individually or collectively, a grant under the Plan of Nonqualified Stock Options, Incentive Stock Options, SARs, Restricted Stock, Restricted Stock Units or Cash Awards.

2.5 "Award Agreement" means the written agreement setting forth the terms and provisions applicable to each Award granted under the Plan.

2.6 "Board" or "Board of Directors" means the Board of Directors of the Company.

2.7 "Cash Award" means the right to receive cash as described in Section 9.

2.8 "Change in Control or Corporate Transaction" means the occurrence of any of the following events:

(a) Any "person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "beneficial owner" (as defined in Rule 13d 3 of the Exchange Act), directly or indirectly, of securities of the Company representing fifty percent (50%) or more of the total voting power represented by the Company's then outstanding voting securities;

(b) The consummation of the sale or disposition by the Company of all or substantially all of the Company's assets;

(c) A change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the Directors are Incumbent Directors. “Incumbent Directors” means Directors who either (A) are Directors as of the effective date of the Plan, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of Directors to the Company); or

(d) The consummation of a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

2.9 “Code” means the Internal Revenue Code of 1986, as amended. Reference to a specific section of the Code or regulation thereunder shall include such section or regulation, any valid regulation promulgated under such section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding such section or regulation.

2.10 “Committee” means the Board or a committee appointed by the Board (pursuant to Section 3.1) to administer the Plan.

2.11 “Company” means Oragenics, Inc., a Florida corporation, or any successor thereto. With respect to the definitions of the Performance Goals, the “Company” means Oragenics, Inc. and its consolidated subsidiaries, except to the extent the Committee expressly determines otherwise.

2.12 “Consultant” means any consultant, independent contractor, or other person who provides significant services to the Company or its Affiliates, but who is neither an Employee nor a Director.

2.13 “Director” means any individual who is a member of the Board of Directors of the Company.

2.14 “Disability” means a permanent and total disability within the meaning of Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Committee in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Committee from time to time.

2.15 “Employee” means any employee of the Company or of an Affiliate, whether such employee is so employed at the time the Plan is adopted or becomes so employed subsequent to the adoption of the Plan.

2.16 “Exercise Price” means the price at which a Share may be purchased by a Participant pursuant to the exercise of an Option.

2.17 “Fair Market Value” means the last quoted per share selling price for Shares on the NASDAQ or the Over-the-Counter Bulletin Board on the relevant date, or if there were no sales on such date, the closing bid on the relevant date. If there are neither bids nor sales on the relevant date, then the Fair Market Value shall mean the arithmetic mean of the highest and lowest quoted selling prices on the last market trading day before the relevant date, as determined by the Committee. In any instance where the relevant date falls on a weekend day, a date the Over-the-Counter Bulletin Board is closed for trading or any other non-trading day, Fair Market Value shall mean the last quoted per share selling price on the last market trading day before the relevant date. If there are neither bids nor sales on the last market trading day before the relevant date, then the Fair Market Value shall mean the arithmetic mean of the highest and lowest quoted selling prices on the most recent market trading day before the relevant date. Notwithstanding the preceding, for federal, state, and local income tax reporting purposes, Fair Market Value shall be determined by the Committee (or its delegate) in accordance with uniform and nondiscriminatory standards adopted by it from time to time. If Shares are not traded on any established stock exchange or quoted on a national market system and are not quoted by a recognized securities dealer, the Committee (following guidelines established by the Board or Committee) will determine Fair Market Value in good faith.

2.18 “Fiscal Year” means the fiscal year of the Company.

2.19 “Freestanding SAR” means a SAR that is granted independently of any Option.

2.20 “Grant Date” means, with respect to an Award, the date that the Award was granted.

2.21 “Incentive Stock Option” means an Option to purchase Shares which is designated as an Incentive Stock Option and is intended to meet the requirements of Section 422 of the Code.

2.22 “Individual Objectives” means as to a Participant, the objective and measurable goals set by a “management by objectives” process and approved by the Committee (in its discretion).

2.23 “Cause” means (i) the commission of an act of fraud, embezzlement, theft or proven dishonesty, or any other illegal act or practice (whether or not resulting in criminal prosecution or conviction), including theft or destruction of property of the Company or a Subsidiary, or any other act or practice which the Committee shall, in good faith, deem to have resulted in the recipient’s becoming unbondable under the Company or any Subsidiary’s fidelity bond; (ii) the willful engaging in misconduct which is deemed by the Committee, in good faith, to be materially injurious to the Company or any Subsidiary, monetarily or otherwise, including, but not limited to, improperly disclosing trade secrets or other confidential or sensitive business information and data about the Company or any Subsidiaries and competing with the Company or any Subsidiaries, or soliciting employees, consultants or customers of the Company or any Subsidiaries in violation of law or any employment or other agreement to which the recipient is a party; (iii) the continued failure or habitual neglect by a person who is an Employee to perform his or her duties with the Company or any Subsidiary; or (iv) other disregard of rules or policies of the Company or any Subsidiary, or conduct evidencing willful or wanton disregard of the interests of the Company or any Subsidiary. For purposes of this Plan, no act or failure to act by the recipient shall be deemed “willful” unless done or omitted to be done by the recipient not in good faith and without reasonable belief that the recipient’s action or omission was in the best interest of the Company and/or the Subsidiary. Notwithstanding the foregoing, if the recipient has entered into an employment agreement that is binding as of the date of employment termination, and if such employment agreement defines “Cause,” then the definition of “Cause” in such agreement shall apply to the recipient in this Plan. “Misconduct” or “Cause” shall be determined by the Committee based upon information presented by the Company and the Employee and shall be final and binding on all parties hereto.

2.24 “Nonemployee Director” means a Director who is an employee of neither the Company nor of any Affiliate.

2.25 “Nonqualified Stock Option” means an option to purchase Shares which is not intended to be an Incentive Stock Option.

2.26 “Option” means an Incentive Stock Option or a Nonqualified Stock Option.

2.27 “Participant” means an Employee, Consultant, or Nonemployee Director who has an outstanding Award.

2.28 “Performance Goals” means the goal(s) (or combined goal(s)) determined by the Committee (in its discretion) to be applicable to a Participant with respect to an Award. As determined by the Committee, the Performance Goals applicable to an Award may provide for a targeted level or levels of achievement using one or more of the following measures: Annual Revenue, Cash Position, Earnings Per Share, Individual Objectives, Net Income, Operating Cash Flow, Operating Income, Regulatory Approval, Return on Assets, Return on Equity, Return on Sales, Stock Price and Total Shareholder Return. The Performance Goals may differ from Participant to Participant and from Award to Award.

2.29 “Period of Restriction” means the period during which the transfer of Restricted Stock is subject to restrictions and therefore, the Shares subject to the Restricted Stock grant are subject to a substantial risk of forfeiture. With respect to Restricted Stock granted pursuant to Section 7, such restrictions may be based on continued employment or other performance of services for the Company, the passage of time, the achievement of target levels of Performance Goals, or the occurrence of other events as determined by the Committee, in its discretion.

2.30 “Plan” means the Orogenics, Inc. 2012 Equity Incentive Plan, as set forth in this instrument and as hereafter amended from time to time.

2.31 “Prior Plan” means the Oragenics, Inc. 2002 Stock Option and Incentive Plan, as amended from time to time.

2.32 “Regulatory Approval” means the approval, or recommendation to approve, of regulatory agencies in the United States or Europe for such pharmaceutical product candidates as specified by the Committee for purposes of applying Performance Goals to any Award.

2.33 “Restricted Stock” means an Award granted to a Participant pursuant to Section 7.

2.34 “Restricted Stock Units” means an Award granted to a Participant pursuant to Section 8, consisting of a bookkeeping entry representing an amount equivalent to the Fair Market Value of one Share (or a fraction or multiple of such value), payable in cash, property or Shares. Restricted Stock Units represent an unfunded and unsecured obligation of the Company, except as otherwise provided for by the Committee.

2.35 “Rule 16b-3” means Rule 16b-3 promulgated under the 1934 Act, and any future regulation amending, supplementing or superseding such regulation.

2.36 “Section 16 Person” means a person who, with respect to the Shares, is subject to Section 16 of the 1934 Act.

2.37 “Shares” means the shares of common stock of the Company.

2.38 “Stock Appreciation Right” or “SAR” means an Award, granted alone or in connection with a related Option, that pursuant to Section 6 is designated as an SAR.

2.39 “Stock Price” means the stock price or market value of a share of the Company’s common stock and any amount determined by reference to such stock price or market value.

2.40 “Subsidiary” means any corporation in an unbroken chain of corporations beginning with the Company if each of the corporations other than the last corporation in the unbroken chain then owns stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

2.41 “Tandem SAR” means an SAR that is granted in connection with a related Option, the exercise of which shall require forfeiture of the right to purchase an equal number of Shares under the related Option (and when a Share is purchased under the Option, the SAR shall be canceled to the same extent).

2.42 “Termination of Service” means (a) in the case of an Employee, a cessation of the employee-employer relationship between the Employee and the Company or an Affiliate for any reason, including, but not by way of limitation, a termination by resignation, discharge, death, Disability or the disaffiliation of an Affiliate, but excluding any such termination where there is a simultaneous reemployment by the Company or an Affiliate; (b) in the case of a Consultant, a cessation of the service relationship between the Consultant and the Company or an Affiliate for any reason, including, but not by way of limitation, a termination by resignation, discharge, death, Disability, or the disaffiliation of an Affiliate, but excluding any such termination where there is a simultaneous re-engagement of the consultant by the Company or an Affiliate; and (c) in the case of a Nonemployee Director, a cessation of the Director’s service on the Board for any reason, including, but not by way of limitation, a termination by resignation, death, Disability or non-re-election to the Board.

**SECTION 3
ADMINISTRATION**

3.1 The Committee. The Plan shall be administered by the Committee. If the Committee is not the full Board of Directors, then the Committee shall consist of not less than two (2) Directors who shall be appointed from time to time by, and shall serve at the pleasure of, the Board of Directors. Unless the Committee is the full Board or all determinations made by the Committee are made only with the approval or ratification of the full Board, then the Committee shall either (a) be comprised solely of Directors who both are (1) “non-employee Directors” under Rule 16b-3, and (2) “outside Directors” under Section 162(m) of the Code.

3.2 Authority of the Committee. It shall be the duty of the Committee to administer the Plan in accordance with the Plan’s provisions. Except to the extent the Board has reserved to itself the authority to review, approve and ratify actions of the Committee, the Committee shall have all powers and discretion necessary or appropriate to administer the Plan and to control its operation, including, but not limited to, the power to (a) determine which Employees, Consultants and Directors shall be granted Awards, (b) prescribe the terms and conditions of the Awards, (c) interpret the Plan and the Awards, (d) adopt such procedures and subplans as are necessary or appropriate to permit participation in the Plan by Employees and Directors who are foreign nationals or employed outside of the United States, (e) adopt rules for the administration, interpretation and application of the Plan as are consistent therewith, and (f) interpret, amend or revoke any such rules.

3.3 Delegation by the Committee. Except to the extent the Board has reserved to itself the authority to review, approve and ratify actions of the Committee, the Committee, in its sole discretion and on such terms and conditions as it may provide, may delegate (a) all or any part of its authority and powers under the Plan to one or more Directors, and (b) more limited authority and powers under the Plan to one or more officers of the Company; provided, however, that the Committee may not delegate its authority and powers (a) with respect to Section 16 Persons, or (b) in any way which would jeopardize the Plan’s qualification under Section 162(m) of the Code or Rule 16b-3.

3.4 Decisions Binding. All determinations and decisions made by the Committee, the Board, and any delegate of the Committee pursuant to the provisions of the Plan shall be final, conclusive, and binding on all persons, and shall be given the maximum deference permitted by law.

3.5 No Liability. Neither any member of the Board nor any member of the Committee shall be liable to any person for any act or determination made in good faith with respect to the Plan or any Award granted hereunder.

3.6 Company Assistance. The Company shall supply full and timely information to the Committee on all matters relating to eligible persons, their employment, death, retirement, disability, or other termination of employment or service, and such other pertinent facts as the Committee may require. The Company shall furnish the Committee with such clerical and other assistance as is necessary in the performance of its duties.

**SECTION 4
SHARES SUBJECT TO THE PLAN**

4.1 Number of Shares.

4.1.1 Plan Limit. Subject to adjustment as provided in Section 4.3, the total number of Shares available for issuance under the Plan shall not exceed 4,000,000 Shares. Shares issued under the Plan may be either authorized but unissued Shares or treasury Shares. In addition,

4.1.2 Individual Award Limits

(a) the maximum number of Shares subject to those Options and SARs that are granted during any calendar year to any individual under this Plan shall be 1,000,000 Shares; and

(b) the maximum number of Shares which may be subject to Awards (other than Options and SARs) intended to qualify as “performance-based compensation” under Section 162(m) of the Code (including Awards payable in Shares and Awards payable in cash where the amount of cash payable upon or following vesting of the Award is determined with reference to the Fair Market Value of a Share at such time) that are granted to any one individual in any one calendar year shall be 1,000,000 Shares.

4.2 Awards Settled in Cash, Reissue of Awards and Shares If an Award is settled in cash, or is cancelled, terminates, expires, or lapses for any reason (with the exception of the termination of a Tandem SAR upon exercise of the related Option, or the termination of a related Option upon exercise of the corresponding Tandem SAR), any Shares subject to such Award again shall be available for subsequent Awards under the Plan. Shares that are exchanged by a Participant or withheld by the Company as full or partial payment in connection with any Award under the Plan, as well as any Shares exchanged by a Participant or withheld by the Company or one of its Affiliates to satisfy the tax withholding obligations related to any Award, shall not be available for subsequent Awards under the Plan. To the extent that Shares are delivered pursuant to the exercise of a SAR or Option granted under the Plan, the number of underlying Shares as to which the exercise related shall be counted against the applicable share limits under Section 4.1, as opposed to only counting the Shares issued. (For purposes of clarity, if a SAR relates to 100,000 Shares and is exercised at a time when the payment due to the Participant is 15,000 Shares, 100,000 Shares shall be charged against the applicable Share limits under Section 4.1 with respect to such exercise.)

4.3 Adjustments in Awards and Authorized Shares In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs such that an adjustment is determined by the Committee (in its sole discretion) to be appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan, then the Committee shall in such manner as it may deem equitable, (a) adjust the number and class of Shares (or other securities) that may be delivered under the Plan under Section 4.1, and the number, class, and price of Shares (or other securities) subject to outstanding Awards or (b) make provision for a cash payment or for the assumption, substitution or exchange of any or all outstanding Awards or the cash, securities or property deliverable to the holder of any or all outstanding Awards, based upon the distribution or consideration payable to holders of the Shares upon or in respect of such event. The specific adjustments shall be determined by the Committee. Notwithstanding the preceding, the number of Shares subject to any Award always shall be a whole number.

SECTION 5 STOCK OPTIONS

5.1 Grant of Options. Subject to the terms and provisions of the Plan, Options may be granted to Employees, Consultants and Directors at any time and from time to time as determined by the Committee in its sole discretion. The Committee may grant Incentive Stock Options, Nonqualified Stock Options, or a combination thereof, and the Committee, in its sole discretion, shall determine the number of Shares subject to each Option.

5.2 Award Agreement. Each Option shall be evidenced by an Award Agreement that shall specify the Exercise Price, the expiration date of the Option, the number of Shares to which the Option pertains, any conditions to exercise the Option, and such other terms and conditions as the Committee, in its discretion, shall determine. The Award Agreement shall also specify whether the Option is intended to be an Incentive Stock Option or a Nonqualified Stock Option.

5.3 Exercise Price. Subject to the provisions of this Section 5.3, the Exercise Price for each Option shall be determined by the Committee in its sole discretion.

5.3.1 Nonqualified Stock Options. In the case of a Nonqualified Stock Option, the Exercise Price shall be not less than one hundred percent (100%) of the Fair Market Value of a Share on the Grant Date.

5.3.2 Incentive Stock Options. In the case of an Incentive Stock Option, the Exercise Price shall be not less than one hundred percent (100%) of the Fair Market Value of a Share on the Grant Date; provided, however, that if on the Grant Date, the Employee (together with persons whose stock ownership is attributed to the Employee pursuant to Section 424(d) of the Code) owns stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any of its Subsidiaries, the Exercise Price shall be not less than one hundred and ten percent (110%) of the Fair Market Value of a Share on the Grant Date.

5.3.3 Substitute Options. Notwithstanding the provisions of Sections 5.3.1 and 5.3.2, in the event that the Company or an Affiliate consummates a transaction described in Section 424(a) of the Code (e.g., the acquisition of property or stock from an unrelated corporation), persons who become Employees, Directors or Consultants on account of such transaction may be granted Options in substitution for options granted by their former employer. If such substitute Options are granted, the Committee, in its sole discretion and consistent with Section 424(a) of the Code, may determine that such substitute Options shall have an exercise price less than one hundred percent (100%) of the Fair Market Value of the Shares on the Grant Date.

5.4 Expiration of Options.

5.4.1 Expiration Dates. Each Option shall terminate no later than the first to occur of the following events:

- (a) The date for termination of the Option set forth in the written Award Agreement, or
- (b) If no date for the termination of the Option is set forth in the written Award Agreement (other than reference to Section 5.4.1(c)), (a) the expiration of twelve (12) months from the date of the Participant's Termination of Service if such Termination of Service is a result of death or Disability, or (b) three (3) months from the date of the Participant's Termination of Service for any other reason; or
- (c) The expiration of ten (10) years from the Grant Date.

5.4.2 Committee Discretion. Subject to the limits of Section 5.4.1, the Committee, in its sole discretion, (a) shall provide in each Award Agreement when each Option expires and becomes unexercisable, and (b) may, after an Option is granted, extend the maximum term of the Option (subject to Section 5.8.4 regarding Incentive Stock Options).

5.5 Exercisability of Options. Options granted under the Plan shall be exercisable at such times and be subject to such restrictions and conditions as the Committee shall determine in its sole discretion. The Committee may, in its discretion, condition the vesting and exercisability of any Option granted under the Plan on satisfaction of (i) any minimum period of continued employment or other continued service with the Company by the Participant the Committee deems appropriate ("service vesting"), (ii) satisfaction of any of one or more Performance Goals the Committee deems appropriate ("performance vesting"), or (iii) any combination of servicing vesting and performance vesting requirements the Committee deems appropriate. After an Option is granted, the Committee, in its sole discretion, may accelerate the exercisability of the Option.

5.6 Payment. Options shall be exercised by the Participant's delivery of a written notice of exercise to the Secretary of the Company (or its designee), setting forth the number of Shares with respect to which the Option is to be exercised, accompanied by full payment for the Shares, including satisfaction of any applicable withholding taxes.

Upon the exercise of any Option, the Exercise Price shall be payable to the Company in full in cash or its equivalent. The Committee, in its sole discretion, also may permit exercise (a) by tendering previously acquired Shares having an aggregate Fair Market Value at the time of exercise equal to the total Exercise Price (such previously acquired Shares must have been held for the requisite period necessary to avoid a charge to the Company's earnings for the financial reporting purposes, unless otherwise determined by the Committee), or (b) by any other means which the Committee, in its sole discretion, determines to both provide legal consideration for the Shares, and to be consistent with the purposes of the Plan.

As soon as practicable after receipt of a written notification of exercise and full payment for the Shares purchased, including satisfaction of any applicable withholding taxes, the Company shall deliver to the Participant (or the Participant's designated broker), Share certificates (which may be in book entry form) representing such Shares.

5.7 Restrictions on Share Transferability. The Committee may impose such restrictions on any Shares acquired pursuant to the exercise of an Option as it may deem advisable, including, but not limited to, restrictions related to applicable federal securities laws, the requirements of any national securities exchange or system upon which Shares are then listed or traded, or any blue sky or state securities laws.

5.8 Certain Additional Provisions for Incentive Stock Options

5.8.1 Exercisability. The aggregate Fair Market Value (determined on the Grant Date(s)) of the Shares with respect to which Incentive Stock Options are exercisable for the first time by any Employee during any calendar year (under all plans of the Company and its Subsidiaries) shall not exceed \$100,000. To the extent that the aggregate Fair Market Value exceeds such \$100,000 limit, such options shall be treated as nonqualified stock options. In reducing the number of options treated as Incentive Stock Options to meet the \$100,000 limit, the most recently granted Options shall be reduced first. To the extent a reduction of simultaneously granted options is necessary to meet the \$100,000 limit, the Committee may, in the manner and to the extent permitted by law, designate which Shares are to be treated as shares acquired pursuant to the exercise of an Incentive Stock Option.

5.8.2 Termination of Service. No Incentive Stock Option may be exercised more than three (3) months after the Participant's Termination of Service for any reason other than Disability or death, unless (a) the Participant dies during such three-month period, and/or (b) the Award Agreement or the Committee permits later exercise. No Incentive Stock Option may be exercised more than one (1) year after the Participant's Termination of Service on account of death or Disability, unless the Award Agreement or the Committee permit later exercise. Notwithstanding the foregoing, to the extent that the post-termination exercise period exceeds the limitations under Section 422 of the Code, the Option will cease to be treated as an Incentive Stock Option and shall be treated as a Nonqualified Stock Option at such time that the applicable time limit is exceeded.

5.8.3 Company and Subsidiaries Only. Incentive Stock Options may be granted only to persons who are employees of the Company or a Subsidiary on the Grant Date.

5.8.4 Duration of Authority to Grant Incentive Stock Options. No Incentive Stock Option may be granted more than ten (10) years after the effective date of this Plan, except to the extent the shareholders of the Company have approved grants after that date pursuant to Section 12.2 below.

5.8.5 Expiration. No Incentive Stock Option may be exercised after the expiration of ten (10) years from the Grant Date; provided, however, that if the Option is granted to an Employee who, together with persons whose stock ownership is attributed to the Employee pursuant to Section 424(d) of the Code, owns stock possessing more than 10% of the total combined voting power of all classes of the stock of the Company or any of its Subsidiaries, the Option may not be exercised after the expiration of five (5) years from the Grant Date.

5.8.6 Other Terms. There shall be imposed in any Award Agreement relating to Incentive Stock Options such other terms and conditions as from time to time are required in order that the option be an "incentive stock option" as that term is defined in Section 422 of the Code.

SECTION 6 STOCK APPRECIATION RIGHTS

6.1 Grant of SARs. Subject to the terms and conditions of the Plan, an SAR may be granted to Employees, Directors and Consultants at any time and from time to time as shall be determined by the Committee, in its sole discretion. The Committee may grant Affiliated SARs, Freestanding SARs, Tandem SARs, or any combination thereof.

6.1.1 Number of Shares. The Committee shall have complete discretion to determine the number of SARs granted to any Participant.

6.1.2 Exercise Price and Other Terms. The Committee, subject to the provisions of the Plan, shall have complete discretion to determine the terms and conditions of SARs granted under the Plan. However, the exercise price of a Freestanding SAR shall be not less than one hundred percent (100%) of the Fair Market Value of a Share on the Grant Date. The exercise price of Tandem or Affiliated SARs shall equal the Exercise Price of the related Option.

6.2 Exercise of Tandem SARs. Tandem SARs may be exercised for all or part of the Shares subject to the related Option upon the surrender of the right to exercise the equivalent portion of the related Option. A Tandem SAR may be exercised only with respect to the Shares for which its related Option is then exercisable. With respect to a Tandem SAR granted in connection with an Incentive Stock Option: (a) the Tandem SAR shall expire no later than the expiration of the underlying Incentive Stock Option; (b) the value of the payout with respect to the Tandem SAR shall be for no more than one hundred percent (100%) of the difference between the Exercise Price of the underlying Incentive Stock Option and the Fair Market Value of the Shares subject to the underlying Incentive Stock Option at the time the Tandem SAR is exercised; and (c) the Tandem SAR shall be exercisable only when the Fair Market Value of the Shares subject to the Incentive Stock Option exceeds the Exercise Price of the Incentive Stock Option.

6.3 Exercise of Affiliated SARs. An Affiliated SAR shall be deemed to be exercised upon the exercise of the related Option. The deemed exercise of an Affiliated SAR shall not necessitate a reduction in the number of Shares subject to the related Option.

6.4 Exercise of Freestanding SARs. Freestanding SARs shall be exercisable on such terms and conditions as the Committee, in its sole discretion, shall determine. The Committees may, in its discretion, condition the vesting and exercisability of any Freestanding SARs granted under the Plan on satisfaction of (i) any minimum period of continued employment or other continued service with the Company by the Participant the Committee deems appropriate ("service vesting"), (ii) satisfaction of any of one or more Performance Goals the Committee deems appropriate ("performance vesting"), or (iii) any combination of servicing vesting and performance vesting requirements the Committee deems appropriate.

6.5 SAR Agreement. Each SAR grant shall be evidenced by an Award Agreement that shall specify the exercise price, the term of the SAR, the conditions of exercise, and such other terms and conditions as the Committee, in its sole discretion, shall determine.

6.6 Expiration of SARs. An SAR granted under the Plan shall expire upon the date determined by the Committee, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the rules of Section 5.4 also shall apply to SARs.

6.7 Payment of SAR Amount. Upon exercise of an SAR, a Participant shall be entitled to receive payment from the Company in an amount determined by multiplying:

- (a) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times
- (b) The number of Shares with respect to which the SAR is exercised.

6.8 At the discretion of the Committee, the payment upon SAR exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

SECTION 7 RESTRICTED STOCK

7.1 Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Committee, at any time and from time to time, may grant Restricted Stock to Employees, Directors and Consultants in such amounts as the Committee, in its sole discretion, shall determine. The Committee, in its sole discretion shall determine the number of Shares to be granted to each Participant.

7.2 Restricted Stock Agreement. Each Award of Restricted Stock shall be evidenced by an Award Agreement that shall specify the Period of Restriction, the number of Shares granted, purchase price, if any, and such other terms and conditions as the Committee, in its sole discretion, shall determine. Unless the Committee determines otherwise, Restricted Stock shall be held by the Company as escrow agent until the restrictions on such Restricted Stock have lapsed.

7.3 Transferability. Except as provided in this Section 7, Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

7.4 Other Restrictions. The Committee, in its sole discretion, may impose such other restrictions on Restricted Stock as it may deem advisable or appropriate, in accordance with this Section 7.4.

7.4.1 General Restrictions. The Committee may set restrictions based upon the achievement of specific performance objectives (Company-wide, divisional, or individual), applicable federal or state securities laws, or any other basis determined by the Committee in its discretion.

7.4.2 Section 162(m) Performance Restrictions. For purposes of qualifying grants of Restricted Stock as “performance-based compensation” under Section 162(m) of the Code, the Committee, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals must be established and approved by the Committee during the first 90 days of the performance period (and, in the case of performance periods of less than one year, in no event after 25% or more of the performance period has elapsed) and while performance relating to such target(s) remains substantially uncertain within the meaning of Section 162(m) of the Code. Performance Goals shall be adjusted to mitigate the unbudgeted impact of material, unusual or nonrecurring gains and losses, accounting changes or other extraordinary events not foreseen at the time the targets were set unless the Committee provides otherwise at the time of establishing the targets. In granting Restricted Stock which is intended to qualify under Section 162(m) of the Code, the Committee shall follow such procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Restricted Stock under Section 162(m) of the Code (e.g., in determining the Performance Goals and certifying that the Performance Goals were satisfied). In addition, the Committee will have the discretion to determine the restrictions or other limitations of the individual awards granted under this Section 7.4.2 including the authority to reduce or eliminate Awards, in its sole discretion, if the Committee preserves such authority at the time of grant by language to this effect in its authorizing resolutions or otherwise.

7.4.3 Legend on Certificates. The Committee, in its discretion, may legend the certificates representing Restricted Stock to give appropriate notice of such restrictions.

7.5 Dividends and Other Distributions. During the Period of Restriction, Participants holding Restricted Stock shall be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement. If any such dividends or distributions are paid in Shares, the Shares shall be subject to the same restrictions on transferability and forfeitability as the Restricted Stock with respect to which they were paid. In addition, any dividends as to the unvested portion of a Restricted Stock award that is subject to performance-based vesting requirements (or any dividend equivalents as to the unvested portion of a Restricted Stock Unit award that is subject to performance-based vesting requirements) will be subject to termination and forfeiture to the same extent as the corresponding portion of the Award to which they relate.

7.6 Voting Rights. During the Period of Restriction, Participants holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Committee determines otherwise.

7.7 Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed shall revert to the Company and again shall become available for grant under the Plan.

SECTION 8 RESTRICTED STOCK UNITS

8.1 Grant of Restricted Stock Units. Subject to the terms and provisions of the Plan, the Committee, at any time and from time to time, may grant Restricted Stock Units to Employees, Directors and Consultants in such amounts as the Committee, in its sole discretion, shall determine. The Committee, in its sole discretion shall determine the number of Shares to be granted to each Participant and the terms of such Restricted Stock Units.

8.2 Award Agreement. Each Award of Restricted Stock Units shall be evidenced by an Award Agreement that shall specify the number of Shares granted, the conditions for vesting of the Restricted Stock Units, and such other terms and conditions as the Committee, in its sole discretion, shall determine.

8.3 Transferability. Restricted Stock Units may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

8.4 Vesting. The Committee, in its sole discretion, may impose such restrictions on the vesting of the Participant's Restricted Stock Units as it may deem advisable or appropriate, in accordance with this Section 8.4.

8.4.1 Service Vesting. The Committee may condition the vesting of a Participant's Restricted Stock Units upon the Participant's continued performance of services for the Company through a specified vesting date or dates. If the Participant's Termination of Service occurs before such vesting date, the relevant Restricted Stock Units shall be forfeited, except as may otherwise be provided in the Award Agreement.

8.4.2 Performance Vesting. Alternatively, the Committee may, in its discretion, condition the vesting of all or a portion of the Participant's Restricted Stock Units upon completion of based upon the achievement of specific performance objectives (Company-wide, divisional, or individual), applicable federal or state securities laws, or any other basis determined by the Committee in its discretion. For purposes of qualifying grants of Restricted Stock Units as "performance-based compensation" under Section 162(m) of the Code, the Committee, in its discretion, may condition the vesting of Restricted Stock Units based upon the achievement of Performance Goals. The Performance Goals must be established and approved by the Committee during the first 90 days of the performance period (and, in the case of performance periods of less than one year, in no event after 25% or more of the performance period has elapsed) and while performance relating to such target(s) remains substantially uncertain within the meaning of Section 162(m) of the Code. In granting Restricted Stock Units which are intended to qualify under Section 162(m) of the Code, the Committee shall follow such procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Restricted Stock Units under Section 162(m) of the Code (e.g., in determining the Performance Goals and certifying that the Performance Goals were satisfied). In addition, the Committee will have the discretion to determine the vesting or other limitations of the individual awards granted under this Section 8.4.2 including the authority to reduce or eliminate Awards, in its sole discretion, if the Committee preserves such authority at the time of grant by language to this effect in its authorizing resolutions or otherwise.

8.5 Settlement of Restricted Stock Units. Upon vesting of all or part of a Participant's Restricted Stock Units, the Participant shall be entitled to receive from the Company in settlement of the vested Restricted Stock Units either, at the discretion of the Committee:

- (a) The number of Shares with respect to that portion of the Restricted Stock Units which have become vested; or
- (b) An amount determined by multiplying the Fair Market Value of a Share on the date of vesting; times the number of Shares with respect to which the Restricted Stock Units which have become vested.

In either case, the Company may reduce the net amount or number of Shares actually delivered to the Participant to account for payroll taxes withheld pursuant to Section 12.2 below.

8.6 No Rights of Shareholder Until Restricted Stock Units Vest. Until such time as the Restricted Stock Units vest and shares of Common Stock are issued to the Participant, the Participant shall not have the rights of a shareholder with respect to the covered shares. In particular, Participants holding unvested Restricted Stock Units shall not be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement or exercise voting rights with respect to those shares.

SECTION 9 CASH AWARDS

9.1 Cash Awards. Cash Awards may be granted either alone, in addition to, or in tandem with other Awards granted under the Plan. After the Committee determines that it will offer a Cash Award, it shall advise the Participant, by means of an Award Agreement, of the terms, conditions and restrictions related to the Cash Award. The grant or vesting of a Cash Award may be made contingent on the achievement of Performance Goals in accordance with the terms of Section 7.4.2.

SECTION 10
CHANGE IN CONTROL

10.1 Change in Control. In the event of a Change in Control, and except as the Committee (as constituted immediately prior to such Change in Control) may otherwise determine in its sole discretion, (i) all Awards granted hereunder shall become fully exercisable as of the date of the Change in Control, whether or not then exercisable; and (ii) all restrictions and conditions on any Award then outstanding shall lapse as of the date of the Change in Control.

10.2 Options and SARs. Notwithstanding Section 10.1, the Committee may provide for Options and SARs to be assumed or an equivalent option or right substituted by the successor corporation or a parent or Subsidiary of the successor corporation. In such case:

(a) Options and SARs, to the extent assumed or substituted, shall not become fully exercisable as of the date of the Change in Control.

(b) For the purposes of this Section 10.2, the Option or SAR shall be considered assumed if, following the Change in Control, the option or right confers the right to purchase or receive, for each Share subject to the Option or SAR immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) received in the Change in Control by holders of Shares for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the Change in Control is not solely common stock of the successor corporation or its parent, the Committee or the Board may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of the Option or SAR, for each Share subject to the Option or SAR, to be solely common stock of the successor corporation or its parent equal in fair market value to the per share consideration received by holders of Shares in the Change in Control, as determined on the date of the Change in Control.

(c) With respect to Options and SARs that are assumed or substituted for, if within twelve (12) months following the Change in Control the Participant incurs a Termination of Service due to involuntary termination by the successor corporation or one of its affiliates for a reason other than Misconduct, then the Options and SARs held by such Participant shall become one hundred percent (100%) exercisable.

(d) In the event that the successor corporation refuses to assume or substitute for the Options or SAR, then the Options and SARs held by such Participant shall become one hundred percent (100%) exercisable. If an Option or SAR becomes fully vested and exercisable in lieu of assumption or substitution in the event of a Change in Control, the Company shall notify the Participant in writing or electronically that the Option or SAR shall be fully vested and exercisable (subject to the consummation of the Change in Control) for a period of fifteen (15) days from the date of such notice, and the Option or SAR shall terminate upon the expiration of such period.

(e) In the event the successor corporation or a parent or Subsidiary of the successor corporation does not agree to assume the Options and SARs or to substitute equivalent options or rights with respect to stock of the successor corporation, each vested Option and/or SAR which has not previously been exercised may, in the discretion of the Committee, be cancelled in exchange for the right to receive a cash payment from the Company equal to the excess of the value of the consideration (whether stock, cash or other securities or property) to be received for shares of common stock in the Change of Control (or, if none, the current Fair Market Value per Share) over the exercise price for the Option or SAR, multiplied by the number of shares covered by the Options or SARs, net of applicable payroll taxes the Company is required to withhold from such payment.

10.3 Restricted Stock. Notwithstanding Section 10.1, the Committee may provide for any vesting conditions or Company repurchase or reacquisition right with respect to outstanding Restricted Stock held by the Participant to be assigned to the successor corporation or a parent or Subsidiary of the successor corporation. In such case:

(a) All vesting conditions and Company repurchase or reacquisition rights with respect to outstanding Restricted Stock held by the Participant, to the extent so assigned, shall not lapse as of the date of the Change in Control.

(b) If the vesting conditions and Company repurchase or reacquisition right with respect to Restricted Stock is assigned to the successor corporation and, within twelve (12) months following the Change in Control, the Participant incurs a Termination of Service due to involuntary termination by the successor corporation or one of its affiliates for a reason other than Misconduct, then such Participant's Restricted Stock (or the property for which the Restricted Stock was converted upon the Change in Control) will immediately vest and any Company repurchase or reacquisition right will lapse and the Participant will become one hundred percent (100%) vested in such Restricted Stock (or the property for which the Restricted Stock was converted upon the Change in Control).

(c) In the event that the successor corporation or a parent or Subsidiary of the successor corporation refuses to accept the assignment of any such vesting conditions or Company repurchase or reacquisition right, any such vesting conditions and Company repurchase or reacquisition right will lapse and the Participant will become one hundred percent (100%) vested in such Restricted Stock immediately prior to the Change in Control.

10.4 Restricted Stock Units. Notwithstanding Section 10.1, the Committee may provide for any vesting conditions with respect to outstanding Restricted Stock Units held by the Participant to be assigned to the successor corporation or a parent or Subsidiary of the successor corporation. In such case:

(a) All vesting conditions with respect to outstanding Restricted Stock Units held by the Participant, to the extent so assigned, shall not lapse as of the date of the Change in Control.

(b) If the vesting conditions are assigned to the successor corporation and, within twelve (12) months following the Change in Control, the Participant incurs a Termination of Service due to involuntary termination by the successor corporation or one of its affiliates for a reason other than Misconduct, then such Participant's remaining unvested Restricted Stock Units will immediately vest.

(c) However, in the event that the successor corporation or a parent or Subsidiary of the successor corporation refuses to accept the assignment of any such vesting conditions, any such vesting conditions will lapse and the Participant will become one hundred percent (100%) vested in such Restricted Stock Units immediately prior to the Change in Control.

(d) Alternatively, in the event the successor corporation or a parent or Subsidiary of the successor corporation does not agree to assume the Restricted Stock Units or to substitute equivalent rights with respect to stock of the successor corporation, each vested Restricted Stock Unit which has not been settled at least fifteen (15) days prior to the effective date of the Change in Control may, in the discretion of the Committee, be cancelled in exchange for the right to receive a cash payment from the Company equal to the value of the consideration (whether stock, cash or other securities or property) to be received for shares of common stock in the Change of Control (or, if none, the current Fair Market Value per Share), multiplied by the number of shares covered by the number of vested Restricted Stock Units, net of all payroll taxes the Company may be required to withhold from such payment.

10.5 Cash Awards. Notwithstanding Section 10.1, the Committee may provide for Cash Awards to be assumed or an equivalent cash award substituted by the successor corporation or a parent or Subsidiary of the successor corporation. In such case:

(a) All Company restrictions with respect to outstanding Cash Awards held by the Participant, to the extent so assigned, shall not lapse as of the date of the Change in Control. However, in the event that the successor corporation or a parent or Subsidiary of the successor corporation refuses to accept the assignment of any such Company restrictions, such Company restrictions will lapse and the Participant will become one hundred percent (100%) vested in such Cash Awards immediately prior to the Change in Control.

(b) If the Company restrictions with respect to a Cash Award are assigned to the successor corporation and, within twelve (12) months following the Change in Control, the Participant incurs a Termination of Service due to involuntary termination by the successor corporation or one of its affiliates for a reason other than Misconduct, then such Participant's Cash Awards will immediately have any Company restrictions lapse and the Participant will become one hundred percent (100%) vested in such Cash Award.

**SECTION 11
MISCELLANEOUS**

11.1 Issuance of Shares. The Company shall not be required to issue or deliver any certificate for Shares purchased upon the attempted exercise of any Option or SAR granted hereunder or any portion thereof, or deliver any certificate for shares of Restricted Stock or Restricted Stock Unit granted hereunder, and no attempted exercise of an Option or SAR shall be effective prior to fulfillment of all of the following conditions:

- (a) The admission of such shares to listing on all stock exchanges on which the Shares are then listed;
- (b) The completion of any registration or other qualification of such Shares which the Committee shall deem necessary or advisable under any federal or state law or under the rulings or regulations of the SEC or any other governmental regulatory body;
- (c) The obtaining of any approval or other clearance from any federal or state governmental agency or body which the Committee shall determine to be necessary or advisable; and
- (d) The lapse of such reasonable period of time following the exercise of the Option or SAR as the Board from time to time may establish for reasons of administrative convenience.

Stock certificates issued and delivered to Participants shall bear such restrictive legends as the Company shall deem necessary or advisable pursuant to applicable federal and state securities laws. The inability of the Company to obtain approval from any regulatory body having authority deemed by the Company to be necessary to the lawful issuance and sale of any Shares pursuant to Options shall relieve the Company of any liability with respect to the non-issuance or sale of the Shares as to which such approval shall not have been obtained. The Company shall, however, use reasonable efforts to obtain all such approvals.

11.2 No Effect on Employment or Service. Nothing in the Plan shall interfere with or limit in any way the right of the Company to terminate any Participant's employment or service at any time, with or without cause. For purposes of the Plan, transfer of employment of a Participant between the Company and any one of its Affiliates (or between Affiliates) shall not be deemed a Termination of Service. Employment with the Company and its Affiliates is on an at-will basis only.

11.3 Participation. No Employee or Consultant shall have the right to be selected to receive an Award under this Plan, or, having been so selected, to be selected to receive a future Award.

11.4 Indemnification. Each person who is or shall have been a member of the Committee, or of the Board, shall be indemnified and held harmless by the Company against and from (a) any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan or any Award Agreement, and (b) from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit, or proceeding against him or her, provided he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled under the Company's Certificate of Incorporation or Second Amended and Restated Bylaws, by contract, as a matter of law, or otherwise, or under any power that the Company may have to indemnify them or hold them harmless.

11.5 Successors. All obligations of the Company under the Plan, with respect to Awards granted hereunder, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business or assets of the Company.

11.6 Beneficiary Designations. If permitted by the Committee, a Participant under the Plan may name a beneficiary or beneficiaries to whom any vested but unpaid Award shall be paid in the event of the Participant's death. Each such designation shall revoke all prior designations by the Participant and shall be effective only if given in a form and manner acceptable to the Committee. In the absence of any such designation, any vested benefits remaining unpaid at the Participant's death shall be paid to the Participant's estate and, subject to the terms of the Plan and of the applicable Award Agreement, any unexercised vested Award may be exercised by the administrator or executor of the Participant's estate.

11.7 Limited Transferability of Awards. Subject to Section 7.3, no Award granted under the Plan may be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated, other than by will, by the laws of descent and distribution, or to the limited extent provided in Section 11.7. All rights with respect to an Award granted to a Participant shall be available during his or her lifetime only to the Participant. Notwithstanding the foregoing, the Participant may, in a manner specified by the Committee, (a) transfer a Nonqualified Stock Option to a Participant's spouse, former spouse or dependent pursuant to a court-approved domestic relations order which relates to the provision of child support, alimony payments or marital property rights, and (b) transfer a Nonqualified Stock Option by bona fide gift and not for any consideration, to (i) a member or members of the Participant's immediate family, (ii) a trust established for the exclusive benefit of the Participant and/or member(s) of the Participant's immediate family, (iii) a partnership, limited liability company of other entity whose only partners or members are the Participant and/or member(s) of the Participant's immediate family, or (iv) a foundation in which the Participant and/or member(s) of the Participant's immediate family control the management of the foundation's assets.

11.8 No Rights as Shareholder. Except to the limited extent provided in Sections 7.6 and 7.7 no Participant (nor any beneficiary) shall have any of the rights or privileges of a shareholder of the Company with respect to any Shares issuable pursuant to an Award (or exercise thereof), unless and until certificates representing such Shares shall have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to the Participant (or beneficiary).

11.9 Tax Matters. Notwithstanding anything to the contrary contained herein, to the extent that the Committee determines that any Award granted under the Plan is subject to Code Section 409A and unless otherwise specified in the applicable Award Agreement, the Award Agreement evidencing such Award shall incorporate the terms and conditions necessary for such Award to avoid the consequences described in Code Section 409A(a)(1), and to the maximum extent permitted under applicable law (and unless otherwise stated in the applicable Award Agreement), the Plan and the Award Agreements shall be interpreted in a manner that results in their conforming to the requirements of Code Section 409A(a)(2), (3) and (4) and any Department of Treasury or Internal Revenue Service regulations or other interpretive guidance issued under Section 409A (whenever issued, the "Guidance").

SECTION 12 AMENDMENT, TERMINATION, AND DURATION

12.1 Amendment, Suspension, or Termination. The Board, in its sole discretion, may amend, suspend or terminate the Plan, or any part thereof, at any time and for any reason. The amendment, suspension, or termination of the Plan shall not, without the consent of the Participant, alter or impair any rights or obligations under any Award already granted to such Participant; provided that such consent shall not be required if the Board determines, in its sole and absolute discretion, that the amendment, suspension or termination: (a) is required or advisable in order for the Company, the Plan or the Award to satisfy applicable law, to meet the requirements of any accounting standard or to avoid any adverse accounting treatment, or (b) in connection with any transaction or event described in Section 9.1, is in the best interests of the Company or its shareholders. The Board may, but need not, take the tax or accounting consequences to affected Participants into consideration in acting under the preceding sentence. No Award may be granted during any period of suspension or after termination of the Plan. The Company shall obtain shareholder approval if necessary or desirable to comply with applicable laws, rules and regulations, including of any governmental agencies and national securities exchanges. Decisions of the Board shall be final, binding and conclusive.

12.2 Duration of the Plan. The Plan shall be effective as of the date the Plan is approved by the Company's Shareholders at the 2012 Annual Meeting of Shareholders, and subject to Section 12.1 (regarding the Board's right to amend or terminate the Plan), shall remain in effect thereafter. However,

(a) No Incentive Stock Option may be granted under the Plan after ten years from the latest date the Company's shareholders approve the Plan, including any subsequent amendment or restatement of the Plan approved by the Company's shareholders; and

(b) For Awards to continue to be eligible to qualify as "performance-based compensation" under Code Section 162(m), the Company's shareholders must re-approve the material terms of the Performance Goals included in the Plan by the date of the first shareholder meeting that occurs in the fifth year following the year in which the shareholders most recently approved the Plan under Code Section 162(m).

**SECTION 13
TAX WITHHOLDING**

13.1 Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company shall have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, and local taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

13.2 Withholding Arrangements. The Committee, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (a) electing to have the Company withhold otherwise deliverable Shares, or (b) delivering to the Company already-owned Shares having a Fair Market Value equal to the minimum amount required to be withheld. If the Committee permits Award Shares to be withheld from the Award to satisfy applicable withholding obligations, the Fair Market Value of the Award Shares withheld, as determined as of the date of withholding, shall not exceed the amount determined by the applicable minimum statutory withholding rates to the extent the Committee determines such limit is necessary or advisable in light of generally accepted accounting principles.

13.3 Liability for Applicable Taxes. Regardless of any action the Company or the Participant's employer (the "Employer") takes with respect to any or all income tax, social security, payroll tax, payment on account, other tax-related withholding or information reporting ("Tax-Related Items"), the Participant acknowledges and agrees that the ultimate liability for all Tax-Related Items legally due by Participant is and remains the Participant's responsibility and that the Company and or the Employer (a) make no representations nor undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of an Award; and (b) do not commit to structure the terms or any aspect of any Award granted hereunder to reduce or eliminate the Participant's liability for Tax-Related Items. The Participant shall pay the Company or the Employer any amount of Tax-Related Items that the Company or the Employer may be required to withhold as a result of the Participant's participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to deliver any benefit under the Plan if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

**SECTION 14
LEGAL CONSTRUCTION**

14.1 Gender and Number. Except where otherwise indicated by the context, any masculine term used herein also shall include the feminine; the plural shall include the singular and the singular shall include the plural.

14.2 Severability. In the event any provision of the Plan shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provision had not been included.

14.3 Requirements of Law. The granting of Awards and the issuance of Shares under the Plan shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.

14.4 Securities Law Compliance. With respect to Section 16 Persons, transactions under this Plan are intended to comply with all applicable conditions of Rule 16b-3. To the extent any provision of the Plan, Award Agreement or action by the Committee fails to so comply, it shall be deemed null and void, to the extent permitted by law and deemed advisable by the Committee.

14.5 Governing Law. The Plan and all Award Agreements shall be construed in accordance with and governed by the laws of the State of Florida.

14.6 Captions. Captions are provided herein for convenience only, and shall not serve as a basis for interpretation or construction of the Plan.

**FIRST AMENDMENT TO
AMENDED AND RESTATED
ORAGENICS, INC.
2012 EQUITY INCENTIVE PLAN**

This First Amendment to the Amended and Restated 2012 Equity Incentive Plan (the "Plan") is made pursuant to Section 12 of the Plan.

Recitals:

WHEREAS, the Plan was originally adopted by the Company on August 6, 2012 and approved by the shareholders on October 23, 2012; and

WHEREAS, the Board of Directors believes it would be in the best interest of the Company and its shareholders to increase the authorized shares available under the Plan.

NOW THEREFORE, Section 4 titled "SHARES SUBJECT TO PLAN" is hereby amended as follows:

The reference to "4,000,000" is replaced with "5,500,000", to reflect an increase in the shares reserved for use under the Plan.

All other terms and conditions of the Plan not otherwise modified hereby shall remain in full force and effect. The Amendment was approved by the Board of Directors on May 16, 2017 and submitted to the Company's shareholders for approval in connection with the Company's May 4, 2017 Annual Meeting.

**SECOND AMENDMENT TO
AMENDED AND RESTATED
ORAGENICS, INC.
2012 EQUITY INCENTIVE PLAN**

This Second Amendment to the Amended and Restated 2012 Equity Incentive Plan (the "Plan") is made pursuant to Section 12 of the Plan.

Recitals:

WHEREAS, the Plan was originally adopted by the Company on August 6, 2012 and approved by the shareholders on October 23, 2012;

WHEREAS, a First Amendment to the Plan was adopted by the Company and approved by the shareholders on May 4, 2017 to increase the authorized shares available under the Plan from 4,000,000 to 5,500,000; and

WHEREAS, the Board of Directors believes it would be in the best interest of the Company and its shareholders to increase the authorized shares available under the Plan from 5,500,000 to 7,500,000.

NOW THEREFORE, Section 4 titled "SHARES SUBJECT TO PLAN" is hereby amended as follows:

The reference to "5,500,000" is replaced with "7,500,000", to reflect an increase in the shares reserved for use under the Plan.

All other terms and conditions of the Plan not otherwise modified hereby shall remain in full force and effect. The Amendment was approved by the Board of Directors on November 14, 2017 and approved by the Company's shareholders through written consent on December 1, 2017.

**THIRD AMENDMENT TO
AMENDED AND RESTATED
ORAGENICS, INC.
2012 EQUITY INCENTIVE PLAN**

This First Amendment to the Amended and Restated 2012 Equity Incentive Plan (the "Plan") is made pursuant to Section 12 of the Plan.

Recitals:

WHEREAS, the Plan was originally adopted by the Company on August 6, 2012 and approved by the shareholders on October 23, 2012; and

WHEREAS, the Board of Directors believes it would be in the best interest of the Company and its shareholders to increase the authorized shares available under the Plan.

NOW THEREFORE, Section 4 titled "SHARES SUBJECT TO PLAN" is hereby amended as follows:

The reference to "750,000" is replaced with "2,250,000", to reflect an increase in the shares reserved for use under the Plan.

All other terms and conditions of the Plan not otherwise modified hereby shall remain in full force and effect. The Amendment was approved by the Board of Directors on April 19, 2018 and submitted to the Company's shareholders for approval in connection with the Company's June 22, 2018 Annual Meeting.

**APPENDIX B
FOURTH AMENDMENT TO
AMENDED AND RESTATED
ORAGENICS, INC.
2012 EQUITY INCENTIVE PLAN**

This Fourth Amendment to the Amended and Restated 2012 Equity Incentive Plan (the "2012 Equity Incentive Plan") is made pursuant to Section 12 of the 2012 Equity Incentive Plan.

Recitals:

WHEREAS, the 2012 Equity Incentive Plan was originally adopted by the Company on August 6, 2012 and approved by the shareholders on October 23, 2012;
and

WHEREAS, the Board of Directors believes it would be in the best interest of the Company and its shareholders to increase the authorized shares available under the 2012 Equity Incentive Plan.

NOW THEREFORE, Section 4 titled "SHARES SUBJECT TO PLAN" is hereby amended as follows:

The reference to "2,250,000" is replaced with "8,250,000", to reflect an increase in the shares reserved for use under the 2012 Equity Incentive Plan.

All other terms and conditions of the 2012 Equity Incentive Plan not otherwise modified hereby shall remain in full force and effect. The Amendment was approved by the Board of Directors on April 25, 2019 and submitted to the Company's shareholders for approval in connection with the Company's June 20, 2019 Annual Meeting of Shareholders.

**APPENDIX C
REQUEST FOR INTERIM FINANCIAL STATEMENTS**

Oragenics, Inc.

Request for Interim Financial Statements

In accordance with National Instrument 54-102 of the Canadian Securities Administrators, registered and beneficial shareholders of the subject Corporation may elect annually to receive interim corporate mailings, including interim financial statements of the Corporation, if they so request. If you wish to receive such mailings, please complete and return this form to:

**Oragenics, Inc.
Investor Relations
4902 Eisenhower Blvd., Suite 125
Tampa, Florida 33634**

NAME:

ADDRESS:

POSTAL CODE:

I confirm that I am an owner of common stock of the Corporation.

SIGNATURE OF
SHAREHOLDER:

DATE:

CUSIP: 684023302

SCRIP COMPANY CODE: ORGQ

**PROXY FOR THE ANNUAL MEETING OF SHAREHOLDERS OF
ORAGENICS, INC.
TO BE HELD AT TAMPA AIRPORT MARRIOTT, 4200 GEORGE J. BEAN PARKWAY, TAMPA, FL, 33607 ON THURSDAY JUNE 20, 2019, AT 9:00
A.M., LOCAL TIME.**

The undersigned shareholder of Oragenics, Inc. (the "Company"), Tampa, Florida, hereby constitutes and appoints Dr. Alan Joslyn with full power of substitution or in the place of the foregoing, Michael Sullivan as proxy holder, for and on behalf of the undersigned shareholder with the power of substitution to attend, act and vote the number of shares of Common Stock which the undersigned would be entitled to vote if personally present at the Annual Meeting of Shareholders of Shareholders or at any adjournments thereof, upon the proposals described in the Notice to the Holders of Common Stock of the Annual Meeting of Shareholders and Proxy Statement, both dated May 16, 2019, the receipt of which is acknowledged, in the manner specified below. The proxies, in their discretion, are further authorized to vote on any shareholder proposals not submitted to the Company for a vote of the shareholders at the Annual Meeting of Shareholders within a reasonable time prior to the mailing of the proxy materials, as well as on the election of any person as a Director if a Director nominee named in Proposal I is unable to serve or for good cause will not serve, and on matters incident to the conduct of the Annual Meeting of Shareholders. At the present time, the Board of Directors knows of no other business to be presented to a vote of the shareholders at the Annual Meeting of Shareholders.

This Proxy, when properly executed, will be voted in the manner directed by the undersigned shareholder **If no direction is made, this Proxy will be voted FOR the election of the Directors listed on the reverse side and FOR Proposals II, III, IV, V and VI.**

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF ORAGENICS, INC. AND MAY BE REVOKED BY THE SHAREHOLDER PRIOR TO ITS EXERCISE. The undersigned reserves the right to revoke this Proxy at any time prior to the Proxy being voted at the Meeting. The Proxy may be revoked by delivering a signed revocation to the Company at any time prior to the Meeting, by submitting a later-dated Proxy, or by attending the Meeting in person and casting a ballot. The undersigned hereby revokes any proxy previously given to vote such shares at the Meeting.

PROXY

A. PROPOSALS – The Board of Directors recommends a vote FOR all the nominees listed and FOR Proposals II, III IV, V and VI.

Proposal I: Election of Directors. On the proposal to elect the following Directors to serve until the indicated Annual Meeting of Shareholders of the Company and until their successors are elected and qualified:

Dr. Frederick W. Telling	For <input type="checkbox"/>	Withhold Authority <input type="checkbox"/>
Dr. Alan Joslyn	For <input type="checkbox"/>	Withhold Authority <input type="checkbox"/>
Robert C. Koski	For <input type="checkbox"/>	Withhold Authority <input type="checkbox"/>
Charles L. Pope	For <input type="checkbox"/>	Withhold Authority <input type="checkbox"/>
Dr. Alan Dunton	For <input type="checkbox"/>	Withhold Authority <input type="checkbox"/>

Proposal II: Advisory Vote on the Frequency of Future Advisory Votes on Executive Compensation.

Every 1 Year Every 2 Years Every 3 Years Abstain

Proposal III: Advisory vote on executive compensation.

For Against Abstain

Proposal IV: To ratify the 2018 Amendment of our 2012 Equity Incentive Plan (the “2012 Equity Incentive Plan”) to increase the number of common shares available for issuance under the 2012 Equity Incentive Plan by 1,500,000 shares.

For Against Abstain

Proposal V: To approve the amendment of our 2012 Equity Incentive Plan (the “2012 Equity Incentive Plan”) to increase the number of common shares available for issuance under the 2012 Equity Incentive Plan by 6,000,000 shares.

For Against Abstain

Proposal VI: Ratification of the selection of Mayer Hoffman McCann P.C. as the Company’s independent auditors for the year ending December 31, 2019.

For Against Abstain

B. Authorized Signatures – This section must be completed for your vote to be counted. — Date and Sign Below.

Please sign exactly as your name appears on your stock certificate and date. Where shares are held jointly, each shareholder should sign. When signing as executor, administrator, trustee, or guardian, please give full title as such. If a corporation, please sign in full corporate name by president or other authorized officer. If a partnership, please sign in full partnership name by authorized person.

Shares Held: _____

Signature of Shareholder _____

Signature of Shareholder (If held jointly) _____

Dated: _____

THIS PROXY FORM IS NOT VALID UNLESS IT IS SIGNED.