UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

Amendment No. 1

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

For the fiscal year ended December 31, 2014

□ TRANSITION REPORT PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ______ to _____

Commission file number 001-32188

ORAGENICS, INC.

(Exact name of registrant as specified in its charter)

Florida (State or Other Jurisdiction of Incorporation or Organization) 59-3410522 (IRS Employer Identification No.)

4902 Eisenhower Blvd., Suite 125 Tampa, FL (Address of Principal Executive Offices)

33634 (Zip Code)

813-286-7900

(Issuer's Telephone Number, Including Area Code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

<u>Title of each class</u> Common Stock \$0.001 par value per share Name of each exchange on which registered
NYSE MKT

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: None

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

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

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

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

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

Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

| Large accelerated filer | Accelerated filer | |
|---|---------------------------|---|
| Non-accelerated filer \Box (Do not check if a smaller reporting company) | Smaller reporting company | X |
| Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2). | Yes 🗆 No 🗵 | |

The aggregate market value of the voting stock held by non-affiliates of the registrant, as of June 30, 2014 was approximately \$28,421,454 based upon a last sales price of \$1.95 as reported by the NYSE MKT.

As of April 20, 2015, there were 38,378,944 shares of the registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

EXPLANATORY NOTE

The sole purpose of this Amendment No. 1 on Form 10-K/A is to amend our Annual Report on Form 10-K for the fiscal year ended December 31, 2014 (the "Original 10-K"), which was filed with the Securities and Exchange Commission on February 27, 2015, to include the information required by Part III, Items 10 through 14. The information required by Items 10-14 of Part III is no longer being incorporated by reference to the Proxy Statement relating to the Company's 2015 Annual Meeting of Shareholders. This information was previously omitted from the Original Form 10-K in reliance on General Instruction G(3) to Form 10-K, which permits the information in the above referenced items to be incorporated in the Form 10-K by reference from a definitive proxy statement if such statement is filed no later than 120 days after the Company's fiscal year end. The Company is filing this Amendment to include the Part III information in its Form 10-K because the Company does not expect to file a definitive proxy statement containing this information before that date.

This Amendment amends and restates in its entirety Items 10, 11, 12, 13 and 14 of Part III of the Original Form 10-K, and it deletes the reference on the cover of the Original Form 10-K to the incorporation by reference to portions of the definitive proxy statement into Part III of the Original Form 10-K. Except as expressly set forth herein, the Amendment does not reflect events occurring after the date of the Original Form 10-K or modify or update any of the other disclosures contained therein in any way other than as required to reflect the amendments discussed above. Accordingly, this Amendment should be read in conjunction with the Original Form 10-K and the Company's other filings with the SEC.

In addition, as required by Rule 12b-15 under the Exchange Act, new certifications by our principal executive officer and principal financial officer are filed as exhibits to this Annual Report on Form 10-K/A.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Directors and Executive Officers

The following table sets forth the names, ages and titles of the Company's Directors, executive officers, key employees and the position they each hold with the Company.

| Name | Age | Position |
|---------------------------------|-----|--|
| Dr. Frederick W. Telling, Ph.D. | 63 | Chairman and Director |
| Robert C. Koski | 56 | Director |
| Christine L. Koski | 57 | Director |
| Charles L. Pope | 63 | Director |
| Dr. Alan W. Dunton, M.D. | 60 | Director |
| Michael Sullivan | 58 | Chief Financial Officer |
| Dr. Martin Handfield, Ph.D | 44 | Senior Vice President of Discovery Research |
| Albert Fosmoe | 52 | Senior Vice President of Operations/Product Development. |

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 since October 1994. Dr. Telling also serves as a director, the Chair of the Compensation Committee and a member of the Audit Committee at CTI BioPharma, Inc. (NASDAQ: CTIC), a public company based in Seattle, Washington. 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.

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 a controlling 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. He is the brother of our Director, Christine Koski.

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.

Christine L. Koski. Ms. Koski has served as a Director since June 2009 and as the Chairperson of our Board of Directors from June 2009 until February 2011 when director Telling was appointed to succeed Ms. Koski. Ms. Koski also serves as President and CEO of nMetric, LLC, a provider of web-based scheduling system software. Prior to joining nMetric in September 2006, Ms. Koski founded Koski Consulting Group, Inc. in June 2001 to advise start-up companies in the areas of business strategy and marketing. Ms. Koski held various positions in sales, product management, purchasing, sales management, and international marketing management with Celanese A.G. or its former affiliates, including Celanese Ltd., Hoechst AG and Hoechst Celanese Chemical Group Ltd. Ms. Koski is the former volunteer executive director of the Dallas Dinner Table, which focuses on improving racial communication in the Dallas Metroplex. Ms. Koski is also a member of the National Association of Corporate Directors, Dallas Chapter, and is an alumnus of Harvard's Corporate Board Effectiveness Program led by Professor Jay Lorsch. In addition to her positions at nMetric and Oragenics, Ms. Koski serves as a director at Sun Hydraulics Corporation (NASDAQ: SNHY), a manufacturer of high performance hydraulic valves and solutions, and Cheltec, Inc., a specialty chemical company. Ms. Koski is a member of the nonprofit National Association of Corporate Directors. Ms. Koski Family Limited Partnership, which beneficially owns a controlling interest in the Company. Ms. Koski is a member of the nonprofit National Association of Corporate Directors, Robert Koski. Lawrence University. Ms. Koski is the sister of our Director, Robert Koski.

Ms. Koski brings to our Board over a decade of experience as an executive officer and as a director of other privately held and public technology-based companies. Through her extensive executive management and board experience, Ms. Koski has developed the leadership, business judgment and consensus-building skills necessary to effectively execute her duties as director. Her strong expertise and background in management and marketing and track record as an accomplished executive have provided her with the business acumen and skills necessary to serve the Company as it moves forward in commercializing its technology.

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 MKT:INV) a public company. Mr. Pope served as a director of Innovaro, Inc. from March 2002 to August 2012. He is also a director of Inuvo, Inc. (NYSE MKT: INV), a public company, specialized in marketing browser – based consumer applications, managing networks of website publishers and operating specialty websites). He is also a director of Trxade Group Inc. (OTCQB: XCEL). Prior to this time, Mr. Pope served as a Partner in the Audit and Financial Advisory Consulting Divisions and was a Partner in the Accounting and SEC Directorate at PricewaterhouseCoopers LLP. Mr. Pope serves on the board of directors of Inuvo, Inc. in Clearwater, Florida which is a public company. 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 since April 2011. Dr. Dunton is the principal owner of Danerius, LLC, a biotechnology consulting company which he founded in 2006. 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. He is currently a Director of the public biotechnology companies Palatin, Inc. (AMEX: PTN) and Targacept, Inc. (NASDAQ: TRGT) as well as Sancilio, Inc., a private biotechnology company. He served as a Director of MediciNova (NASDAQ: MNOV) from 2006 to 2011. In 2005, Dr. Dunton served as the Non-Executive Chairman of the board of directors of ActivBiotics, Inc., a privately held 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 technologies.

Executive Management

President and Chief Executive Officer. The position of President and Chief executive Officer is currently vacant due to the resignation of the Company's former President and Chief Executive Officer on October 30, 2014. The Board is conducting a search for a suitable candidate to fill this vacancy. Mr. Sullivan, the Company's Chief Financial Officer, has been designated to serve as the Company's interim principal executive officer.

Michael Sullivan. Mr. Sullivan has served as our interim principal executive officer since October 30, 2014 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. 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 Employees

Dr. Martin Handfield. Dr. Handfield is, the Company's Senior Vice President of Discovery Research and previously has served as our Director of Research and Development. 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.

Albert Fosmoe. Mr. Fosmoe, has been employed at the Company since April 2014 serving as the Company's Senior Vice President of Operations/Product Development. Between 2012 and the time he became employed with the Company Mr. Fosmoe served as a President and Sr. Consultant for Integrated Reg-Ops Consulting , a consulting company providing regulatory and operations consulting services to the FDA and EMEA regulated device/drug/biotech companies. Between 2010 and 2012 Mr. Fosmoe served as senior manager-product development (and Director of Quality) for Banyan Biomarkers, a company focused on the discovery and development of in-vitro diagnostics for brain injury. Between 2002 and 2010 Mr. Fosmoe worked for OxThera (including Ixion Biotechnology, Inc.) last serving as Chief Regulatory Officer. Mr. Fosmoe served as Director of Quality Assurance and Regulatory Affairs for US Biomaterials Corporation, a medical device company, from 1994-2002. Mr. Fosmoe holds a B.S. degree in Chemistry from the University of Florida.

Each of our directors 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 Florida law. 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. Mr. Sullivan, our Chief Financial Officer, Dr. Handfield, our Senior Vice President of Discovery Research and Mr. Fosmoe, Senior Vice President of Operations/Product Development, each have employment agreements with us. See "Executive Compensation— Employment Contracts and Change in Control Arrangements."

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 MKT and SEC 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.

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 SEC's requirements and with listing standards of the NYSE MKT 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 SEC) 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 SEC requirements.

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 persons subject to the reporting requirements with regard to the Common Stock complied with the applicable filing requirements during 2014, except that Ms. Koski was three (3) days late in filing her Form 4 for a purchase made on December 4, 2014, but not reported until December 11, 2014.

Director Nominations

There have been no material changes to the procedures by which security holders may recommend nominees to our Board of Directors since those procedures were described in our proxy statement for our 2014 annual meeting of shareholders.

ITEM 11. EXECUTIVE COMPENSATION.

Compensation Practices

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 10-K Amendment.

Compensation Discussion and Analysis

Throughout this section, the individuals who served as the Company's Chief Executive 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 review 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 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. Given the current vacancy of the office of Chief Executive Officer at the Company, the Company's interim principal executive officer and chief financial officer, together with the Chairman of the Board of Directors would make such recommendation to the Compensation Committee also annually analyzes the Company's 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 Company's Chief Executive Officer. The Company's 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 Company's Chief Executive Officer. The Compensation Committee review and makes recommendation to the board of Directors. The Company's Chief Executive Officer is 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 Company's Chief Executive Officer is performance and determines his salary, annual cash bonus and grants of long-term equity incentive awards and makes

2014 Executive Compensation Components

For the fiscal year ended December 31, 2014, the principal components of compensation for the Company's executive officers

were:

- Annual base salary;
- Bonus;
- Long-term equity based incentive compensation;
- Executive LTPB Program; and
- 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 instituted a performance based bonus program in the 2014 fiscal year for Dr. John Bonfiglio, our former Chief Executive Officer, pursuant to the requirements of his employment agreement. See "Chief Executive Bonus Plan – 2014" below for a description of Dr. Bonfiglio's bonus program for 2014. The Company also established a formal bonus program for Mr. Sullivan and Dr. Handfield in 2014. See "Bonus Plan 2014 – Mr. Sullivan and Dr. Handfield" below for a description of their bonus program for 2014. In 2015, the Company also established a formal bonus program for 2015. See "Bonus Plan 2015 – Mr. Sullivan, Dr. Handfield and Mr. Fosmoe" below for a description of their bonus program for 2015. Discretionary bonuses for executive officers and employees may also be considered by the Compensation Committee and recommended at the discretion of the Compensation Committee for approval by our Board of Directors.

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 seek to 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 for 2014 were 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 incentives 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 may not apply a formula assigning specific weights to any of these factors when making its determination.

Executive LTPB Program

On November 14, 2011, the Compensation Committee of our Board of Directors as well as our Board of Directors approved a long-term performance-based incentive program (the "Executive LTPB Program") to be administered under the Company's then existing equity incentive plan. The Executive LTPB Program was an incentive program designed to motivate the participants, including the Company's Chief Executive Officer, to achieve the Company's financial and other performance objectives and to reward them if, and when, those objectives were met. The Committee and the Board believed it was in the best interest of the Company to: (i) develop a culture of achievement and performance; (ii) align the incentive structure to the long term goals of the Company; (iii) promote retention; (iv) promote achievement of targeted results; (v) use equity proactively and as an appropriate incentive; and (vi) employ variable compensation based upon performance goals.

The Executive LTPB Program provided for the award of shares of common stock as a bonus to designated executive officers and employees of the Company. The shares would be issued to participants during the term of the Executive LTPB Program, subject to the satisfaction of applicable performance goals (as described below). Participants were eligible to receive a bonus payable in shares of common stock if they continued to be employed by the Company through the first to occur of either of the following: (i) the Company's achievement, on or before December 31, 2013 (the "Termination Date"), of the various "Performance Goals" set forth below, or (ii) the effective date of a "Change in Control" of the Company that occurs at any time following the date of this Agreement and on or before the Termination Date.

The Executive LTPB Program included an immediate retention award made to the designated participants, which was payable in shares of common stock of the Company, as a retention award (a "Retention Award"). The Retention Award was determined by multiplying (i) the approved award percentage for the Retention Award by (2) the total number of outstanding shares of Common Stock, determined on a non-fully diluted basis. Total retention awards issued to executive participants by the Company at the time the Executive LTPB Program was established consisted of 61,600 shares.

The performance periods for the Executive LTPB Program ran from January 1, 2012 through December 31, 2014 (originally December 2013, but see amendment discussed below). Awards under the Executive LTPB Program were subject to being credited to participants, up to target levels, to the extent that the performance goals were satisfied, as determined by the Compensation Committee. Upon the occurrence of a "Performance Vesting Date" with respect to a "Performance Goal," a participant was entitled to receive a number of shares of Common Stock determined by multiplying (1) the award percentage (each, an "Award Percentage") corresponding to that particular Performance Goal as set forth in their individual award agreement by (2) the total number of outstanding shares of Common Stock, determined on a non-fully diluted basis, as of that particular applicable Performance Vesting Date. For purposes of an award, the "Performance Vesting Date" with respect to a Performance Goal would be the day on which the Compensation Committee of the Company's Board of Directors certified and determined, in its reasonable discretion, that the applicable Performance Goal had been achieved. Participants were required to remain employees of the Company through the date on which the Compensation Committee made a final determination under the Executive LTPB Program with respect to the satisfaction of any Performance Goal during the performance period.

The Executive LTPB Program provided for awards upon the Company achieving any of the following performance goals: (i) achievement of Company fiscal year sales equal or greater than \$10,000,000; (ii) achievement of Company fiscal year sales equal or greater than \$20,000,000; (iii) achievement by the Company of cash flow positive in any fiscal quarter; (iv) achievement by the Company of earnings per share in any fiscal year equal or greater than \$0.02 per share of Company stock; (v) achievement of price per share of Company stock equal to \$10.00; (vi) achievement of price per share of Company stock equal to \$20.00; (vii) licensing of any science technology which results in upfront cash receipt by the Company of \$2,000,000 or more; or (viii) capital raise by the Company of \$5,000,000 or more in both fiscal years or a \$10,000,000 or more in a single raise.

An award agreement was delivered to each designated participant under the Executive LTPB Program, which set forth the percentage award of shares to be awarded to the participant upon achievement of the designated

Performance Goals and the terms thereof. New participants were able to be added to the Executive LTPB Program following the beginning of the performance period. A copy of the form of long term incentive plan award agreement for employee participants approved by the Committee and Board was previously filed with the SEC.

The share based awards payable to our executive officers were based on the achievement of the performance goals listed above and tied to certain pre-determined and approved percentages. The specific percentages for awards upon achievement of the specific Performance Goals of the participants were as follows:

| Executive | \$10M Sales | \$20M Sales | Positive CF | EPS Goal | \$10 Share Price | \$20 Share Price | License Technology | Company Capital Raise |
|---------------------------------|----------------|----------------|----------------|-------------|---------------------|---------------------|-----------------------|-----------------------------|
| Dr. Martin Handfield | 0.17% | 0.13% | 0.17% | 0.23% | 0.17% | 0.10% | 0.13% | 0.23% |
| Michael Sullivan | 0.22% | 0.18% | 0.22% | 0.31% | 0.22% | 0.14% | 0.18% | N/A |
| Dr. John Bonfiglio (former CEO) | 0.50% | 0.40% | 0.50% | 0.70% | 0.50% | 0.30% | 0.40% | 0.70% |

Amendment to Executive LTPB Program. On February 11, 2013, the Committee and Board approved an amendment to the Executive LTPB Program administered under the Company's 2012 Equity Incentive Plan. The Amendment consisted of (i) the extension of the Termination Date in the individual award agreements from December 31, 2013 to December 31, 2014 (the "Amended Termination Date"); and (ii) the addition of four new performance goals. The specific additional Performance Goals added and the Award Percentages for the participating executive officers were as follows:

Additional Performance Goals:

(ix) Successful filing and acceptance by the FDA of an IND on the Company's first lantibiotic candidate.

(x) First dose of a lantibiotic administered to a patient under a Company-sponsored clinical study.

(xi) Capital raise by the Company of \$12,000,000 or more in a single year.

(xii) Broaden Intrexon relationship to include a new area outside of lantibiotics as evidenced by a Board approved amendment to an existing collaboration agreement or a new collaboration agreement that includes a new therapeutic area.

| | Performance Goals/Award Percentages | | | | | |
|---------------------------------|-------------------------------------|---|----------------------------------|---|--|--|
| | (ix) Lantibiotic IND | (x) Human Exposure to Lantibotic | (xi) Company Capital Raise | (xii) Expand Existing or Enter into New Collaboration Agreement | | |
| Participating Executives | | | | | | |
| Michael Sullivan | 0.18% | 0.18% | 0.22% | 0.18% | | |
| Martin Handfield | 0.17% | 0.17% | 0.17% | 0.17% | | |
| Dr. John Bonfiglio (former CEO) | 0.50% | 0.50% | 0.50% | 0.50% | | |

The Committee believed it was in the best interest of the Company to extend the period in which the program would be in effect until the Amended Termination Date for the existing performance goals and to add the new goals related to further capital raising efforts and to its lantibiotic development efforts due to the significance of such efforts to the Company. The Committee believed the changes continued to serve the purposes of the long term incentive program. The amendments were implemented by amending the existing executive and employee participants' original Award Agreements.

Executive LTPB Program Change of Control. In the event a Change in Control of the Company occurs, a participant would be entitled to receive the full amount of the shares with respect to any Performance Goal as to which the related Performance Vesting Date did not occur prior to the date of the Change in Control, as though the Performance Goal had been fully achieved as of the time of the Change in Control, except with respect to the Share Appreciation Goals which would depend on the price per share of any change in control transaction. The term "Change in Control" for purposes of an award shall mean: a "Corporate Transaction" as defined in the Plan.

Assuming a Change of Control event during the Executive LTPB Program period as amended, and based upon the current level of the Company's outstanding shares of common stock and all remaining performance based wards being vested (including share appreciation awards), Mr. Sullivan and Dr. Handfield and the Company's former CEO would have been entitled to receive 661,160, 520,257, and 1,553,545 shares, respectively (an aggregate of 2,734,962 shares). The actual number of shares to be issued under the Executive LTPB Program was subject to change as the Company issued more shares of its common stock because the Executive LTPB Program awards were based upon a percentage of the then outstanding shares.

Termination of Long-Term Performance-Based Incentive Programs. The performance period for the Executive LTPB Program ran from January 1, 2012 through December 31, 2014. The program expired in accordance with its terms on December 31, 2014. This program resulted in no shares of common stock being issued to our executives during the year ended December 31, 2014. Under the Executive LTPB Program an aggregate of 567,103 shares were issued to our executives during the period in which the program was in place based upon the achievement of certain of the designated performance goals.

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. Because the Company provides limited perquisites to certain executive officers, the Company does not believe these perquisites and other personal benefits constitute a material component of the executive officers' compensation packages.

Employment Agreements

The Company has employment agreements in effect with Mr. Michael Sullivan, Dr. Martin Handfield and Mr. Al Fosmoe. 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."

Chief Executive Bonus Plan - 2014

On April 11, 2014, the Compensation Committee (the "Committee") approved the 2014 performance objectives for the Company's former President and Chief Executive Officer, Dr. John Bonfiglio under his cash bonus plan. Dr. Bonfiglio's employment agreement with the Company required the adoption of a bonus plan to provide for a bonus target of up to 50% of his annual base salary which equates to \$140,000 (the "Bonus Target"). The Company originally put the bonus plan in place when Dr. Bonfiglio joined the Company. The bonus payable to Dr. Bonfiglio for 2014 was based on the achievement of the following objectives, which were similar to those adopted by the Committee in the prior year:

(i) Up to 30% of the Bonus Target for achievement of a successful pre-investigational new drug (IND) meeting with the Food and Drug Administration (FDA), which shall be measured by no change in the timeline for filing the IND in 2015;

(ii) Up to 20% of the Bonus Target for meeting operational objectives tied to consumer probiotic business, including sales and licensing initiatives;

(iii) Up to 40% of the Bonus Target for financial performance objectives related to the Company's raising capital and finalizing an approved budget and incentive plan for 2015 and managing the Intrexon relationship; and

(iv) Up to 10% of the Bonus Target designated to be discretionary as determined by the Committee.

Achievement of each non-discretionary objective was measured independently, and a minimum threshold for each objective was required to be met for any credit to be given to that factor. The Committee established ranges for the revenue, bottom line performance and capital raise objectives. The bonuses earned for 2014, if any, could range from zero to 100% of Dr. Bonfiglio's Bonus Target. The aggregate amount of bonus payable under the above bonus plan to Dr. Bonfiglio for 2014 would have been approximately \$147,500 if all of the objectives were determined to be have been achieved by the Committee and the full discretionary percentage amount was awarded for 2014 performance. The bonus earned with respect to these objectives for 2014 by Dr. Bonfiglio was \$29,500.

Bonus Plan 2014-Mr. Sullivan and Dr. Handfield

On April 11, 2014, the Committee approved the 2014 performance objectives for Mr. Sullivan and Dr. Handfield. Under such cash bonus program the aggregate amount of bonuses payable to Mr. Sullivan and Dr. Handfield for 2014 would be approximately \$50,000 and \$45,000 respectively, if all of the objectives were determined to be achieved by the Committee at the high end of the ranges by the end of 2014.

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

(i) Up to 10% of the Bonus Target for achievement of a successful pre-IND meeting with the FDA, which shall be measured by no change in the timeline for filing the IND in 2015;

(ii) Up to 30% of the Bonus Target for meeting operational objectives tied to consumer probiotic business, including sales and licensing initiatives;

(iii) Up to 50% of the Bonus Target for financial performance objectives related to the Company's raising capital and finalizing an approved budget and incentive plan for 2015 and managing the Intrexon relationship; and

(iv) Up to 10% of the Bonus Target designated to be discretionary as determined by the Board.

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

(i) Up to 30% of the Bonus Target for achievement of a successful pre-IND meeting with the FDA, which shall be measured by no change in the timeline for filing the IND in 2015;

(ii) Up to 20% of the Bonus Target for meeting operational objectives tied to consumer probiotic business, including sales and licensing initiatives;

(iii) Up to 40% of the Bonus Target for performance objectives related to research and development, including the management of Intrexon deliverables under the Company's ECCs with Intrexon, meeting milestones and budget for 2014 and a decision on drug candidates for human studies; and

(iv) Up to 10% of the Bonus Target designated to be discretionary as determined by the Board.

Achievement of each objective would be measured independently, and a minimum threshold for each objective would be required to be met for any credit to be given to that factor. The Committee established ranges for the revenue, bottom line performance and capital raise objectives. The bonus earned for 2014 with respect to these objectives, by Mr. Sullivan was \$20,000 and the bonus earned by Dr. Handfield was \$13,500.

Bonus Plan 2015-Mr. Sullivan, Dr. Handfield and Mr. Fosmoe

On February 20, 2015, the Board approved the 2015 cash bonus program for Mr. Sullivan, Dr. Handfield and Mr. Fosmoe recommended by the Compensation Committee. Under such cash bonus program Mr. Sullivan, Dr. Handfield and Mr. Fosmoe are eligible for cash bonuses of up to \$76,650, \$48,900, and \$58,075 respectively, equaling up to 35%, 25% and 25% of their respective base salaries (each a "Bonus Target").

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

(i) Up to 30% of the Bonus Target for achievement of a successful pre-Individual New Drug ("IND") meeting with the FDA, within designated timing parameters in 2015;

(ii) Up to 20% of the Bonus Target for meeting operational objectives tied to consumer probiotic business, including sales and licensing initiatives;

(iii) Up to 30% of the Bonus Target for financial performance objectives related to the Company's raising capital and finalizing an approved budget and incentive plan for 2016;



(iv) Up to 10% of the Bonus Target for research and development objectives related to lantibiotics; and

(v) Up to 10% of the Bonus Target designated to be discretionary as determined by the Board.

The bonuses payable to Dr. Handfield and Mr. Fosmoe will be based upon the achievement of the following objectives:

(i) Up to 30% of the Bonus Target for achievement of a successful pre-IND meeting with the FDA, which shall be measured by no change in the timeline for filing the IND in 2015;

(ii) Up to 10% of the Bonus Target for meeting operational objectives tied to consumer probiotic business, including sales and licensing initiatives;

(iii) Up to 10% of the Bonus Target for financial performance objectives related to the Company's raising capital and finalizing an approved budget and incentive plan for 2016;

(iv) Up to 40% of the Bonus Target for research and development objectives related to lantibiotics; and

(v) Up to 10% of the Bonus Target designated to be discretionary as determined by the Board.

Each of Mr. Sullivan, Dr. Handfield and Mr. Fosmoe are also eligible for an additional 10% of Bonus Target should the Pre-IND meeting occur earlier than currently anticipated.

2014 Compensation Decisions

The Company believes that the total compensation paid to its named executive officers for the fiscal year ended December 31, 2014 achieved the overall objectives of its executive compensation program. In accordance with its overall objectives, executive compensation for 2014 is believed to be competitive with other similarly-sized companies. The Compensation Committee took the following key compensation actions in 2014:

• Determination of Annual Base Salaries

On October 9, and December 5, 2014, the Compensation Committee authorized increases in the annual salary for each of the Company's named executive officers currently employed with the Company in the amounts set forth below.

| | Prior Annual | | New Annual |
|----------------------|---------------------|----------|--------------------|
| Executive/Employee | Base Salary | Increase | Base Salary |
| Michael Sullivan | \$ 200,000 | \$19,000 | \$ 219,000 |
| Dr. Martin Handfield | \$ 180,000 | \$15,600 | \$ 195,600 |
| Albert Fosmoe | \$ 230,000 | \$ 2,300 | \$ 232,300 |

• Determination of Cash Bonus:

- The Compensation Committee established a performance based 2014 bonus plan for the named executive officers pursuant to the terms of their employment agreements. See below.
- The Committee subsequently approved bonus awards to the named executive officers based on such bonus plan in the amounts set forth in the Summary Compensation Table below.

Summary Compensation Table

The following table sets forth the aggregate compensation in 2014 and 2013 for services in all capacities paid or accrued by the Company to Dr. John Bonfiglio, our former Chief Executive Officer, Mr. Michael Sullivan, our Chief Financial Officer who has also served as our principal executive officer since Dr. Bonifiglio's resignation, and our two next most highly compensated officers who earned more than \$100,000 in total salary and bonus during the fiscal year ended December 31, 2014 (the "Named Executive Officers").

| Name and principal position | Year | Salary | Bonus | Stock Awards(5) | Option Awards(5) | | ll Other pensation(6) | Total | |
|--|--------------|------------------------|---------------------|--------------------|----------------------|----------|--------------------------|------------------------|---|
| Michael O. Sullivan ⁽¹⁾ | 2014 | \$200,667 | \$20,000 | | \$ 16,103 | \$ | 6,020 | \$ 242,79 | 0 |
| Chief Financial Officer Interim Principal Executive Officer | 2013 | \$183,332 | \$17,500 | \$ 461,209 | \$ 17,856 | | | \$ 680,49 | 7 |
| Dr. Martin Handfield ⁽²⁾ Senior Vice President of Discovery Research | 2014 2013 | \$180,600 \$172,500 | \$13,500 \$4,500 | \$ 389,698 | \$ 8,084 \$ 8,471 | \$ \$ | 5,418 5,130 | \$ 207,60 \$ 580,29 | |
| Albert Fosmoe (3) | 2014 | \$172,883 | \$16,000 | | \$ 95,382 | \$ | 75,400 | \$ 359,66 | 5 |
| Senior Vice President of Operations/Product Development | 2013 | — | — | — | — | \$ | 198,770 | \$ 198,77 | 0 |
| Former Officer: | | | | | | | | | |
| Dr. John Bonfiglio ⁽⁴⁾ | 2014 | 279,244 | \$29,500 | _ | \$ 38,769 | \$ | 56,542 | \$ 404,05 | 5 |
| Former Chief Executive Officer | 2013 | \$282,931 | \$28,025 | \$1,146,169 | \$ 92,648 | \$ | 8,400 | \$1,558,17 | 3 |

(1) Mr. Sullivan became our Chief Financial Officer on February 6, 2012, and, upon the resignation of our former Chief Executive Officer on October 30, 2014, Mr. Sullivan became our Interim Principal Executive Officer. Pursuant to the terms of Mr. Sullivan's employment agreement, the Board of Directors adopted a bonus plan for the achievement of certain financial and other performance objectives. See "Employment Agreements – Mr. Sullivan, Dr. Handfield and Mr. Fosmoe" and "Bonus Plan 2014 – Mr. Sullivan and Dr. Handfield" for discussion of the bonus plan. Under the bonus plan, Mr. Sullivan was awarded and paid a bonus of \$20,000 for 2014. In 2014, Mr. Sullivan received no shares of our common stock under the Executive LTPB Program and the Executive LTPB Program expired under its terms on December 31, 2014. See "Executive Long-Term Performance-Based Incentive Program" above for a summary of the Executive LTPB Program. In 2013, Mr. Sullivan received 54,304 shares of our common stock under the Executive LTPB Program for the Company's achievement of the goal related to the broadening of the Intrexon relationship to include a new area outside of lantibiotics. Also in 2013, Mr. Sullivan received 76,795 shares of our common stock under the Executive LTPB Program for the Company's achievement of the capital raise by the Company of \$12,000,000 or more during 2013.

- (2) Under the bonus plan, Dr. Handfield was awarded and paid a bonus of \$13,500 for 2014. In 2014, Dr. Handfield received no shares of our common stock under the Executive LTPB Program. In 2013, Dr. Handfield received 51,287 shares of our common stock under the Executive LTPB Program for the Company's achievement of the goal related to the broadening of the Intrexon relationship to include a new area outside of lantibiotics. Also in 2013, Dr. Handfield received 59,341 shares of our common stock under the Executive LTPB Program for the Company's achievement of the goal related to the company of \$12,000,000 or more during 2013.
- (3) Mr. Fosmoe commenced employment with the Company on April 1, 2014. Prior to that time Mr. Fosmoe provided services to us through his consulting company, Integrated Reg-Ops Consulting ("Integrated Consulting"). The amounts reflected under All Other Compensation for 2013 and 2014 reflect amounts paid to Integrated Consulting for Mr. Fosmoe's consulting services for 2013 and a portion of 2014. Amounts the Company paid to Integrated Consulting for expense reimbursements are not included in the All Other Compensation amount. Under the bonus plan, Mr. Fosmoe was awarded and paid a bonus of \$16,000 for 2014.
- (4) Dr. Bonfiglio resigned as our President and Chief Executive Officer effective October 30, 2014. In connection with Dr. Bonfiglio's resignation, we entered into a separation and release agreement with Dr. Bonfiglio which provided for the payment of severance consistent with the terms of his employment agreement with us in the amount of \$147,500 over six months in accordance with the Company's normal payroll practices, accrued vacation, and out

placement services. Dr. Bonfiglio's employment agreement was terminated in connection with the separation and release agreement. Amounts paid to Dr. Bonfiglio under the separation and release agreement are included under the column heading "All Other Compensation." Following Dr. Bonfiglio's separation from employment with us he did not exercise any outstanding options he had within the time period for doing so and as a result they were forfeited and included back in the Plan as available shares for future awards as contemplated by the Plan.

- (5) 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). Under SEC 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 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 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 9 "Stock Compensation Plan" in our financial statements for the year ended December 31, 2014.
- (6) Amounts in this column for Messrs. Sullivan and 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 Mr. Fosmoe, the amount represents the amounts paid to Integrated Consulting described in footnote 3 above. For Dr. Bonfiglio, \$49,167 of the 2014 amount is severance as described in footnote 4 above and \$7,375 of the 2014 amount and all of the 2013 amount represent the Company's matching contributions to our Simple IRA retirement plan.

Outstanding Equity Awards

The following table provides information concerning unexercised options outstanding as of December 31, 2014:

| Name | Number of securities underlying unexercised options (#) exercisable | Number of securities underlying unexercised options (#) unexercisable | Option exercise price (\$) | Option expiration date |
|---|--|--|--|--|
| Michael O. Sullivan Chief Financial Officer, Interim Principal Executive Officer | 45,000 | 40,000(1) 25,000(2) | 0.88 0.86 1.20 | 12/08/2024 10/30/2024 02/10/2022 |
| Dr. Martin Handfield Senior Vice President of Discovery Research | 15,000 12,500 2,500 16,800 | 40,000(1) 4,275(3) | $\begin{array}{c} 0.88 \\ 10.40 \\ 5.40 \\ 5.40 \\ 5.40 \\ 1.50 \end{array}$ | 12/08/2024 9/18/2018 12/01/2019 12/01/2019 12/01/2019 9/27/2021 |
| Albert Fosmoe Senior Vice President of Operations/Product Development | 33,333(4) | 40,000(1) | 0.88 2.84 | 12/08/2024 04/01/2024 |
| Dr. John Bonfiglio ⁽⁵⁾ (Former Chief Executive Officer) | 125,800 39,200 | | 4.76 1.50 | 5/24/2021 9/27/2021 |

(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 an award that is time vested in six months from the date of grant subject to earlier vesting upon a change of control as defined in the award agreements. The vesting date is April 30, 2015.

(3) Represents awards that vest upon the first calendar quarter in which we report a net profit in a Form 10-Q Report or a Form 10-K Report. This award expires on the earlier of (i) December 1, 2019 or (ii) such date we cease to be required to file quarterly or annual reports with the Securities and Exchange Commission.

(4) Represents awards in which 33,333 shares vested on April 1, 2014, subject to earlier vesting upon a change in control as defined in the award agreements. An additional 66,667 shares awarded in this grant were forfeited due to performance milestones that did not occur.

(5) Subsequent to December 31, 2014 all of the options listed in the table for Dr. Bonfiglio were not exercised by Dr. Bonfiglio within the time limits required by the Company's 2012 Equity Incentive Plan and Dr. Bonfiglio's award agreement. As a result, the right to acquire the shares was terminated and in accordance with the Plan terms the shares were included back in the Plan and are again available for issuance by the Company.

Employment Contracts and Change in Control Arrangements

Former President and Chief Executive Office, Dr. John Bonfiglio — Executive Employment Agreement.

Dr. Bonfiglio resigned as our President and Chief Executive Officer effective October 30, 2014. In connection with Dr. Bonfiglio's resignation, we entered into a separation and release agreement with Dr. Bonfiglio which provided for the payment of severance consistent with the terms of his employment agreement with us in the amount of \$147,500 over six months in accordance with the Company's normal payroll practices in addition to his accrued vacation and certain out-placement services. Dr. Bonfiglio's employment agreement was terminated in connection with the separation and release agreement.

We originally entered into an Executive Employment Agreement with Dr. Bonfiglio on May 23, 2011. Under the terms of Dr. Bonfiglio's Executive Employment Agreement, Dr. Bonfiglio's employment with us became effective May 25, 2011, and he received an annual base salary and was eligible for bonuses of up to 50% of his annual salary based on appropriate Company based, and individual based, targets determined in the discretion of the Compensation Committee as approved by the full Board of Directors. Dr. Bonfiglio was eligible to participate in the medical insurance and other benefits available to all employees except his annual vacation was set at four (4) weeks.

Dr. Bonfiglio's Executive Employment Agreement was terminable at any time by either party and if Dr. Bonfiglio was involuntarily terminated by us he would 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 he participated. In addition, if Dr. Bonfiglio's separation from employment was not voluntary and without cause, we would be obligated to pay Dr. Bonfiglio six months of his annual base salary as severance plus any earned, accrued but unpaid bonus and Dr. Bonfiglio shall be entitled to out placement service benefits. If Dr. Bonfiglio was terminated for cause, he would 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 Dr. Bonfiglio under the terms of the employee handbook or other applicable incentive plans maintained by us. Cause was defined in the Executive Employment Agreement as any action that was illegal or immoral that reflects on us, the employee, or the ability of either to function optimally. If Dr. Bonfiglio voluntarily resigned, he would be entitled to his 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 or key employee under the terms of the employee handbook or other incentive plans maintained by us.

If Dr. Bonfiglio had died during the term of his employment, the estate of Dr. Bonfiglio would have been paid his salary as it would have accrued over a period of thirty days after Dr. Bonfiglio's death. We would have also extended his right to exercise vested stock options for six months provided such extension is permitted under the Equity Incentive Plan. In the event Dr. Bonfiglio became disabled (as defined in the then applicable short and long-term disability insurance policies) we would pay to Dr. Bonfiglio his salary as it would have accrued over a period of 30 days after he became so disabled and we would have extended his right to exercise vested stock options for six months provided such extension is permitted under the Stock Incentive Plan.

The Executive Employment Agreement also included non-disclosure and Company ownership of development provisions, as well as a provision providing for us to defend and indemnify Dr. Bonfiglio if he was 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 Equity Incentive Plan would have become immediately vested in full and in the case of stock options exercisable in full. If the change in control resulted in an involuntary separation from employment within 180 days following a change in control, Dr. Bonfiglio would have been entitled to (i) receive six months of salary and the extension of his benefits (excluding vacation time and paid time off) for two months and (ii) exercise vested options for two months from the date of separation, provided said extension period is allowed under the Equity Incentive Plan. Under the Executive Employment Agreement, "involuntary separation of employment" meant (i) termination without cause, (ii) any reduction in responsibilities of office altering the status of Dr. Bonfiglio as an employee, or (iii) the duplication of Dr. Bonfiglio's position by an equivalent executive in an acquiring entity. "Change in control" meant 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; provided, such sale would qualify as a "change in ownership" "change in effective control" or "change in the ownership of substantially all of the assets" of the Company as these terms are defined in Treasury Regulation Section 1.409A-3(i)(5).

Employment Agreements—Mr. Sullivan, Dr. Handfield and Mr. Fosmoe

We have entered into employment agreements with our Chief Financial Officer, Mr. Michael Sullivan and Dr. Martin Handfield, our Vice-President of Research and Development (the "Employment Agreements"). The initial annual base salaries provided in the Employment Agreements are \$180,000 and \$171,000 for Mr. Sullivan and Dr. Handfield, respectively, and 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 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 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 applicable period) and any nonforfeitable benefits already earned and payable to 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 Stock 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 and an initial employment agreement with Mr. Fosmoe, our Senior Vice President of Operations/Product Development. 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.

Mr. Fosmoe's employment agreement was similar in form to Mr. Sullivan's amended and restated agreement in all respects, except for Mr. Fosmoe's designated annual base salary of \$232,000 and the percentage of base salary eligible for bonus awards, which for Mr. Fosmoe was up to 25% of his base salary.

Director Compensation

The Director compensation program for 2014 consisted of the following:

Non-employee directors

Cash Compensation. The Director compensation program for 2014 provided that all non-employee Directors would receive an annual base fee for service on the Board of \$24,000. In addition, the Chairperson of the Board and of our Audit Committee, Compensation Committee and Nominating Committee would also receive annual fees of \$25,000, \$20,000, \$15,000 and \$10,000, respectively. All non-employee Directors serving on committees (other than as the Chairperson) would receive an annual fee of \$5,000 in connection with such committee service. In addition, all non-employee Directors would receive a fee of \$2,000 for each in-person board meeting attended in excess of one per quarter 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 to be paid on or before the last business day of each quarter.

Equity Compensation. Equity compensation is issued to Directors upon joining our Board. Non-employee Directors receive a stock option for the purchase of 5,000 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. In connection with each annual meeting of shareholders commencing with the 2013 Annual Meeting, each continuing non-employee director would be granted an award of 10,000 fully vested shares of the Company's common stock under the Company's 2012 Equity Incentive Plan. As part of the Director compensation program, the Board may also make discretionary equity based awards from time to time under the Company's 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

On November 14, 2011, the Compensation Committee and Board of Directors approved a change in the Company's director compensation program to add a long term performance based equity incentive component for the non-employee directors (the "Non-Employee Director LTIP Program"). The Non-Employee Director LTIP Program was an incentive program designed to motivate the non-employee directors to achieve the Company's financial and other performance objectives and to reward them if, and when, those objectives are met. The Non-Employee Director LTIP Program included, upon adoption, a one-time retention award to each non-employee director of common stock from the Company's Equity Incentive Plan. In addition, the Non-Employee Director LTIP Program provided for the award of shares of common stock as compensation to non-employee directors of the Company. The shares would be issued to non-employee directors during the term of the Non-Employee Director LTIP Program, subject to the satisfaction of applicable performance goals (as described below). The non-employee director participants are eligible to receive shares of common stock if they continue to serve the Company as directors through the first to occur of either of the following: (i) the Company's achievement, on or before December 31, 2013 (the "Termination Date"), of the various "Performance Goals" set forth below, or (ii) the effective date of a "Change in Control" of the Company that occurs at any time on or before the Termination Date. The Non-Employee Director LTIP Program is comparable in all respects to the long-term incentive plan for the designated executive officers and employee Director LTIP Program is comparable in all

Awards under the Non-Employee Director LTIP Program were subject to being credited to participants, up to target levels, to the extent that the performance goals were satisfied, as determined by the Compensation Committee and Board. Upon the occurrence of a "Performance Vesting Date" with respect to a "Performance Goal," a participant would be entitled to receive a number of shares of Common Stock determined by multiplying (1) the award percentage (each, an "Award Percentage") corresponding to that particular Performance Goal as set forth in their award agreement by (2) the total number of outstanding shares of Common Stock, determined on a non-fully diluted basis, as of that particular applicable Performance Vesting Date. For purposes of an award, the "Performance Vesting Date" with respect to a Performance Goal would be the day on which the Compensation Committee of the Company's Board of Directors certified and determined, in its reasonable discretion, that the applicable Performance Goal had been achieved. Participants were required to remain directors of the Company through the date on which the Compensation Committee made a final determination under the Non-Employee Director LTIP Program with respect to the satisfaction of the performance goals during the performance period.

The Non-Employee Director LTIP Program provided for share awards upon the Company achieving any of the following performance goals: (i) achievement of Company fiscal year sales equal or greater than \$10,000,000; (ii) achievement of Company fiscal year sales equal or greater than \$20,000,000; (iii) achievement by the Company of cash flow positive in any fiscal quarter; (iv) achievement by the Company of earnings per share in any fiscal year equal or greater than \$0.02 per share of Company stock; (v) achievement of price per share of Company stock equal to \$10.00; (vi) achievement of price per share of Company stock equal to \$20.00; (vii) licensing of any science technology which results in upfront cash receipt of \$2M; or (viii) capital raise by the Company of \$5,000,000 in both fiscal years or a \$10,000,000 in a single raise.

The award percentages for each non-employee director for the achievement of each designated Performance Goal were the same for each non-employee director and upon commencement of the program were as follows:

| Non-Emp. Director | \$10M Sales | \$20M Sales | Positive CF | EPS Goal | \$10 Share Price | \$20 Share Price | License Technology | Company Capital Raise |
|-------------------|----------------|----------------|----------------|-------------|---------------------|---------------------|-----------------------|-----------------------------|
| | 0.11% | 0.09% | 0.11% | 0.16% | 0.11% | 0.06% | 0.09% | 0.16% |

Amendment to Long Term Incentive Component. On February 11, 2013, the Board considered and approved amendments to the Non-Employee Director Program which is administered under the Company's 2012 Equity Incentive Plan. The amendments consist of (i) an extension of the Termination Date in the individual award agreements from December 31, 2013 to December 31, 2014 (the "Amended Termination Date"); and (ii) the addition of four new performance goals. These changes were considered by the Committee to be in the best interest of the Company and necessary to attract and retain highly qualified directors to serve on the Company's Board. The Board also ratified and approved the changes to the director compensation program.

The specific additional Performance Goals added and the Award Percentages for the participating non-employee directors were as follows:

(ix) Successful filing and acceptance by the FDA of an IND on first lantibiotic candidate.

(x) First dose of a lantibiotic administered to a patient under a Company sponsored clinical study.

(xi) Capital raise by the Company of \$12,000,000 or more in a single year.

(xii) Broaden Intrexon relationship to include new area outside of lantibiotics as evidenced by a Board approved amended or new collaboration agreement that includes a new therapeutic area.

| | | Performance Goals/Award Percentages | | | | |
|-----------------------|----------------------------|---|----------------------------------|---|--|--|
| | (ix) Lantibiotic IND | (x) Human Exposure to Lantibotic | (xi) Company Capital Raise | (xii) Expand Existing or Enter into New Collaboration Agreement | | |
| Non-Employee Director | | | | | | |
| | 0.11% | 0.11% | 0.11% | 0.11% | | |

The amendments were implemented by amending the non-employee director participants' original Award Agreements.

Long Term Incentive Component-Change of Control. In the event a Change in Control of the Company occurs, each nonemployee director would have been entitled to receive the full amount of the shares with respect to any Performance Goal as to which the related Performance Vesting Date did not occur prior to the date of the Change in Control as though the Performance Goal had been fully achieved as of the time of the Change in Control except with respect to the Share Appreciation Goals which will depend on the price per share of any change in control transaction. The term "Change in Control" for purposes of an award meant: a "Corporate Transaction" as defined in the Company's Equity Incentive Plan.

Assuming a Change of Control event would have occurred during the Non-Employee Director LTIP Program period as amended, and based upon the current level of the Company's outstanding shares of common stock and all remaining unachieved performance based awards being vested (including share appreciation awards), each non-employee director would have been entitled to receive 343,225 shares and an aggregate for all non-employee directors 1,716,125 shares. Copies of the form of long term incentive plan award agreement and amendment for non-employee directors approved by the Committee and Board were previously filed with the SEC.

Termination of Long-Term Performance Based Incentive Programs. The performance periods for the Non-Employee Director LTIP Program ran from January 1, 2012 through December 31, 2014. The program expired in accordance with its terms on December 31, 2014. This program resulted in no shares of common stock being issued in aggregate to our non-employee directors during the year ended December 31, 2014. Under the Non-Employee Director LTIP Program an aggregate of 357,910 shares were issued to our non-employee directors during the period in which the program was in place based upon the achievement of certain of the designated performance goals.

The following table sets forth the compensation of our non-employee Directors in 2014.

Director Compensation Table

| Name | earned or in cash(1) | Stock Awards ⁽²⁾ | Option awards | other nsation ⁽³⁾ | Total |
|--------------------------|-------------------------|--------------------------------|------------------|---------------------------------|-----------|
| Dr. Frederick W. Telling | \$ 89,500 | \$ 20,500 | \$ — | \$ | \$110,000 |
| Robert C. Koski | \$ 33,000 | \$ 20,500 | \$ — | \$ — | \$ 53,500 |
| Christine L. Koski | \$ 37,000 | \$ 20,500 | \$ — | \$ | \$ 57,500 |
| Charles L. Pope | \$ 71,500 | \$ 20,500 | \$ — | \$ — | \$ 92,000 |
| Dr. Alan W. Dunton | \$ 58,000 | \$ 20,500 | \$ — | \$ — | \$ 78,500 |

(1) Amounts represent cash compensation earned by Directors during 2014 in connection with their Board service including service in connection with special committees established by the Board.

(2) As part of the Company's non-employee Director compensation program and in connection with the Company's annual meeting, on May 30, 2014, each continuing non-employee Director (Frederick Telling, Charles Pope, Alan Dunton, Christine Koski and Robert Koski) was granted an award of 10,000 fully vested shares of the Company's common stock under the Company's 2012 Equity Incentive Plan. The grant date fair value of these shares was \$2.05 per share.

(3) No other compensation was paid to the non-employee Directors except for reimbursement for travel expenses to Board meetings, which did not exceed \$10,000 individually or in the aggregate for our non-employee Directors.

Employee Directors

The Director compensation program provides that employee Directors receive no additional compensation in connection with their board service.

Director Compensation Program Changes-2015

On March 16, 2015, the Compensation Committee of the Board of Directors (the "Compensation Committee") recommended and approved, and the Board of Directors approved, changes to the Director Compensation program, which included a program of equity based awards from the Company's 2012 Equity Incentive Plan (the "2012

Plan") described below which are intended to align the Board's interests with stockholders over a long-term basis and thereby replace the expired Non-Employee Director LTIP Program and changes to cash compensation. With respect to non-employee directors, the new equity based program also provides for equity awards in the form of stock options and in the form of restricted stock to be split 66% and 33%, respectively. The new equity based programs also include a minimum dollar value stock ownership requirement which is described below.

Non-Employee Director Option Awards. On March 16, 2015, in connection with and in furtherance of the new equity based award program, the Board approved stock option awards in the amount of 80,000, to each of the Company's non-employee directors, Frederick Telling, Charles Pope, Alan Dunton, Christine Koski and Robert Koski, under the Company's 2012 Equity Incentive Plan, at an exercise price of \$1.32 per share, the closing price on March 16, 2015, the date of grant. The options are subject to time-based vesting in equal annual installments over a three-year period on the first, second and third anniversaries of the date of the grant, provided that the recipient remains a director of the Company through the vesting dates. The stock option awards are subject to the standard terms and conditions of the Company's form of stock option agreement which include early vesting upon a change in control of the Company.

Non-Employee Director Restricted Stock Awards. Dr. Telling, Mr. Pope, Dr. Dunton, Ms. Koski and Mr. Koski were each also awarded 40,000 restricted shares of Company common stock under the Company's 2012 Plan of which 10,000 restricted shares will vest at the end of each calendar quarter in 2015 provided the recipient remains a director through the vesting date. The restricted stock awards are subject to the standard terms and conditions of the Company's form of restricted stock agreement which include early vesting upon a change in control of the Company.

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) below which dollar threshold they would be precluded from selling shares of Company stock acquired from the Company under its 2012 Equity Incentive Plan.

Non-Employee Director 2015 Cash Compensation. On March 16, 2015, the Board of Directors approved certain adjustments to the cash compensation of non-employee directors with certain increases as a result of the significant amount of additional time spent by Board members on Company matters due to, among other factors, an increase in the number of expected in-person meetings during the year and the Company's current vacancy in the position of Chief Executive Officer. The increases in Board committee services fees were to bring them in line with similarly sized companies. The table below compares the cash compensation to non-employee directors for 2014 with the new cash compensation for 2015.

| | 2014 | 2015 | Increase |
|----------------------------|----------|----------|----------|
| Board: | | | |
| Board Service - retainer | \$24,000 | \$45,000 | \$21,000 |
| Board Chairperson | \$25,000 | \$40,000 | \$15,000 |
| Audit Committee: | | | |
| Audit Chairperson | \$20,000 | \$20,000 | |
| Committee member - service | \$ 5,000 | \$10,000 | \$ 5,000 |
| Compensation Committee: | | | |
| Compensation Chairperson | \$15,000 | \$15,000 | _ |
| Committee member - service | \$ 5,000 | \$ 7,500 | \$ 2,500 |
| Nominating Committee: | | | |
| Nominating Chairperson | \$10,000 | \$10,000 | |
| Committee member - service | \$ 5,000 | \$ 5,000 | — |

In connection with the above Director Compensation changes, the Board is expecting to meet in-person for a minimum of six meeting in 2015. 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.

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

The following table sets forth, as of April 20, 2015, certain information concerning the beneficial ownership of each class of our voting securities by: (i) each person known by us to own beneficially 5% or more of the outstanding shares of our common stock, (ii) each of our Directors and named executive officers, and (iii) all executive officers and Directors as a group.

| Name and address(1) | Number of shares beneficially owned | Percentage of ownership(2) |
|--|---|----------------------------------|
| 5% shareholders | | |
| Koski Family Limited Partnership ⁽³⁾ | 11,248.660 | 30.7% |
| Randall J. Kirk ⁽⁴⁾ | 9,839,221 | 27.0% |
| Fidelity ⁽⁵⁾ | 2,795,566 | 7.3% |
| Directors and officers | | |
| Christine L. Koski ⁽³⁾⁽⁶⁾ | 9,410,265 | 25.8% |
| Robert C. Koski ⁽³⁾ (7) | 9,556,471 | 26.2% |
| Charles L. Pope ⁽⁸⁾ | 216,063 | * |
| Dr. Alan Dunton ⁽⁸⁾ | 162,688 | * |
| Dr. Frederick W. Telling ⁽⁸⁾ | 361,174 | * |
| Michael Sullivan ⁽⁹⁾ | 212,543 | * |
| (All Directors and officers as a group 7 persons) (10) | 12,730,788 | 34.6% |

* Beneficial ownership percentage is less than 1%.

- (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 April 20, 2015, 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 36,378,944 shares of the Common Stock outstanding as of April 20, 2015. 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 the Koski Family Limited Partnership, or KFLP, in the amendment to its Schedule 13D filing with the SEC on January 23, 2015 and Form 4 filings of February 27, 2014, March 12, 2014, March 14, 2014, March 27, 2014, March 30, 2014, June 3, 2014, November 12, 2014, November 13, 2014, November 20, 2014, November 25, 2014, December 2, 2014, December 4, 2014, December 11, 2014, December 12, 2014, December 15, 2014 and December 16, 2014, includes (i) 8,257,742 shares held directly by the KFLP, and (ii) 1,152,523 shares held by KFLP partner Christine Koski, 737,878 shares held by KFLP partner Robert Koski, 20,000 shares held by KFLP partner Koski Management, Inc. (solely owned by Beverly Koski), 519,666 shares held by KFLP partner, Thomas Koski, and 530,851 shares held in trusts which Robert Koski serves as sole trustee (See Note 7 below). 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.
- (4) Based upon information provided by Schedule 13D filings with the SEC, dated June 12, 2012, August 3, 2012, October 2, 2013, November 2, 2013 and December 26, 2013 the number of shares includes (i) 8,838,661 shares owned directly by Intrexon Corporation ("Intrexon") that is controlled by Mr. Randal J. Kirk, and (ii) 1,000,555 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

⁽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.

may therefore be deemed to have voting and dispositive power over the 1,000,555 shares of common stock owned by NRM Holdings and the 8,838,661 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.

- (5) Based upon information contained in Schedule 13G/A filed with the SEC on February 13, 2015, Fidelity Management & Research Company ("Fidelity"), 82 Devonshire Street, Boston, Massachusetts 02109, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 2,795,566 shares of the Company as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Edward C. Johnson 3d and FMR LLC, through its control of Fidelity, and the funds each has sole power to dispose of the 2,795,566 shares owned by the Funds. Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d, Chairman of FMR LLC, has the sole power to vote or direct the voting of the shares owned directly by the Fidelity funds, which power resides with the Funds' Boards of Trustees. Fidelity carries out the voting of the shares under written guidelines established by the Funds' Boards of Trustees.
- (6) In addition to the 8,257,742 shares reflected as being directly owned by the KFLP, described in Note 3, the share amounts also include: (i) 1,056,253 shares owned directly by Ms. Koski, and (ii) 30,000 restricted shares awarded as part of the Company's non-employee director compensation program that are subject to forfeiture during 2015.
- (7) In addition to the 8,257,742 shares reflected as directly owned by the KFLP, described in Note 3, the share amounts also includes: (i) 737,878 shares owned directly by Mr. Koski , (ii) 530,851 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 (107,600 shares); The Robert Clayton Koski Trust for the benefit of Hunter Buchanan Koski (107,600 shares); The Robert Clayton Koski Trust for the benefit of Clayton Ward Bennett (100,000 shares); and The Robert Clayton Koski Trust for the benefit of Robert Edward Koski (107,600 shares) and the Robert Clayton Koski Trust for the benefit of Elyse Margaux Koski (108,051 shares), and (iii) 30,000 restricted shares subject to forfeiture during 2015.
- (8) Includes: (i) 55,000 option shares able to be acquired upon the exercise of currently exercisable stock options granted pursuant to our Director compensation program and (ii) Excludes 30,000 restricted shares awarded as part of the Company's non-employee director compensation program that are subject to forfeiture during 2015. Excludes 80,000 shares subject to options that have not yet vested.
- (9) Includes 70,000 shares able to be acquired pursuant to currently exercisable stock options and excludes 240,000 shares subject to options that have not yet vested.
- (10) Excludes 20,000 shares owned directly by Koski Management, Inc. (solely owned by Beverly Koski), and 519,666 shares owned directly by Thomas Koski, neither of which are directors or employees of the Company, but both of which are general partners of the KFLP. If such shares were included the beneficial ownership percentage of the group would be 36.0%.

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, 2014 with respect to the 2012 Equity Incentive Plan:

| | Number of Securities to be Issued Upon Exercise of Outstanding Options | Av Ex Pr Outs | ighted- erage ercise ice of icanding otions | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A)) |
|--|--|------------------------|--|---|
| Plan Category | (A) | | (B) | (C) |
| Equity compensation plans approved by stockholders: | | | | |
| 2012 Equity Incentive Plan | 820,865 | \$ | 4.03 | 1,501,673 |
| Equity compensation plans not approved by stockholders: (1) | | | | |
| None | | \$ | | |
| Total: | 820,865 | \$ | 4.03 | 1,501,673 |

⁽¹⁾ The Company does not have any equity compensation plans that have not been approved by security holders. The Company does have warrants to acquire 2,532,094 shares of common stock outstanding at a weighted average exercise price of \$1.93 per share.

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

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 of 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

March 2012 Conversion of Credit Facility Indebtedness and Entering Into New Secured Loan Agreement

On March 23, 2012, we entered into an Exchange of Notes for Equity Agreement (the "Debt Exchange Agreement") with the Koski Family Limited Partnership ("KFLP"). Our directors Christine Koski and Robert Koski are general partners of the KFLP and one of our largest shareholders. Pursuant to the terms of the Debt Exchange Agreement, we issued 6,285,619 shares of common stock and warrants to acquire 1,571,405 shares of common stock to the KFLP in exchange for the cancellation of an aggregate of \$8,737,011 of indebtedness owed to the KFLP under our then existing unsecured revolving credit facility with the KFLP. The outstanding indebtedness, consisted of \$8,250,000 in principal owed on twelve separate promissory notes previously issued by us to the KFLP under the credit facility and accrued interest through March 23, 2012 (the closing date) of \$487,011. The credit facility was terminated and the previously issued promissory notes thereunder were cancelled. The warrants were exercisable immediately at a price per share of \$2.00 and expired three (3) years after the date of issuance on March 23, 2015.

On March 23, 2012, we also entered into a secured loan agreement (the "Loan Agreement") with the KFLP. It provided us with \$2.5 million in secured funding in two advances of \$1,250,000 each with the first advance occurring on March 23, 2012 and the second advance occurring 30 days thereafter. Borrowings under the Loan Agreement matured in three years and accrued interest at the rate of 5.0% and were secured by select assets relating to or connected with the ProBiora3, SMaRT Replacement Therapy, MU1140 and LPT3-04 technologies. The loan amount was subject to automatic conversion upon a subsequent qualified equity financing by us of \$5,000,000 (excluding any converted debt amount). Pursuant to the Loan Agreement we also issued a warrant to the KFLP to acquire 599,520 shares of our common stock. The warrants were exercisable immediately at a price per share of \$2.00 and expired three (3) years after the date of issuance on March 23, 2015.

The Lantibiotic Exclusive Channel Collaboration Agreement with Intrexon Corporation ("Intrexon")

On June 5, 2012, the Company entered into an ECC with Intrexon that governs a "channel partnering" arrangement in which the Company 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 methyllanthonine (collectively, the "Lantibiotics Program"). The ECC establishes committees comprised of Company 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.

The ECC grants the Company 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, the Company may not sublicense the rights described without Intrexon's written consent.

Under the ECC, and subject to certain exceptions, the Company is responsible for, among other things, funding the further anticipated development of lantibiotics toward the goal of commercialization, conducting preclinical 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.

Subject to certain expense allocations and other offsets provided in the ECC, the Company will pay Intrexon on a quarterly basis 25% of gross quarterly profits derived in that quarter from the sale of products developed from the ECC, calculated on an Oragenics Product-by-Oragenics Product basis. The Company has likewise agreed to pay Intrexon on a quarterly basis 50% of revenue obtained in that quarter from a sublicensor in the event of a sublicensing arrangement.

During the first 18 months of the agreement, neither the Company nor Intrexon may terminate the ECC, except under limited circumstances, including in the event of a material breach by the other party and Intrexon may terminate the ECC under certain circumstances if the Company assigns its rights under the ECC without Intrexon's consent. Following the first 12 months of the agreement, Intrexon may also terminate the ECC if the Company fails to use diligent efforts to develop and commercialize Oragenics Products or if the Company elects not to pursue the development of a Lantibiotics Program identified by Intrexon that is a "Superior Therapy" as defined in the ECC. Following the first 18 months of the agreement, the Company may voluntarily terminate the ECC at any time upon 90 days written notice to Intrexon.

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

- commercialized by the Company;
- 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 the Company).

The Company's obligation to pay 25% of gross profits or revenue described above 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 ECC.

In addition, in partial consideration for each party's execution and delivery of the ECC, the Company entered into a Stock Issuance Agreement with Intrexon. Pursuant to the Stock Issuance Agreement the Company issued to Intrexon 4,392,425 shares of the Company common stock as an initial technology access fee, in consideration for the execution and delivery of the ECC and granted Intrexon certain equity participation rights and registration rights.

Under the Stock Issuance Agreement and as part of the ECC, the Company has also agreed to make certain payments to Intrexon upon the Company's achievement of designated milestones in the form of shares of Company Common Stock or at the Company's option make a cash payment to Intrexon (based upon the fair market value of the shares otherwise required to be issued). The milestone events and amounts payable are as follows:

(i) upon filing of the first Investigational New Drug application with the U.S. Food and Drug Administration for an Oragenics Product, that number of shares equal to the number of shares of Common Stock comprising 1.0% of the Base Shares;

(ii) upon the dosing of the first patient in the first Phase 2 clinical study with an Oragenics Product, that number of shares equal to the number of shares of Common Stock comprising 1.5% of the Base Shares;

(iii) upon the dosing of the first patient in the first Phase 3 clinical study with an Oragenics Product, that number of shares equal to the number of shares of Common Stock comprising 2% of the Base Shares;

(iv) upon the filing of the first New Drug Application ("NDA") or Biologics License Application ("BLA") with the U.S. Food and Drug Administration for an Oragenics Product, or alternatively the filing of the first equivalent regulatory filing with a foreign regulatory agency, that number of shares equal to the number of shares of Common Stock comprising 2.5% of the Base Shares; and

(v) upon the granting of the first regulatory approval of an Oragenics Product, that number of shares equal to the number of shares of Common Stock comprising 3% of the Base Shares.

Base Shares is defined in the Stock Issuance Agreement to mean (i) the number of shares of Company common stock together with any securities or instruments convertible or exercisable for shares of common stock issued and outstanding at the time of the applicable milestone event, (ii) minus any shares issuable upon conversion of Capital Inducement Securities. Capital Inducement Securities is defined in the Stock Issuance Agreement to mean warrants or other convertible securities of the Company issued to investors in connection with a debt or equity investment in the Company that are issued in addition to the primary investment securities and in an amount not to exceed 10% of the overall number of shares issued in the investment (on an as-converted to common stock basis).

During the year ended December 31, 2014 and 2013, we paid \$866,030 and \$1,463,019, respectively, to Intrexon relating to work performed under the Lantibiotics ECC.



July 2012 Private Placement Financing and Conversion of Secured Loan Agreement

On July 31, 2012, the Company closed on a private placement of its common stock (the "July 2012 Private Placement") pursuant to which it issued an aggregate of 8,666,665 shares of common stock at a \$1.50 per share and received gross proceeds of \$13.0 million. The terms of Loan Agreement between the Company and KFLP, which was entered into on March 23, 2012, provided for the automatic conversion of the secured debt represented by the Loan Agreement at the time of a "qualified financing" defined as a financing by the Company raising an amount of no less than \$5.0 million on the same terms as such financing. Because the July 2012 Private Placement constituted a "qualified financing" under the terms of the Company's Loan Agreement with the KFLP, the Company's secured debt in the principal amount of \$2.5 million, together, with accrued but unpaid interest thereon, due to the KFLP pursuant to the Loan Agreement was automatically converted contemporaneously with the closing of the July 2012 Private Placement into 1,692,123 shares of common stock. The shares of common stock were issued to the KFLP based upon the same price of \$1.50 per share paid by the purchasers in the July 2012 Private Placement. The KFLP waived receiving comparable registration rights as the purchasers in the July 2012 Private Placement as well as its piggyback registration rights. Intrexon also waived its piggyback registration rights and waived its participation rights. As a result of the conversion of the secured indebtedness, the Loan Agreement together with the related Security Agreement and related loan agreements were terminated and are of no further force or effect.

Our Chairman, Dr. Frederick Telling participated in the July 2012 Private Placement and acquired 98,111 shares at \$1.50 per share. Our disinterested directors approved the participation of Dr. Telling in the July 2012 Private Placement.

NRM VII Holdings I, LLC ("NRM Holdings"), a Delaware limited liability company acquired 857,555 shares of common stock in the July 2012 Private Placement and is the record and direct beneficial owner of the shares. NRM Holdings is controlled by Randal J. Kirk. An additional 4,392,425 shares of our common stock are owned by Intrexon Corporation, a Virginia corporation of which Mr. Kirk is the Chairman and Chief Executive Officer 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 857,555 shares of common stock and the 4,392,425 shares of common stock owned by Intrexon Corporation. Mr. Kirk disclaims beneficial ownership of such shares, except to the extent of any pecuniary interest therein.

September 2013-The Probiotics Exclusive Channel Collaboration Agreement with Intrexon

On September 30, 2013, the Company entered into the Probiotics ECC with Intrexon that governs a "channel collaboration" arrangement in which the Company will use Intrexon's proprietary technology relating to the identification, design and production of genetically modified cells, DNA vectors and in vivo control of expression (the "Technology") for the development and commercialization of probiotics, specifically the direct administration to humans of genetically modified probiotics for the treatment of diseases of the oral cavity, throat, sinus and esophagus, including, but not limited to, aphthous stomatitis and Behcet's disease (collectively, the "Probiotics Program"). The Probiotics ECC establishes committees comprised of Company and Intrexon representatives that will govern activities related to the Probiotics Program in the areas of project establishment, chemistry, manufacturing and controls matters, clinical and regulatory matters, commercialization efforts and intellectual property matters.

The Probiotics ECC grants the Company an exclusive worldwide license to utilize Intrexon's Technology to develop and commercialize probiotics, specifically the direct administration to humans of genetically modified probiotics for the treatment of diseases of the oral cavity, throat, sinus and esophagus ("Company Products"). Such license is exclusive with respect to any clinical development, selling, offering for sale or other commercialization of Company Products, and otherwise is non-exclusive. Subject to limited exceptions, the Company may not sublicense the rights described without Intrexon's written consent.

Under the Probiotics ECC, and subject to certain exceptions, the Company is responsible for, among other things, funding the further anticipated development of probiotics toward the goal of commercialization, conducting preclinical and clinical development of candidate probiotics, 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.

The Company will pay Intrexon 10% of the net sales derived from the sale of products developed from the exclusive channel collaboration relating to the Probiotics Program. The Company has likewise agreed to pay Intrexon a percentage of revenue obtained from a sublicensee in the event of a sublicensing arrangement. The percentage of the revenue to be paid will be determined at the time that a sublicense agreement is negotiated.

The Company may voluntarily terminate the Probiotics ECC upon 90 days written notice to Intrexon. Intrexon may also terminate the Probiotics ECC if the Company breaches the Probiotics ECC and fails to cure the breach within 60 days or the Company does not pursue development of the Superior Therapy under the probiotics identified by Intrexon that is a "Superior Therapy" as defined in the Probiotics ECC.

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

- commercialized by the Company;
- 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 of the Probiotics Program.

In addition, in partial consideration for each party's execution and delivery of the Probiotics ECC, on September 30, 2013 the Company entered into a Stock Purchase and Issuance Agreement and a First Amendment to the Stock Purchase and Issuance Agreement (collectively the "SPIA") with Intrexon. Pursuant to the SPIA, the Company paid Intrexon an up-front technology access fee of \$6,000,000 (the "Technology Access Fee") in consideration for the execution of the Probiotics ECC. The Technology Access Fee was paid to Intrexon by the Company through the (i) issuance of 1,348,000 (at \$3.00 per share) shares of the Company's common stock (the "Technology Access Shares"), and (ii) a convertible promissory note in the amount of \$1,956,000 which is payable, at the Company's option, in cash or shares of Company common stock (the "Convertible Note"). The Convertible Note matured on December 31, 2013 and required the Company to obtain shareholder approval prior to conversion of the Convertible Note. The conversion price is equal to the closing price per share of the Company's common stock on the last trading day immediately prior to the date of conversion.

Under the SPIA and as part of the Probiotics ECC, the Company has also agreed to make certain payments to Intrexon upon the Company's achievement of designated milestones. The milestone payments are each payable to Intrexon, at the Company's election (subject to an election right of Intrexon if the milestone is achieved by a sublicensee), either in cash or in shares of Company common stock (using the fair market value of the shares to calculate the number of shares to be issued to Intrexon in lieu of cash). The Commercialization Milestone Events and amounts payable are as follows:

- \$2,000,000 within thirty (30) days of the dosing of a patient by or on behalf of the Company, or an Affiliate (as that term is defined in the Probiotics ECC) or permitted sublicensee of the Company, in a phase II clinical trial, whether such occurs in the United States of America under the jurisdiction of the United States Food and Drug Administration ("FDA") or elsewhere under the jurisdiction of a foreign regulatory agency, for a Company Product;
- \$5,000,000 within thirty (30) days of the first meeting of the primary endpoint by or on behalf of the Company, or an Affiliate or permitted sublicensee of the Company, in a phase III clinical trial, whether such occurs in the United States of America under the jurisdiction of the FDA or elsewhere under the jurisdiction of a foreign regulatory agency, for a Company Product;
- \$10,000,000 within thirty (30) days of the first to occur of (a) the First Commercial Sale (as that term is defined in the Probiotics ECC) of a Company Product, or (b) the approval of a New Drug Application (as that term is defined in the Probiotics ECC) for a Company Product by the FDA or equivalent regulatory action in a foreign jurisdiction.

On September 30, 2013 the Company also sold to Intrexon 1,300,000 shares of the Company's common stock at a price per share of \$3.00 for gross proceeds of \$3,900,000. The Company intends to use the proceeds from this sale of common stock towards development of the Company's key initiatives relating to the Probiotics Program, and general corporate purposes.

During the year ended December 31, 2014 and 2013, we paid \$46,892 and \$0, respectively, to Intrexon relating to work performed under the Probiotics ECC.

Participation in Underwritten Public Offering-November 2013

On November 20, 2013, the Company completed an underwritten public offering of 4,400,000 shares of common stock at a public offering price of \$2.50 per share resulting in gross proceeds of \$11,000,000. Intrexon participated in this public offering acquiring 1,242,490 shares of our common stock.

Repayment of Intrexon Convertible Note-December 2013

On December 18, 2013, the Company issued to Intrexon 698,241 shares of Company common stock in connection with the conversion of the Convertible Note and accrued interest previously issued by the Company to Intrexon on September 30, 2013 as partial consideration for the Technology Access Fee required by the Exclusive Channel Collaboration Agreement entered into with respect to the Company's probiotics research and development. The Note was payable to Intrexon, at the Company's option, in cash or shares of Company common stock prior to the maturity date of December 31, 2013 and the conversion price was equal to the closing price on the NYSE MKT of the Company's common stock on the last trading day immediately prior to the date of conversion which was \$2.82 per share.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

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 | 2014 | 2013 |
|-----------------------|-----------|-----------|
| Audit Fees(1) | \$122,000 | \$157,100 |
| Audit-Related Fees(2) | | _ |
| Tax Fees(3) | 14, 010 | 13,280 |
| All Other Fees(4) | | |
| | \$136,010 | \$170,380 |

- (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 SEC, 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 MHM in 2014. In 2013, the Company previously reported \$13,867 was paid to third-party consultants for audit compliance services. Because these fees were not paid to MHM, the amount has been removed from the table for the 2013 period. MHM leases substantially all of its personnel, who work under the control of MHM shareholders, from wholly owned subsidiaries of CBIZ, Inc., in an alternative practice structure.

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 SEC's 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.



PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

Incorporated by reference to the Exhibit Index immediately following the signature page.

SIGNATURES

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

Dated: April 27, 2015

ORAGENICS, INC.

By: /s/ Michael Sullivan

Michael Sullivan, Chief Financial Officer (Principal Financial Officer and Principal Executive Officer)

EXHIBIT INDEX TO FORM 10-K/A

EXHIBIT INDEX

| | | Incorporated by Reference | | | | |
|-------------------|--|---------------------------|------------|-----------------|----------------|-------------------|
| Exhibit number | Exhibit description | Form | File no. | <u>Exhibi</u> t | Filing date | Filed herewith |
| 3.1 | Amended and Restated Articles of Incorporation | SB-2 | 333-100568 | 3.3 | 10/16/02 | |
| 3.2 | Articles of Amendment to Amended and Restated Articles of Incorporation | 8-K | 001-32188 | 10.2 | 10/30/09 | |
| 3.3 | Articles of Amendment to Amended and Restated Articles of Incorporation | 8-K | 001-32188 | 3.1 | 9/27/10 | |
| 3.4 | Articles of Amendment to Amended and Restated Articles of Incorporation | 8-K | 001-32188 | 3.1 | 09/01/11 | |
| 3.5 | Bylaws | SB-2 | 333-100568 | 3.2 | 10/16/02 | |
| 3.6 | First Amendment to Bylaws | 8-K | 001-32188 | 3.1 | 6/9/10 | |
| 3.7 | Second Amendment to Bylaws | 8-K | 001-32188 | 3.1 | 8/24/10 | |
| 4.1 | Specimen Stock Certificate | S-1/A | 333-169031 | 4.0 | 10/05/10 | |
| 10.1 | Exclusive License Agreement between the Company and the University of Florida Research Foundation, Inc. effective August 4, 1998 for Replacement Therapy for Dental Caries (the "Replacement Therapy License Agreement") | SB-2 | 333-100568 | 10.1 | 10/16/02 | |
| 10.2 | First Amendment to Replacement Therapy License Agreement dated September 15, 2000 | SB-2 | 333-100568 | 10.2 | 10/16/02 | |
| 10.3 | Second Amendment to Replacement Therapy License Agreement dated June 2002 | SB-2 | 333-100568 | 10.3 | 10/16/02 | |
| 10.4 | Third Amendment to Replacement Therapy License Agreement dated September 25, 2002 | SB-2 | 333-100568 | 10.4 | 10/16/02 | |
| 10.5 | Fourth Amendment to Replacement Therapy License Agreement dated March 2003 | SB-2/A-3 | 333-100568 | 10.36 | 4/9/03 | |
| 10.6 | Fifth Amendment to Replacement Therapy License Agreement dated April 19, 2013 | 8-K | 001-32188 | 10.2 | 4/23/13 | |
| 10.7 | Standard Exclusive License Agreement with Sublicensing Terms between the Company and the University of Florida Research Foundation, Inc. effective June 22, 2000 (the "MU1140 License Agreement") | SB-2 | 333-100568 | 10.5 | 10/16/02 | |
| 10.8 | First Amendment to the MU1140 License Agreement dated September 15, 2000 | SB-2 | 333-100568 | 10.6 | 10/16/02 | |
| 10.9 | Second Amendment to the MU1140 License Agreement dated June 10, 2002 | SB-2 | 333-100568 | 10.7 | 10/16/02 | |
| 10.10 | Third Amendment to the MU1140 License Agreement dated September 25, 2002 | SB-2 | 333-100568 | 10.4 | 10/16/02 | |
| 10.11 | Fourth Amendment to the Antimicrobial Polypeptide License Agreement dated March 2003 | SB-2/A-3 | 333-100568 | 10.36 | 4/9/03 | |
| 10.12 | Fifth Amendment to the Antimicrobial Polypeptide License Agreement dated April 19, 2013 | 8-K | 001-32188 | 10.1 | 4/23/13 | |
| 10.13 | License Agreement by and between Oragenics Inc. and Texas A&M University System dated December 20, 2011 | 10 - K | 001-32188 | 10.28 | 4/16/12 | |

| Exhibit number Exhibit description | | | Incorporated by Reference | | | |
|---------------------------------------|---|---------------|----------------------------------|----------------|-------------------|---|
| | <u>Form</u> | File no. | <u>Exhibit</u> | Filing date | Filed herewith | |
| 10.14 | Exclusive Channel Collaboration Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of June 5, 2012.* | 8-K | 001-32188 | 10.1 | 6/11/12 | |
| 10.15 | Stock Issuance Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of June 5, 2012. | 8-K | 001-32188 | 10.2 | 6/11/12 | |
| 10.16 | Exclusive Channel Collaboration Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of September 30, 2013.* | 8-K | 001-32188 | 10.1 | 10/01/13 | |
| 10.17 | Stock Purchase and Issuance Agreement by and between Oragenics, Inc. and Intrexon Corporation dated as of September 30, 2013. | 8-K | 001-32188 | 10.2 | 10/01/13 | |
| 10.18 | First Amendment to the Stock Purchase and Issuance Agreement dated September 30, 2013. | 8-K | 001-32188 | 10.3 | 10/01/13 | |
| 10.19 | Lease Agreement between the Company and Hawley-Wiggins LLC dated October 28, 2011 (13700 Progress Blvd, Alachua, FL 32615). | 10-K | 001-32188 | 10.20 | 4/16/12 | |
| 10.20 | Amendment to Lease Agreement between the Company and Hawley-Wiggins LLC dated July 13, 2014 (13700 Progress Blvd, Alachua, FL 32615). | 10-Q | 001-32188 | 10.2 | 8/7/14 | |
| 10.21 | Stock Purchase Agreement by and between the Company and Purchasers dated July 30, 2012. | 8-K | 001-32188 | 10.1 | 8/2/12 | |
| 10.22 | 2012 Equity Incentive Plan.+ | 8-K | 001-32188 | 4.1 | 10/25/12 | |
| 10.23 | Amended and Restated Executive Employment Agreement between the Company and Michael Sullivan dated effective January 1, 2015.+ | 8-K | 001-32188 | 10.1 | 2/25/15 | |
| 10.24 | Executive Employment Agreement between the Company and Martin Handfield dated May 11, 2010.+ | 10-Q | 001-32188 | 10.16 | 11/14/11 | |
| 10.25 | Executive Employment Agreement between the Company and Albert Fosmoe dated effective January 1, 2015.+ | 8-K | 001-32188 | 10.2 | 2/25/15 | |
| 10.26 | Form of Placement Agent Warrant. | 8-K | 001-32188 | 10-3 | 8/2/12 | |
| 10.27 | Form of Employee Stock Option Agreement.+ | 10-K | 001-32188 | 10.26 | 3/26/13 | |
| 10.28 | Form of Consultant Stock Option Agreement.+ | 10-K | 001-32188 | 10.27 | 3/26/13 | |
| 10.29 | Form of Notice of Grant of Stock Options and Stock Option Award Agreement (Employee). + | 8-K | 001-32188 | 10-1 | 3/18/15 | |
| 10.30 | Form of Notice of Grant of Stock Options and Stock Option Award Agreement (Directors).+ | 8-K | 001-32188 | 10.2 | 3/18/15 | |
| 10.31 | Form of Director Restricted Stock Award Agreement. + | 8-K | 001-32188 | 10.3 | 3/18/15 | |
| 23.1 | Consent of Mayer Hoffman McCann P.C., an independent public accounting firm. | 10-K | 001-32188 | | 2/27/15 | |
| 24.1 | Powers of Attorney (included on signature page). | 10 - K | 001-32188 | 24.1 | 2/27/15 | |
| 31.1 | Certification of Principal Executive Officer pursuant to Rule 13a-14 and Rule 15d-14(a), promulgated under the Securities and Exchange Act of 1934, as amended. | | | | | Х |
| 31.2 | Certification of Principal Financial Officer pursuant to Rule 13a-14 and Rule 15d- 14(a), promulgated under the Securities and Exchange Act of 1934, as amended. | | | | | Х |
| 32.1 | Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer). | 10-K | 001-32188 | 32.1 | 2/27/15 | |
| | | | | | | |

| | | Incorporated by Reference | | | | |
|-------------------|---|----------------------------------|-----------|---------|----------------|-------------------|
| Exhibit number | Exhibit description | Form | File no. | Exhibit | Filing date | Filed herewith |
| 32.2 | Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer). | 10-K | 001-32188 | 32.2 | 2/27/15 | |
| 101.INS | XBRL Instance Document | 10 - K | 001-32188 | 101.INS | 2/27/15 | |
| 101.SCH | XBRL Taxonomy Extension Schema | 10 - K | 001-32188 | 101.SCH | 2/27/15 | |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase | 10 - K | 001-32188 | 101.CAL | 2/27/15 | |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase | 10 - K | 001-32188 | 101.DEF | 2/27/15 | |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase | 10 - K | 001-32188 | 101.LAB | 2/27/15 | |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase | 10 - K | 001-32188 | 101.PRE | 2/27/15 | |

* Confidential treatment has been granted as to certain portions of this exhibit pursuant to Rule 406 of the Securities Act of 1933, as amended, or Rule 24b-2 of the Securities Exchange Act of 1934, as amended.
 + Executive management contract or compensatory plan or arrangement.

CERTIFICATION

I, Michael Sullivan, certify that:

- 1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of Oragenics, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Date: April 27, 2015

/s/ Michael Sullivan Principal Executive Officer

CERTIFICATION

I, Michael Sullivan, certify that:

- 1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K of Oragenics, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

Date: April 27, 2015

/s/ Michael Sullivan

Michael Sullivan, Chief Financial Officer