Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐
Check the appropriate box:
☐ Preliminary Proxy Statement
☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
☒ Definitive Proxy Statement
☐ Definitive Additional Materials
☐ Soliciting Material under §240.14a-12

Vermillion, Inc.
(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):
☒ No fee required.
☐ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

☐ Fee paid previously with preliminary materials.
☐ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount previously paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:
Dear Stockholder:

NOTICE IS HEREBY GIVEN that the 2017 Annual Meeting of Stockholders of Vermillion, Inc., a Delaware corporation (the “Company”), will be held on Wednesday, June 21, 2017 at 8:00 a.m. (Eastern Daylight Time), at the Company’s office located at 35 Nutmeg Drive, Suite 260, Trumbull, Connecticut 06611, for the following purposes:

1. To elect as directors the seven nominees named in the proxy statement and recommended by the Board of Directors to serve for a one-year term expiring at the 2018 annual meeting of stockholders and until their successors are elected and qualified (Proposal 1);

2. To hold an advisory vote to approve the compensation of the Company’s named executive officers as disclosed in the proxy statement (Proposal 2);

3. To hold an advisory vote on the frequency of future advisory votes to approve the compensation of the Company’s named executive officers (Proposal 3);

4. To ratify the selection of BDO USA, LLP as the Company’s independent registered public accounting firm for the year ending December 31, 2017 (Proposal 4); and

5. To transact such other business as properly may be brought before the Annual Meeting or any adjournment or postponement thereof.

The foregoing items of business are more fully described in the proxy statement accompanying this Notice.

The Board of Directors of the Company has fixed the close of business on April 26, 2017 as the record date for determining the stockholders entitled to receive notice of, and to vote at, the Annual Meeting or any adjournment or postponement thereof.

YOUR VOTE IS IMPORTANT. IN ORDER TO ENSURE YOUR REPRESENTATION AT THE ANNUAL MEETING, YOU ARE URGED TO SIGN AND DATE THE ATTACHED PROXY CARD AND RETURN IT IN THE ENCLOSED PRE-ADDRESS POSTAGE-PAID ENVELOPE AS SOON AS POSSIBLE.

All stockholders are cordially invited to attend the Annual Meeting in person. Even if you plan to attend the Annual Meeting in person, you are urged to sign, date and return the attached proxy card in order to ensure your representation at the Annual Meeting. Any stockholder attending the Annual Meeting may vote in person even if that stockholder has returned a proxy.

Austin, Texas
April 27, 2017

By Order of the Board of Directors

/s/ Valerie B. Palmieri

Valerie B. Palmieri
President, Chief Executive Officer and Director

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be held on June 21, 2017

# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION ABOUT THE ANNUAL MEETING AND VOTING</td>
<td>1</td>
</tr>
<tr>
<td>PROPOSAL 1: ELECTION OF DIRECTORS</td>
<td>5</td>
</tr>
<tr>
<td>CORPORATE GOVERNANCE</td>
<td>9</td>
</tr>
<tr>
<td>MANAGEMENT</td>
<td>13</td>
</tr>
<tr>
<td>BOARD COMPENSATION</td>
<td>13</td>
</tr>
<tr>
<td>COMPENSATION COMMITTEE REPORT</td>
<td>16</td>
</tr>
<tr>
<td>COMPENSATION DISCUSSION AND ANALYSIS</td>
<td>16</td>
</tr>
<tr>
<td>PROPOSAL 2: ADVISORY VOTE TO APPROVE THE COMPENSATION OF OUR NAMED</td>
<td>28</td>
</tr>
<tr>
<td>EXECUTIVE OFFICERS</td>
<td></td>
</tr>
<tr>
<td>PROPOSAL 3: ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES TO</td>
<td>30</td>
</tr>
<tr>
<td>APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS</td>
<td></td>
</tr>
<tr>
<td>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</td>
<td>31</td>
</tr>
<tr>
<td>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS</td>
<td>33</td>
</tr>
<tr>
<td>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</td>
<td>34</td>
</tr>
<tr>
<td>PROPOSAL 4: RATIFICATION OF THE SELECTION OF THE INDEPENDENT REGISTERED</td>
<td>35</td>
</tr>
<tr>
<td>PUBLIC ACCOUNTING FIRM FOR VERMILLION</td>
<td></td>
</tr>
<tr>
<td>REPORT OF THE AUDIT COMMITTEE</td>
<td>36</td>
</tr>
<tr>
<td>OTHER MATTERS</td>
<td>37</td>
</tr>
<tr>
<td>IMPORTANT NOTE</td>
<td>37</td>
</tr>
</tbody>
</table>
Annual Meeting of Stockholders to be Held on June 21, 2017

INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

General

The enclosed proxy is solicited on behalf of the Board of Directors (the “Board”) of Vermillion, Inc., a Delaware corporation (“Vermillion,” “the Company,” “we,” “us” or “our”), for use at our 2017 Annual Meeting of Stockholders (the “Annual Meeting”) to be held on Wednesday, June 21, 2017 at 8:00 a.m. (Eastern Daylight Time). The Annual Meeting will be held at the Company’s office located at 35 Nutmeg Drive, Suite 260, Trumbull, Connecticut 06611. The Notice of the Annual Meeting, this proxy statement, the accompanying proxy card and our Annual Report on Form 10-K for the year ended December 31, 2016 will first be mailed to stockholders on or about May 4, 2017, and are also available online at http://www.vermillion.com. Our principal executive offices are located at 12117 Bee Caves Road, Building Three, Suite 100, Austin, Texas 78738, and our telephone number is (512) 519-0400.

Record Date; Outstanding Shares

Only stockholders of record at the close of business on April 26, 2017 (the “Record Date”) are entitled to notice of and to vote at the Annual Meeting. At the close of business on the Record Date, there were 56,089,245 shares of our common stock issued and outstanding and entitled to vote. A complete list of the stockholders entitled to vote at the Annual Meeting will be available for examination by any stockholder for any purpose germane to the Annual Meeting at the Annual Meeting and during ordinary business hours at our principal executive offices for a period of 10 days before the Annual Meeting.

Revocability of Proxies

Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before its use by delivering to us at our principal executive offices (12117 Bee Caves Road, Building Three, Suite 100, Austin, Texas 78738, Attention: Investor Relations) either a written notice of revocation or a duly executed proxy card bearing a later date, or by attending the Annual Meeting and voting in person. Attendance at the Annual Meeting will not, by itself, revoke a proxy. For shares held in street name by beneficial owners, holders may change their votes by submitting a later dated voting instruction form to their brokers, banks or other nominees or, if they have obtained legal proxies from their brokers, banks or other nominees giving them the right to vote their shares at the Annual Meeting, by attending the Annual Meeting and voting in person.

Solicitation of Proxies

This solicitation of proxies is made by us and all related costs will be borne by us. In addition, we will reimburse brokerage firms and other persons representing beneficial owners of shares for their expenses in forwarding solicitation material to such beneficial owners. Proxies may also be solicited by certain of our directors, officers and employees, without additional compensation, personally or by electronic or regular mail, telephone or facsimile.
Voting

Each share of common stock outstanding on the Record Date is entitled to one vote for each director to be elected and one vote on each other matter to be voted on. Stockholders do not have cumulative voting rights.

When a proxy card is properly dated, executed and returned, the shares represented by such proxy card will be voted at the Annual Meeting in accordance with the instructions of the stockholder as set forth on the proxy card. If no specific instructions are given, the shares will be voted in accordance with the Board’s recommendation, as follows:

- “FOR” the election of directors (Proposal 1);
- “FOR” the approval of the compensation of our Named Executive Officers (as such term is defined under “Compensation Discussion and Analysis” below) (Proposal 2);
- for a frequency of every “ONE YEAR” for future advisory votes to approve the compensation of our Named Executive Officers (Proposal 3); and
- “FOR” the ratification of the selection of BDO USA, LLP as our independent registered public accounting firm for the year ending December 31, 2017 (Proposal 4).

In addition, shares will be voted at the discretion of the individuals designated as proxies on the proxy card on such other business as may properly come before the Annual Meeting or any adjournment or postponement thereof.

Quorum; Required Votes; Abstentions; Broker Non-Votes

Quorum

Holders of a majority of the outstanding shares entitled to vote must be present, in person or by proxy, at the Annual Meeting in order to have the required quorum for the transaction of business. If the shares present, in person or by proxy, at the Annual Meeting do not constitute the required quorum, the meeting may be adjourned to a subsequent date for the purpose of obtaining a quorum. When a proxy card is properly dated, executed and returned, the shares represented by such proxy card are counted in determining whether a quorum exists, even if the shares are voted “ABSTAIN” or “WITHHOLD.” Broker non-votes (as defined below) are also counted for purposes of determining a quorum.

Required Votes

The proposal to elect directors (Proposal 1) requires the affirmative vote of a plurality of the shares present at the Annual Meeting in person or by proxy and entitled to vote. This means that the seven nominees receiving the highest number of “FOR” votes will be elected as directors.

The proposals to approve the compensation of our Named Executive Officers (Proposal 2) and to ratify the selection of BDO USA, LLP as our independent registered public accounting firm (Proposal 4) each require the affirmative vote of the holders of a majority of the shares present at the Annual Meeting either in person or by proxy and entitled to vote.

On the proposal regarding the frequency of future advisory votes to approve the compensation of our Named Executive Officers (Proposal 3), for the three choices of every one year, every two years or every three years, the choice receiving the most votes at the Annual Meeting will be the frequency recommended by the stockholders.

Abstentions

Shares voted “WITHHOLD” from the proposal to elect directors (Proposal 1) will have no effect on the outcome of the vote with respect to the election of directors.
Shares voted “ABSTAIN” will have the same effect as votes “AGAINST” the proposals to approve the compensation of our Named Executive Officers (Proposal 2) and to ratify the selection of BDO USA, LLP as our independent registered public accounting firm (Proposal 4). Shares voted “ABSTAIN” will not affect the outcome of the proposal regarding the frequency of future advisory votes to approve the compensation of our Named Executive Officers (Proposal 3).

Broker Non-Votes

If a stockholder holds shares in the name of a broker, bank or nominee (this is called “street name”), the broker, bank or nominee will send to the stockholder a voting instruction form with this proxy statement. The broker, bank or nominee is not permitted to vote on the stockholder’s behalf on certain matters that are not “routine,” such as the proposals regarding the election of the director nominees and the approval of executive compensation, unless the stockholder provides specific instructions by completing and returning the voting instruction form (these uninstructed votes are termed “broker non-votes”). Broker non-votes are not treated as entitled to vote on these proposals and, therefore, are not counted for purposes of determining the number of votes cast with respect to these particular proposals.

Broker non-votes will have no effect on the outcome of the votes with respect to the proposals to elect the director nominees (Proposal 1), to approve the compensation of our Named Executive Officers (Proposal 2) or regarding the frequency of future advisory votes to approve the compensation of our Named Executive Officers (Proposal 3).

The proposal to ratify the selection of BDO USA, LLP as our independent registered public accounting firm (Proposal 4) is considered a routine matter, and the broker, bank or nominee is allowed to vote the shares in street name, without receiving specific instructions from stockholders on how to vote the shares on that proposal.

Attendance at the Annual Meeting

Attendance at the Annual Meeting will be limited to stockholders as of the Record Date. Each stockholder may be asked to present valid picture identification, such as a driver’s license or passport. Stockholders holding stock in brokerage accounts or by a bank or other nominee may be required to show a brokerage statement or account statement reflecting stock ownership as of the Record Date.

Householding of Proxy Materials

Some banks, brokers and other nominee record holders may be “householding” our proxy statements and annual reports. This means that only one copy of our proxy statement and annual report to stockholders may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you if you call or write to us at our principal executive offices, 12117 Bee Caves Road, Building Three, Suite 100, Austin, Texas 78738, Attn: Investor Relations, telephone: (512) 519-0400. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee, or you may contact us at the above address or telephone number.

Submission of Stockholder Proposals for the 2018 Annual Meeting

In order to be eligible for inclusion in the Company’s proxy statement and form of proxy for the 2018 Annual Meeting, stockholder proposals must comply with Rule 14a-8 promulgated by the Securities and Exchange Commission (the “SEC”) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and any other applicable rules. Rule 14a-8 requires that stockholder proposals be delivered to our principal executive offices no later than 120 days before the one-year anniversary of the release date of the previous year’s annual meeting proxy statement. Accordingly, if you wish to submit a proposal to be considered for inclusion in the proxy statement for our 2018 Annual Meeting, you must submit the proposal in writing to Vermillion, Inc., 12117 Bee Caves Road, Building Three, Suite 100, Austin, Texas 78738, Attention: Corporate Secretary. We must receive the proposal by January 4, 2018 in order to consider it for inclusion in the proxy statement for our 2018 Annual Meeting.
Stockholder proposals and director nominations not included in our proxy statement for the 2018 Annual Meeting will not be eligible for presentation at the meeting unless they comply with the advance notice requirements set forth in our Bylaws, including that the stockholder gives timely notice of the proposal or nomination in writing to our principal executive offices. To be timely, stockholder proposals and director nominations must be received by us not earlier than the 120th day nor later than the 90th day prior to the one-year anniversary of the previous year’s annual meeting. Accordingly, proposals and nominations that are not received between February 21, 2018 and March 23, 2018 will not be voted on at the 2018 Annual Meeting. Our Bylaws contain provisions regarding information that must be set forth in a stockholder’s notice or otherwise provided in connection with stockholder proposals and director nominations.

YOUR VOTE IS EXTREMELY IMPORTANT, NO MATTER HOW MANY OR HOW FEW SHARES YOU OWN. PLEASE SIGN AND DATE THE ENCLOSED PROXY CARD AND RETURN IT TODAY IN THE ENCLOSED PRE-ADDRESSED POSTAGE-PAID ENVELOPE.

IMPORTANT: If your shares are held in the name of a brokerage firm, bank, nominee or other institution, only it can sign a proxy card with respect to your shares and only upon specific instructions from you. Please return the enclosed proxy card to your broker or bank and contact the person responsible for your account to ensure that a proxy is voted on your behalf.
PROPOSAL 1: ELECTION OF DIRECTORS

Our Board of Directors currently consists of seven members and one vacant Board seat, with directors serving for a one-year term expiring at the 2017 annual meeting of our stockholders and until their successors are elected and qualified. The seven persons named below, all of whom currently serve on our Board, have been nominated to serve on the Board until our 2018 annual meeting of stockholders and until their respective successors are elected and qualified. Directors will be elected by a plurality of the votes cast in the election of directors. The seven nominees receiving the highest number of affirmative votes will be elected as directors. Stockholders may not vote for more than seven nominees.

In evaluating the suitability of individual Board members, our Nominating and Corporate Governance Committee takes into account many factors such as general understanding of various business disciplines (e.g., marketing or finance), understanding of the Company’s business environment, educational and professional background, judgment, integrity, ability to make independent analytical inquiries and willingness to devote adequate time to Board duties. The Board evaluates each individual in the context of the Board as a whole with the objective of retaining a group with diverse and relevant experience that can best perpetuate the Company’s success and represent stockholder interests through sound judgment.

Nominees for Director

Information regarding the nominees for the Board of Directors is set forth below. The Company has no reason to believe that the nominees would be unable or unwilling to serve as a director if elected. However, in the event that any of the nominees is unable to or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who is designated by the Board to fill the vacancy.

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Position with Vermillion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. James S. Burns</td>
<td>70</td>
<td>Chairman – Nominating and Governance Committee; Member – Compensation Committee</td>
</tr>
<tr>
<td>Veronica G.H. Jordan, Ph.D.</td>
<td>66</td>
<td>Chairman - Compensation Committee; Member - Audit Committee</td>
</tr>
<tr>
<td>Mr. James T. LaFrance</td>
<td>58</td>
<td>Chairman of the Board</td>
</tr>
<tr>
<td>Ms. Valerie B. Palmieri</td>
<td>55</td>
<td>President, Chief Executive Officer and Director</td>
</tr>
<tr>
<td>Mr. David R. Schreiber</td>
<td>57</td>
<td>Chairman - Audit Committee; Member – Nominating and Governance Committee</td>
</tr>
<tr>
<td>Mr. Carl Severinghaus</td>
<td>64</td>
<td>Member – Audit Committee</td>
</tr>
<tr>
<td>Eric Varma, M.D.</td>
<td>35</td>
<td>Member – Compensation Committee</td>
</tr>
</tbody>
</table>

*James S. Burns*, age 70, has been our director since June 2005 and served as Chairman of the Board from September 2011 to March 2013. He is the Chair of our Nominating and Governance Committee and a member of our Compensation Committee. Mr. Burns served as Chairman of the Board and Executive Chairman, from 2014 to 2016, and as President and Chief Executive Officer, from 2009 to 2014, of Assurex Health, Inc., an informatics-based precision medicine company focused on treatment decision support products for patients with neuropsychiatric disorders. Prior to joining Assurex Health, Mr. Burns was the President and Chief Executive Officer of EntreMed, Inc. from June 2004 to December 2008, and a director from September 2004 to December 2008. Mr. Burns was a co-founder and, from 2001 to 2003, served as President and as Executive Vice President of MedPointe Pharmaceuticals, a specialty pharmaceutical company that develops, markets and sells branded prescription pharmaceuticals. From 2000 to 2001, Mr. Burns served as a founder and Managing Director of
MedPointe Capital Partners, a private equity firm that led a leveraged buyout to form MedPointe Pharmaceuticals. Previously, Mr. Burns was a founder, Chairman, President and Chief Executive Officer of Osiris Therapeutics, Inc., a biotech company developing therapeutic stem cell products for the regeneration of damaged or diseased tissue. Mr. Burns has also been Vice Chairman of HealthCare Investment Corporation and a founding General Partner of Healthcare Ventures L.P., a venture capital partnership specializing in forming companies building around new pharmaceutical and biotechnology products; Group President at Becton, Dickinson and Company, a multidivisional biomedical products company; and Vice President and Partner at Booz & Company, Inc., a multinational consulting firm. Mr. Burns is a director of AFT Pharmaceuticals Ltd. (NZX/ASX:AFT), a specialty pharmaceutical company and Sano Informed Prescribing Inc., specializing in patient-specific medication analyses. Mr. Burns previously served as a director of Symmetry Surgical Inc. (formerly NASDAQ:SSRG), a supplier of general and specialty surgical instruments. Mr. Burns received his B.S. and M.S. in Biological Sciences from the University of Illinois, an M.B.A. from DePaul University, and a D.L.S. from Georgetown University. He has also earned a Board Leadership Fellow certification from the National Association of Corporate Directors.

Our Board has determined that based upon Mr. Burns’ extensive experience in the diagnostics industry, and current and prior board and management experience, he has the qualifications and skills to serve as a member of our Board and as a member of our Compensation Committee and Chair of our Nominating and Governance Committee.

Veronica G.H. Jordan, Ph.D., age 66, Dr. Jordan became a director of Vermillion in December 2014 and serves as the Chair of our Compensation Committee and a member of our Audit Committee. Since 2007 she has served as an advisor to companies developing novel healthcare products and services. Previously, from 2001 to 2006, she was President and Chief Executive Officer of Medelle Corporation, a medical device company in women’s health. Prior to that, Dr. Jordan served for fourteen years in various executive positions at PAREXEL International Corporation. Earlier, she held business leadership roles at Biogen and managed an R&D department for Baxter International. Dr. Jordan served as a director of Albany Molecular Research Inc. (NASDAQ:AMRI) from 2006 to 2016 and currently serves on the boards of a number of not-for-profit organizations working to advance healthcare initiatives. She earned a B.Sc. in Biochemistry from Cambridge University and a Ph.D. in Biochemistry/Cell Biology from Oxford University.

Our Board of Directors has determined that based upon Dr. Jordan’s extensive experience in the life sciences industry, including relevant experience as a current and prior director and as an executive officer, she has the qualifications and skills to serve as a member of our Board and as a member of our Audit Committee and Chair of our Compensation Committee.

James T. LaFrance, age 58, was appointed to our Board of Directors in December 2013 and was also appointed Chairman of our Board. Mr. LaFrance was initially designated as a director nominee pursuant to the Stockholders Agreement described under “Certain Relationships and Related Transactions” below. He also served as our President and Chief Executive Officer from April 2014 to December 2014. Mr. LaFrance has almost thirty years of diagnostic industry experience. From May 2012 to September 2013, Mr. LaFrance was head of digital pathology and acting Chief Executive Officer of Omnyx, LLC for GE Healthcare, a medical technology provider. From 2009 to 2011, Mr. LaFrance was the President and Chief Executive Officer of LaFrance Consulting, an independent consulting firm. Prior to that, Mr. LaFrance held a series of commercial, strategic marketing and business development leadership roles at Ventana Medical Systems, Inc. (now Roche Tissue Diagnostics), a provider of tissue-based diagnostic solutions, including general manager of their North American and International commercial organizations from 2001 to 2009. Prior to Ventana, Mr. LaFrance served in leadership roles in strategic marketing and business development at Bayer Diagnostics. He currently serves as a member of the boards of HTG Molecular, Inc., BioArray Genetics, Inc. and Personal Genome Diagnostics, Inc. He earned a Bachelor of Arts degree in Economics from the University of Connecticut and an M.B.A. from the University of Notre Dame.

Our Board of Directors has determined that based upon Mr. LaFrance’s demonstrated executive-level management and commercial operations skills, as well as his prior role as our President and Chief Executive Officer and his prior board position, he has the qualifications and skills to serve as a member and the Chairman of our Board of Directors.

Valerie B. Palmieri, age 55, was appointed as our President and Chief Executive Officer on January 1, 2015 and was elected to our Board in June 2015. She first joined Vermillion as Chief Operating Officer in October
2014. Ms. Palmieri brings to Vermillion more than 30 years of experience in the diagnostic laboratory industry, serving in numerous sales, operations, and executive leadership positions for both laboratory service and consulting organizations.

From April 2009 to October 2014, Ms. Palmieri was the President and Chief Executive Officer of Momentum Consulting, LLC, a national consulting firm serving the life science and diagnostic laboratory industries. During her time at Momentum, Ms. Palmieri also served as CEO/President of two healthcare start-ups that resulted in a successful exit for one and won her recognition as one of the “Top 10 Entrepreneurs of Springboard Enterprises” for the other. Prior to that she spent six years as the National Vice President of Anatomic Pathology Operations with LabCorp, one of the largest public diagnostic laboratories in the world. LabCorp was the successor company to Dianon Systems, also a publicly traded company, where she served as Senior Vice President of Operations. She was a key leader in the sale of Dianon to LabCorp in 2003. Ms. Palmieri holds a Bachelor of Science degree in Medical Technology from Western Connecticut State University.

Our Board of Directors has determined that based upon Ms. Palmieri’s extensive experience in the life science and diagnostic laboratory industries, including relevant experience as our President and Chief Executive Officer and as an executive officer, she has the qualifications and skills to serve as a member of our Board of Directors.

David R. Schreiber, age 57, became a director of Vermillion in December 2014. He serves as the Chair of our Audit Committee since June 2016 and previously served as a member of our Audit Committee from December 2014 to January 2016. He is also a member of our Nominating and Governance Committee. Mr. Schreiber has held a variety of executive positions in the diagnostic laboratory industry for the past 26 years. For the last 14 years, Mr. Schreiber has consulted for private equity firms to assist with their due diligence efforts and served in various interim operating roles for targeted or existing portfolio companies. From 1986 to 1996, Mr. Schreiber was at Quest Diagnostics, initially in a variety of financial roles, his last position being Vice President and General Manager of Quest's Midwest Region, based in Chicago, Illinois. Following Quest, from 1996 to 2003, Mr. Schreiber was Senior Vice President and Chief Financial Officer of Dianon Systems, a publicly traded specialized pathology company, until Dianon was acquired by LabCorp. Mr. Schreiber was also a member of Dianon's Board of Directors. Following Dianon, Mr. Schreiber joined the Board of Directors of Specialty Labs, a publicly traded lab company focused on serving the esoteric needs of hospitals. Mr. Schreiber helped lead the turnaround of Specialty Labs which led to its successful sale to Ameripath/Welsh Carson. At the same time, Mr. Schreiber joined and previously served on the board of Nanogen, a publicly traded nanotechnology company and also began his consulting career. Mr. Schreiber received a B.S. in Finance and an M.B.A. from Northern Illinois University.

Our Board of Directors has determined that based upon Mr. Schreiber’s extensive experience in the life sciences industry, including relevant experience as a current and prior director and an executive officer and chief financial officer, he has the qualifications and skills to serve as a member of our Board of Directors, Chair of our Audit Committee and member of the Nominating and Governance Committee.

Carl Severinghaus, age 64, was appointed to our Board in 2010 and serves as a member of our Audit Committee. He is currently the Vice President of OEM/Partnering for Tecan Americas since 2014 and the former Vice President, Head Global Sales OEM Components of the Tecan Group from 2011 to 2014, a leading global provider of laboratory instruments and solutions in biopharmaceuticals, forensics and clinical diagnostics. From 2009 to 2011, he was President of Tecan Americas, responsible for Sales and Commercial Operations for the Americas Region, including the U.S., Canada and Central and South America. From 2007 to 2009, he lived in Zurich and was Senior Vice President for International Sales at Tecan, responsible for Worldwide Sales and Operations. From 1999 to 2007, Mr. Severinghaus served as President and General Manager of Tecan US, Inc. From 2007 to 2014, Mr. Severinghaus also served as director of Tecan Asia Pte. Ltd, and is currently a director of Tecan US, Inc. and Tecan US Group, Inc. Prior to becoming President and General Manager at Tecan, he was Vice President of Sales from 1991 to 1998. Before he joined Tecan he was National Sales Manager for American Monitor Corporation. Mr. Severinghaus received his Bachelor of Fine Arts Degree from Drake University in 1974. Mr. Severinghaus is or has been a member of the Analytical & Life Science System Association, Society for Laboratory Automation and Screening (SLAS) and also the American Association of Clinical Chemistry (AACC).
Our Board has determined that based upon Mr. Severinghaus’ demonstrated executive-level management and commercial operations skills, both domestically and internationally, he has the qualifications and skills to serve as a member of our Board and Audit Committee.

*Eric Varma, M.D.*, age 35, was appointed to our Board in September 2013 and is a member of our Compensation Committee. Dr. Varma was initially designated as a director nominee pursuant to the Stockholders Agreement described under “Certain Relationships and Related Transactions” below. Dr. Varma is currently a partner at Oracle Investment Management, Inc., which is a fundamental research-driven investment management company that is exclusively focused on the global health care and bioscience industries. Prior to joining Oracle Investment Management in 2009, he worked at Leerink Swann, a healthcare investment bank, the Boston Consulting Group, and the Food and Drug Administration. Dr. Varma received his B.A. from the University of California Berkeley, M.D. from the Albert Einstein College of Medicine, and M.B.A. from the MIT Sloan School of Management.

Our Board has determined that as a partner at Oracle Investment Management, which is among Vermillion's largest stockholders, and as a physician, Dr. Varma brings significant financial and commercial experience in the life sciences industry to our Board and has the qualifications and skills to serve as a member of our Board and Compensation Committee.

THE BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE “FOR” THE ELECTION OF EACH DIRECTOR NOMINEE NAMED ABOVE.
CORPORATE GOVERNANCE

Independence of the Board of Directors

The Board has affirmatively determined, after considering all relevant facts and circumstances, that each of James S. Burns, Veronica G.H. Jordan, David R. Schreiber, Carl Severinghaus and Eric Varma is an independent director, as the term is currently defined under NASDAQ Listing Rule 5605(a)(2). James T. LaFrance is not an independent director because he served as our President and Chief Executive Officer in 2014. Valerie Palmieri is not an independent director because she currently serves as our President and Chief Executive Officer.

Board Leadership Structure

The Board believes that the leadership structure of the Board is a matter that should be evaluated and determined by the Board from time to time, based on the then-relevant facts and circumstances. The Board has chosen to separate the roles of Chief Executive Officer and Chairman of the Board. This enables our President and Chief Executive Officer, Ms. Valerie Palmieri, to focus on the day-to-day operation of our business while allowing Mr. James LaFrance, our Chairman of the Board, to focus on leadership of the Board. The Board believes that its current leadership structure best serves the objectives of the Board’s oversight and management, the ability of the Board to carry out its roles and responsibilities on behalf of the stockholders, and the Company’s overall corporate governance.

Recognizing the importance of independent and empowered directors, the independent directors have designated James S. Burns as lead independent director. The lead independent director’s responsibilities include, among others, presiding at the meetings of independent directors, advising the Chairman of the Board as to the quality, quantity and timeliness of information sent to the Board and serving as the principal liaison and facilitator between the independent directors and the Chairman of the Board.

Role of the Board in Risk Oversight

The Board is involved in oversight of risks that could affect the Company. This oversight is conducted primarily through committees of the Board, and particularly the Audit Committee and Nominating and Governance Committee, but the full Board has retained responsibility for general oversight of risks. The Board satisfies this responsibility through full reports by each committee chair regarding the committee’s considerations and actions, as well as through regular reports directly from officers responsible for oversight of particular risks within the Company.

Meetings of the Board of Directors

Our Board establishes overall policies and standards and reviews the performance of management. The Board held 20 meetings in 2016, including a number of meetings relating to financing matters, which culminated in the February 13, 2017 private placement discussed below under “Certain Relationships and Related Transactions.” Each director attended 75% or more of the aggregate number of meetings of the Board and the committees on which he or she served that were held during the period for which he or she was a director. Applicable NASDAQ listing standards require that the independent directors meet from time to time in executive session. In 2016, our independent directors met in regularly scheduled executive sessions at which only independent directors were present. It is our policy to request that all Board members attend the annual meeting of stockholders. We held our most recent annual meeting of stockholders on June 16, 2016 and all members of the Board standing for re-election attended the meeting.
Audit Committee

The Audit Committee of the Board was established by the Board to oversee our corporate accounting and financial reporting processes, systems of internal control over financial reporting and the quality and integrity of our financial statements and reports. In addition, the Audit Committee oversees the qualification, independence and performance of our independent registered public accounting firm. The Audit Committee also recommends to the Board the appointment of our independent registered public accounting firm.

The Audit Committee is currently composed of three directors: Mr. Schreiber (Chairperson), Ms. Jordan and Mr. Severinghaus. The Audit Committee is governed by a written charter adopted by the Board. The Audit Committee charter can be found in the Investor Relations section of our website at http://www.vermillion.com. The Audit Committee met four times in 2016. Mr. Peter S. Roddy, a former Board member, also served as Chair of the Audit Committee during 2016. Mr. Roddy did not stand for re-election at the 2016 Annual Meeting of Stockholders. The Board has determined that all members of our Audit Committee are independent pursuant to applicable NASDAQ and SEC requirements. The Board has determined that Mr. Schreiber qualifies as an “audit committee financial expert,” as defined in applicable SEC rules. In making the determination that Mr. Schreiber qualifies as an “audit committee financial expert,” the Board made a qualitative assessment of Mr. Schreiber’s level of knowledge and experience based on a number of factors, including his experience as the chief financial officer of other companies.

Compensation Committee

The Compensation Committee of the Board acts on behalf of the Board to review, adopt and oversee our compensation strategy, policies, plans and programs. The Compensation Committee reviews and recommends to the Board for approval the compensation (i.e., salary, bonus and stock-based compensation grants) and other terms of employment or service of our Chief Executive Officer and other executive officers, reviews with management our Compensation Discussion and Analysis for inclusion in our proxy statements and other SEC filings, and administers our Amended and Restated 2010 Stock Incentive Plan. The Compensation Committee has the authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant’s reasonable fees and other retention terms.

Our executive officers recommend to the Compensation Committee of the Board business performance targets and objectives and provide background information about the Company’s underlying strategic objectives. Our Chief Executive Officer generally makes recommendations to the Compensation Committee regarding salary increases for other executive officers during the regular merit increase process. Our executive officers are not present or involved in deliberations concerning their own compensation.

The Compensation Committee is currently composed of three directors: Dr. Jordan (Chairman), Mr. Burns and Dr. Varma. The Board has determined that the members of our Compensation Committee are independent pursuant to applicable NASDAQ and SEC requirements, as well as under the Internal Revenue Code. The Compensation Committee has adopted a written charter that can be found in the Investor Relations section of our website at http://www.vermillion.com. The Compensation Committee met nine times in 2016. The performance and compensation process and specific determinations of the Compensation Committee with respect to executive compensation for 2016 are described in greater detail in the “Compensation Discussion and Analysis” section of this proxy statement.

Compensation Committee Interlocks and Insider Participation

There were no compensation committee interlocks during 2016.

Nominating and Governance Committee

The Nominating and Governance Committee is responsible for identifying individuals qualified to serve as members of the Board, recommending to the Board nominees for election as our directors, and providing oversight with respect to corporate governance and ethical conduct.
Our Nominating and Governance Committee currently consists of Mr. Burns (Chairman) and Mr. Schreiber. The Board has determined that the members of our Nominating and Governance Committee are independent pursuant to applicable NASDAQ listing standards. The Nominating and Governance Committee has adopted a written charter that can be found in the Investor Relations section of our website at http://www.vermillion.com. The Nominating and Governance Committee met one time in 2016.

The information below describes the criteria and process that the Nominating and Governance Committee uses to evaluate candidates for selection to the Board.

**Board Membership Criteria**

The Nominating and Governance Committee is responsible for assessing the appropriate balance of experience, skills and characteristics required of directors. Nominees for director are selected on the basis of depth and breadth of experience, knowledge, integrity, ability to make independent analytical inquiries, understanding of our business environment, the willingness to devote adequate time to Board duties, the interplay of the candidate’s experience and skills with those of other Board members, and the extent to which the candidate would be a desirable addition to the Board and any committees of the Board. Although there is no specific policy regarding diversity in identifying director nominees, both the Nominating and Governance Committee and the Board seek the talents and backgrounds that would be most helpful to us in selecting director nominees. In particular, the Nominating and Governance Committee, when recommending director candidates to the full Board for nomination, may consider whether a director candidate, if elected, assists in achieving a mix of Board members that represents a diversity of background and experience.

**Process for Identifying and Evaluating Nominees**

The Nominating and Governance Committee initiates the process for identifying and evaluating nominees to the Board by identifying a slate of candidates who meet the criteria for selection as nominees and have the specific qualities or skills being sought based on input from members of the Board, management and, if the Nominating and Governance Committee deems appropriate, a third-party search firm. Candidates are evaluated by the Nominating and Governance Committee on the basis of the factors described above under “Board Membership Criteria.” With respect to candidates for initial election to the Board, the Nominating and Governance Committee also reviews biographical information and qualifications and checks the candidates’ references. Qualified candidates are interviewed by at least one member of the Nominating and Governance Committee. Serious candidates meet, either in person or by telephone, with all members of the Nominating and Governance Committee and as many other members of the Board as practicable.

Using the input from interviews and other information obtained, the Nominating and Governance Committee evaluates which of the prospective candidates is qualified to serve as a director and whether the committee should recommend that the Board nominate, or elect to fill a vacancy with, a prospective candidate. Candidates recommended by the Nominating and Governance Committee are presented to the Board for selection as nominees to be presented for the approval of the stockholders or for election to fill a vacancy.

The Nominating and Governance Committee and/or the Board will consider nominees for director who are recommended by our stockholders, provided that written notice of any such recommendation is received by our Corporate Secretary within the timeframe established by our Bylaws with respect to director nominations by stockholders (see “Information About the Annual Meeting and Voting--Submission of Stockholder Proposals for the 2018 Annual Meeting”). All candidates for directors, including those who have been properly recommended or nominated by a stockholder, are evaluated using the criteria and process described above.

**Strategy Committee**

The Strategy Committee assists with the Company’s long-term mission, vision and strategic direction. The Strategy Committee is responsible for reviewing periodic reports from management with respect to Company strategy and/or related potential strategic transactions and providing recommendations to the Board regarding the same. The Strategy Committee also meets as needed to discuss the priorities of our Company, taking into
consideration economic, consumer and other significant trends, as well as changes in our business. The Strategy Committee is currently composed of four directors: James T. LaFrance (Chairman), Veronica G.H. Jordan, David Schreiber and Eric Varma.

**Code of Ethics**

We have adopted the Vermillion, Inc. Code of Business Conduct and Ethics (the “Code of Ethics”) that applies to all of our officers, directors and employees. The Code of Ethics is available in the Investor Relations section of our website at http://www.vermillion.com. We will disclose on our website any waiver of, or amendment to, the Code of Ethics as required by applicable SEC and NASDAQ requirements.

**Stockholder Communications**

Our stockholders may communicate directly with the Board of Directors or individual directors in writing, addressed to:

Board of Directors  
c/o Corporate Secretary  
Vermillion, Inc.  
12117 Bee Caves Road, Building Three, Suite 100  
Austin, Texas 78738

The Corporate Secretary will review each stockholder communication. The Corporate Secretary will forward to the entire Board (or to members of a committee thereof, if the communication relates to a subject matter clearly within that committee’s area of responsibility) or to any individual director, as applicable, each communication that (a) relates to our business or governance, (b) is not offensive and is legible in form and reasonably understandable in content, and (c) does not merely relate to a personal grievance against us, a director, a member of our management, or our other employees, or to further a personal interest not shared by the other stockholders generally.
MANAGEMENT

Set forth below is certain information about our current executive officers:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Valerie B. Palmieri</td>
<td>55</td>
<td>President and Chief Executive Officer</td>
</tr>
<tr>
<td>Mr. Fred Ferrara</td>
<td>49</td>
<td>Chief Operating Officer</td>
</tr>
<tr>
<td>Mr. Eric J. Schoen</td>
<td>48</td>
<td>Senior Vice President, Finance and Chief Accounting Officer</td>
</tr>
</tbody>
</table>

Valerie B. Palmieri - Biographical information about Ms. Palmieri can be found under Proposal 1, Election of Directors.

Fred Ferrara joined Vermillion in April 2015 as our Chief Information Officer. In November 2016, Mr. Ferrara was named our Chief Operating Officer. Mr. Ferrara has spent 25 years designing industry-specific systems including application and database development in Information Technology, with the previous 19 years solely dedicated to diagnostics companies responsible for the creation of several state of the art products used across the industry. He has served in numerous leadership roles in Information Technology, Operations, and senior leadership capacities for diagnostic service organizations such as LabCorp and Dianon Systems from 1998 to 2006. Prior to that, Mr. Ferrara served as an independent information systems consultant in the healthcare and mobile application markets. In his most recent senior leadership role prior to joining the Company, Mr. Ferrara served as Chief Information Officer and SVP of Aurora Diagnostics’ Anatomic Pathology Services Company, an anatomic pathology services provider, from 2006 to 2014.

Eric J. Schoen joined Vermillion in 2010 as our Corporate Controller. He is currently our Senior Vice President, Finance and has been our Chief Accounting Officer since October 2011. Prior to joining the Company, Mr. Schoen served as Revenue Controller for Borland Software, a publicly traded software development company, from 2007 to 2010. From 2000 to 2007, he served in Corporate Controller and Director of Finance roles for Trilogy Enterprises, Momentum Software and Alticast, Inc. Mr. Schoen also spent nine years with PricewaterhouseCoopers, most recently as a Manager in the audit and assurance, transaction services and global capital markets practices. Mr. Schoen received his Bachelor of Science in Finance from Santa Clara University.

BOARD COMPENSATION

Outside directors (i.e., non-employee directors) are compensated for their service as (1) a member of the Board, (2) a member of any committee of the Board, and (3) a chair of any committee of the Board. For 2016, we adopted a compensation program granting restricted stock units (“RSUs”) to outside directors other than the Chairman of the Board with a targeted value on the grant date equal to approximately $60,000. RSUs granted to directors vest 50% on June 1, 25% on September 1 and 25% on December 1, subject to the director’s continued service through the vesting date. For the Chairman of the Board, if such person is an outside director, the targeted value on the grant date is approximately $100,000. For 2016, outside directors, at their option, received 30% of compensation in cash in connection with their services as directors. Periodically, the Compensation Committee reviews and determines the adequacy of the compensation program for outside directors and, based upon the results of its review, the Compensation Committee will make recommendations regarding the compensation program for...
outside directors to the Board. During 2016, the outside directors were compensated as follows, with the RSU or RSU/cash awards being made as of March 17, 2016:

- the Chairman of the Board was awarded 45,455 RSUs and $30,000;
- each other outside director received 27,273 RSUs and $18,000;
- the chairperson of the Audit Committee received an additional 5,909 RSUs and $3,900 and the other members of the Audit Committee each received an additional 2,727 RSUs and $1,800;
- the chairperson of the Compensation Committee received an additional 4,091 RSUs and $2,700 and the other members of the Compensation Committee each received an additional 1,818 RSUs and $1,200;
- the chairperson of the Nominating and Governance Committee received an additional 2,727 RSUs and $1,800 and the other members of the Nominating and Governance Committee each received an additional 1,818 RSUs and $1,200; and
- the chairperson of the Strategy Committee received an additional 4,091 RSUs and $2,700 and the other members of the Strategy Committee each received an additional 1,818 RSUs and $1,200.

2016 Director Compensation Table

The table below presents the compensation earned by our outside directors for the year ended December 31, 2016.

<table>
<thead>
<tr>
<th>Name</th>
<th>Fees Earned or Paid in Cash</th>
<th>Stock Awards(1)</th>
<th>All Other Compensation(2)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>James S. Burns</td>
<td>$21,000</td>
<td>$49,000</td>
<td>$—</td>
<td>$70,000</td>
</tr>
<tr>
<td>Veronica G.H. Jordan</td>
<td>23,700</td>
<td>55,300</td>
<td>—</td>
<td>79,000</td>
</tr>
<tr>
<td>James T. LaFrance</td>
<td>32,700</td>
<td>76,300</td>
<td>—</td>
<td>109,000</td>
</tr>
<tr>
<td>Peter S. Roddy(3)</td>
<td>10,950</td>
<td>25,550</td>
<td>—</td>
<td>36,500</td>
</tr>
<tr>
<td>David R. Schreiber</td>
<td>22,350</td>
<td>52,150</td>
<td>51,750</td>
<td>126,250</td>
</tr>
<tr>
<td>Carl Severinghaus</td>
<td>19,800</td>
<td>46,200</td>
<td>—</td>
<td>66,000</td>
</tr>
<tr>
<td>Eric Varma(4)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

(1) Reflects the grant date fair value, calculated in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation—Stock Compensation, of RSUs granted in fiscal year 2016 by the Company under its Amended and Restated 2010 Stock Incentive Plan. The number of RSUs granted is determined by dividing the targeted grant value by a five day trailing average price of our common stock for the week prior to the date of grant of the RSUs. In 2016, the price and target value was fixed in March 2016 when the trailing average price per share of the Company’s stock was $1.54 per share.

14
(2) The amount reported for Mr. Schreiber represents consulting fees paid by the Company to him with respect to 2016 relating to assessment of business strategies.

(3) Mr. Roddy, a former Board member, did not stand for re-election at the June 2016 Annual Meeting of Stockholders and thus received prorated compensation for 2016.

(4) Dr. Varma waived his compensation for 2016.
COMPENSATION COMMITTEE REPORT

Our executive compensation program for our Named Executive Officers is administered by the Compensation Committee of the Board of Directors. The Compensation Committee has reviewed the Compensation Discussion and Analysis and discussed that analysis with management. Based on its review and discussions with management, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement and the Company’s annual report on Form 10-K for the year-ended December 31, 2016.

This report is provided by the following independent members of the Compensation Committee:

Veronica G.H. Jordan, Chairman
James S. Burns
Eric Varma

The information provided under the heading “Compensation Committee Report” shall not be deemed to be “soliciting material” or “filed” or incorporated by reference in future filings with the SEC, or subject to the liabilities of Section 18 of the Exchange Act, except to the extent that it is specifically incorporated by reference into a document filed under the Securities Act of 1933, as amended (the “Securities Act”) or the Exchange Act.

COMPENSATION DISCUSSION AND ANALYSIS

This section describes the compensation program for our Named Executive Officers. In particular, this section focuses on our 2016 compensation program and related decisions. The Compensation Committee annually reviews our executive compensation program to evaluate whether it appropriately rewards performance that is tied to sound decision-making and creating stockholder value, and is designed to achieve our goals of promoting financial and operational success by attracting, motivating and facilitating the retention of key employees with outstanding talent and ability.

Named Executive Officers During 2016

The following individuals who served as executive officers of the Company during 2016 were our “Named Executive Officers” for 2016:

<table>
<thead>
<tr>
<th>Name</th>
<th>Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie B. Palmieri</td>
<td>President, Chief Executive Officer and Director</td>
</tr>
<tr>
<td>Fred Ferrara</td>
<td>Chief Information Officer (through October 31, 2016); Chief Operating Officer (effective November 1, 2016)</td>
</tr>
<tr>
<td>Eric J. Schoen</td>
<td>Vice President, Finance and Chief Accounting Officer (through July 11, 2016); Senior Vice President, Finance and Chief Accounting Officer (effective July 12, 2016)</td>
</tr>
</tbody>
</table>
Compensation Philosophy and Objectives

The goal of our compensation program for our Named Executive Officers is the same as for the overall Company, which is to foster compensation policies and practices that attract, engage and motivate high caliber talent by offering compensation in a competitive range. We are committed to a total compensation philosophy and structure that provides flexibility in responding to market factors; rewards and recognizes superior performance; attracts highly skilled, experienced and capable employees; and is fair and fiscally responsible.

The Compensation Committee has designed and implemented compensation programs for Named Executive Officers to reward them for improving our financial and operating performance and leadership excellence, to align their interests with those of our stockholders and to encourage them to remain with us for long and productive careers. Because bonus and equity compensation play a key role in aligning our executives’ interests with our stockholders’ interests, annual incentives and equity incentives constitute an essential portion of Named Executive Officer compensation. We believe that our compensation elements simultaneously fulfill one or more performance, alignment and/or retention objectives.

Base salary and annual incentives are designed to reward annual achievements and be commensurate with the executive’s scope of responsibilities, demonstrated leadership abilities, and management experience and effectiveness. Our other elements of compensation focus on motivating and challenging the executive to achieve superior, longer-term, sustained results.

In establishing compensation for the Named Executive Officers, the following are the Compensation Committee’s objectives:

- Attract, retain, reward and motivate high performing executive talent;
- Align senior officer compensation with our corporate strategies, business objectives and the long-term interests of our stockholders;
- Increase the incentive to achieve key strategic, financial and operational performance measures by linking incentive award opportunities to the achievement of performance goals in these areas;
- Provide elements of compensation that, individually and in the aggregate, do not encourage excessive risk-taking; and
- Enhance the officers’ incentive to increase the Company’s long-term value, as well as promote retention of key people, by providing a portion of total compensation opportunities for senior management in the form of direct ownership in the Company through stock ownership.

The Compensation Committee reviews all components of the Named Executive Officers’ compensation, including annual base salary, bonuses based on corporate and individual performance, equity compensation, perquisites and severance benefits. For equity incentive compensation, which includes grants of RSUs and stock options, the Compensation Committee reviews accumulated realized and unrealized stock options and RSU gains. The Compensation Committee also reviews the dollar value to the executive and cost to the Company of all perquisites, as well as the actual and projected payout obligations under several potential severance and change in control scenarios. In addition, from time to time, the Compensation Committee may hire compensation and benefits consultants to assist in developing and reviewing overall executive compensation strategies, which the Compensation Committee did utilize in 2016. The Compensation Committee’s independent compensation consultant, Arnosti Consulting, Inc., had no conflicts of interest related to services rendered for the Company. The Compensation Committee also receives input from the Chief Executive Officer regarding the compensation of all executives other than the Chief Executive Officer.

On June 16, 2016, we held a stockholder advisory vote on the compensation of our named executive officers for 2016, commonly referred to as a say-on-pay vote. Our stockholders overwhelmingly voted to approve the 2016 compensation of our named executive officers, as disclosed in the 2016 proxy statement, with
approximately 98% of the shares present in person or by proxy voting “FOR” the proposal. Considering the results of this advisory vote, the Compensation Committee decided to retain our overall executive compensation philosophy and did not make any changes to our executive compensation program in response to the 2016 say-on-pay vote. The Compensation Committee believes that the elements of the Company’s executive compensation program are structured in a way that is supportive of the Company’s strategic objectives and is aligned with interests of the Company’s stockholders.

Peer Group

In evaluating executive compensation decisions, the Compensation Committee also considers peer group comparator data derived from the following companies: CareDX, Inc., Genmark Diagnostics, Inc., iCAD, Inc., Nanosphere, Inc., NanoString Technologies, Inc., Orasure Technologies Inc., Oxford Immunotec Global PLC, Pacific Biosciences of California, Inc., Response Genetics, Inc., Roka Bioscience, Inc., Sequenom, Inc., T2 Biosystems, Inc., Trovagen, Inc., Venaxis, Inc., and Veracyte, Inc. For peer group companies with ownership or other status changes, peer group data was evaluated through the date of change or relevant period.

Compensation Components

Our executive compensation program is designed to attract executives with the requisite skills deemed necessary to support our strategic objectives, to reward executives for the achievement of near-term and long-term objectives, and to retain executives by aligning compensation with the longer-term creation of stockholder value, by developing a sustainable business with consistent performance.

Our compensation program is comprised of the following components for the Named Executive Officers:

- Base Salaries;
- Annual Incentive Bonus;
- Equity Incentives;
- Employment agreements providing for severance and change in control benefits; and
- Certain perquisites as well as 401(k) plan and health and welfare benefits.

The Compensation Committee believes that these elements of compensation, when combined, are effective, and will continue to be effective, in achieving the overall objectives of our compensation program.

Base Salaries. Executive salaries are determined based on the data from our comparator group, an evaluation of each officer’s individual performance throughout the year, level of responsibility, overall salary structure, budget guidelines and assessment of our financial condition. We believe that this approach ensures that our cost structure will allow us to remain competitive in the markets. Salaries paid to the Named Executive Officers in fiscal 2016 were within the targeted range of the peer group aggregate. The Compensation Committee normally reviews and adjusts as appropriate the base salaries for the Named Executive Officers in the first half of each calendar year. For fiscal year 2016, no adjustment of base salary was made with respect to our Named Executive Officers, except that Mr. Ferrara’s base salary was adjusted in connection with his promotion from Chief Information Officer to Chief Operating Officer.

Annual Bonuses. Consistent with our objectives to tie a significant portion of the Named Executive Officers’ total compensation to our performance, all Named Executive Officers have a target bonus of a fixed percentage of their salary. At the beginning of each fiscal year, the Compensation Committee establishes performance measures and goals, which typically include milestones and targets. The milestones and targets are formulated into specific metrics on which to measure performance and attainment of goals during the year. The Compensation Committee typically assigns weightings to the various performance goals to provide a balanced approach to the various factors applied to determining bonus amounts. For fiscal year 2016, these goals, milestones
and targets, which were designed to be challenging yet achievable with strong management performance, focused primarily on the following:

- Total OVA1/Overa test revenue (while staying within operating budget);
- Payer positive medical policy covered lives;
- Generation of clinical utility studies;
- Launch of enhanced products;
- Initiation of a pelvic mass registry study; and
- Gross margin generated from ASPiRA services to IVD companies.

At the beginning of each fiscal year, the Compensation Committee establishes bonus payout targets for each Named Executive Officer. The Compensation Committee generally establishes the individual payout targets for each Named Executive Officer based on the executive’s position, level of responsibility and a review of the peer group. For 2016, the payout targets for each Named Executive Officer were as follows:

<table>
<thead>
<tr>
<th>Target Opportunity</th>
<th>(as a % of annual base salary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie B. Palmieri</td>
<td>50%</td>
</tr>
<tr>
<td>Fred Ferrara</td>
<td>40%</td>
</tr>
<tr>
<td>Eric J. Schoen</td>
<td>40%</td>
</tr>
</tbody>
</table>

After the close of each fiscal year, or other such timeframe as determined by the Compensation Committee, the Compensation Committee assesses the performance of each Named Executive Officer against the pre-established metrics. Each Named Executive Officer receives a bonus based on his or her individual payout target and our performance measured relative to the specific performance goals.

As a result of this evaluation of 2016 goals, milestones and targets, the Compensation Committee determined that the targets for the fiscal year 2016 had been partially met and paid actual bonus payouts of approximately 40% of the aggregate bonus target amount for Ms. Palmieri, Mr. Ferrara and Mr. Schoen. This resulted in the following payouts to each of our Named Executive Officers:

<table>
<thead>
<tr>
<th>Annual Bonus Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie Palmieri</td>
</tr>
<tr>
<td>Fred Ferrara</td>
</tr>
<tr>
<td>Eric J. Schoen</td>
</tr>
</tbody>
</table>
2017 Annual Bonus Plan. The Compensation Committee has recommended and the Board has approved the components of the 2017 Annual Bonus Plan. There were no changes to the payout targets for the Named Executive Officers. For fiscal year 2017, goals, milestones and targets are focused primarily on the following:

- Total reported revenue (ASPiRA LABS and ASPiRA IVD);
- Payer positive medical policy covered lives;
- Cash utilization; and
- Customer retention and re-order metrics.

Equity Incentive Compensation. The equity component of our executive compensation program is designed to fulfill our performance alignment and retention objectives. We currently maintain the Vermillion, Inc. Amended and Restated 2010 Stock Incentive Plan (the “2010 Plan”). The 2010 Plan is administered by the Compensation Committee of the Board.

The 2010 Plan generally authorizes us to make awards reserving the following recourse against a participant who does not comply with certain employment-related covenants, either during employment or for certain periods after ceasing to be employed: we may terminate any outstanding, unexercised, unexpired, unpaid, or deferred awards; rescind any exercise, payment or delivery pursuant to the award; or recapture any shares (whether restricted or unrestricted) or proceeds from the participant’s sale of shares issued pursuant to the award. These remedies are also generally available to us for awards that would have had a lower grant level, vesting, or payment if a participant’s fraud or misconduct had not caused or partially caused the need for a material financial restatement by us or any affiliate. In addition, all awards or proceeds from the sale of awards made or earned pursuant to the 2010 Plan will be subject to the right of us to full recovery (with reasonable interest thereon) in the event that the Board determines reasonably and in good faith that any participant’s fraud or misconduct has caused or partially caused the need for a material restatement of our financial statements for any fiscal year to which the award relates.

In general, the Named Executive Officers receive incentive stock option grants at the time of hire. Annually thereafter, they receive additional stock option grants or RSUs as recommended by the Compensation Committee. Stock option grants and RSUs are based on individual performance and contributions toward the achievement of our business objectives, as well as overall Company performance. The number of underlying shares that may be purchased pursuant to the stock options granted to each Named Executive Officer varies based on the executive’s position and responsibilities. In addition, amounts are determined by comparing the level of equity-based compensation that is awarded to executives at the peer group companies.

The grants of stock-based awards to Named Executive Officers during the year ended December 31, 2016 were as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Restricted Stock Awards:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Shares of Stock or Units</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Valerie B. Palmieri(1)</td>
<td>-</td>
</tr>
<tr>
<td>Fred Ferrara(2)</td>
<td>-</td>
</tr>
<tr>
<td>Eric J. Schoen(3)</td>
<td>-</td>
</tr>
</tbody>
</table>
functions for which they are responsible. The Compensation Committee does not adhere to rigid formulas when evaluating an executive’s performance during the year against established goals, leadership qualities, operational performance, business responsibilities, career with the Company, current compensation and benefits programs.

In deciding on the type and amount of compensation for each executive, the Compensation Committee seeks to align the interests of the Named Executive Officers with those of our stockholders. In making compensation decisions, the Compensation Committee reviews the performance of the Company and carefully evaluates an executive’s performance during the year against established goals, leadership qualities, operational performance, business responsibilities, career with the Company, current compensation arrangements and long-term potential to enhance shareowner value. The types and relative importance of specific financial and other business objectives vary among our Named Executive Officers depending on their positions and the particular operations or functions for which they are responsible. The Compensation Committee does not adhere to rigid formulas when determining the amount and mix of compensation elements. The Compensation Committee seeks to structure...

Employee Benefits Programs. Our employee benefits program primarily consists of two components: (1) severance and change in control arrangements and (2) perquisites and other benefits.

Severance and Change in Control Arrangements. Under the terms of the Named Executive Officer’s employment agreements, each is eligible to receive severance benefits upon a termination by the Company without cause or by the executive officer due to good reason. The Compensation Committee believes that these arrangements are important in order to attract and retain executive officer talent as many of the peer group companies provide similar benefits.

In addition, the Compensation Committee believes that executive officers have a greater risk of job loss or modification as a result of a change in control transaction than other employees. Accordingly, we have entered into change in control agreements with each of our Named Executive Officers, under which they will receive certain payments and benefits upon qualifying terminations that follow a change in control. The principal purpose of the change in control agreements is to provide executive officers with appropriate incentives to remain with us before, during and after any change in control transaction by providing the executive officers with security in the event their employment is terminated or materially changed following a change in control. By providing this type of security, the change in control agreements help ensure that the executive officers support any potential change in control transaction that may be considered in the best interests of our stockholders, even while the transaction may create uncertainty in the executive officer’s personal employment situation. The Compensation Committee believes that salary and benefits for one year for Ms. Palmieri as our current President and Senior Vice President, Finance and Chief Accounting Officer are reasonable and appropriate to achieve the desired objectives of the agreements.

Perquisites and Other Benefits. Our Named Executive Officers participate in our standard employee benefits programs, including medical, dental, vision, life, short-term and long-term disability insurance, 401(k) Plan and flexible spending accounts.

Method for Determining Compensation Amounts

(1) 450,000 stock options are subject to annual vesting over a period of four years. 150,000 stock options were performance-based grants with vesting based upon attainment of 2016 goals related to (1) OVA/Overa test volume (while staying within operating budget), (2) payer positive medical policy covered lives, (3) generation of clinical utility studies, (4) launch of enhanced products and (5) initiation of a pelvic mass registry study. The performance goals were designed to be challenging, but achievable with strong management performance. These options were scheduled to vest on December 31, 2016 if the performance criteria were met. As the performance criteria were not met, the options were forfeited on December 31, 2016. 350,000 stock options were performance-based grants with vesting based upon attainment of 2017 goals related to (1) coverage by commercial payers, (2) positive endorsement in national guidelines and (3) closing a commercial partnership with specified minimum financial terms. These options vest 50% on December 31, 2017 and 50% on December 31, 2018 if the performance criteria are met.

(2) 150,000 stock options (including 50,000 stock options granted in connection with Mr. Ferrara’s mid-year promotion) are subject to annual vesting over a period of four years. 60,000 stock options were performance-based grants with vesting based upon attainment of 2017 goals related to (1) coverage by commercial payers, (2) positive endorsement in national guidelines and (3) closing a commercial partnership with specified minimum financial terms. These options vest 50% on December 31, 2017 and 50% on December 31, 2018 if the performance criteria are met. The performance goals were designed to be challenging, but achievable with strong management performance.

(3) 75,000 stock options are subject to annual vesting over a period of four years. 35,000 stock options were performance-based grants with vesting based upon attainment of 2017 goals related to (1) coverage by commercial payers, (2) positive endorsement in national guidelines and (3) closing a commercial partnership with specified minimum financial terms. These options vest 50% on December 31, 2017 and 50% on December 31, 2018 if the performance criteria are met. The performance goals were designed to be challenging, but achievable with strong management performance.

Our employee benefits program primarily consists of two components: (1) severance and change in control arrangements and (2) perquisites and other benefits.

Severance and Change in Control Arrangements. Under the terms of the Named Executive Officer’s employment agreements, each is eligible to receive severance benefits upon a termination by the Company without cause or by the executive officer due to good reason. The Compensation Committee believes that these arrangements are important in order to attract and retain executive officer talent as many of the peer group companies provide similar benefits.

In addition, the Compensation Committee believes that executive officers have a greater risk of job loss or modification as a result of a change in control transaction than other employees. Accordingly, we have entered into change in control agreements with each of our Named Executive Officers, under which they will receive certain payments and benefits upon qualifying terminations that follow a change in control. The principal purpose of the change in control agreements is to provide executive officers with appropriate incentives to remain with us before, during and after any change in control transaction by providing the executive officers with security in the event their employment is terminated or materially changed following a change in control. By providing this type of security, the change in control agreements help ensure that the executive officers support any potential change in control transaction that may be considered in the best interests of our stockholders, even while the transaction may create uncertainty in the executive officer’s personal employment situation. The Compensation Committee believes that salary and benefits for one year for Ms. Palmieri as our current President and Chief Executive Officer and nine months for our Chief Operating Officer and Senior Vice President, Finance and Chief Accounting Officer are reasonable and appropriate to achieve the desired objectives of the agreements.

Perquisites and Other Benefits. Our Named Executive Officers participate in our standard employee benefits programs, including medical, dental, vision, life, short-term and long-term disability insurance, 401(k) Plan and flexible spending accounts.

Method for Determining Compensation Amounts

In deciding on the type and amount of compensation for each executive, the Compensation Committee seeks to align the interests of the Named Executive Officers with those of our stockholders. In making compensation decisions, the Compensation Committee reviews the performance of the Company and carefully evaluates an executive’s performance during the year against established goals, leadership qualities, operational performance, business responsibilities, career with the Company, current compensation arrangements and long-term potential to enhance shareowner value. The types and relative importance of specific financial and other business objectives vary among our Named Executive Officers depending on their positions and the particular operations or functions for which they are responsible. The Compensation Committee does not adhere to rigid formulas when determining the amount and mix of compensation elements. The Compensation Committee seeks to structure...
compensation elements in a manner that optimizes the executive’s contributions to the Company, and reflects an evaluation of the compensation paid by our competitors.

The Compensation Committee reviews both current pay and the opportunity for future compensation to achieve an appropriate mix between equity incentive awards and cash payments in order to meet our objectives. However, prior stock compensation gains are not considered in setting future compensation levels. The mix of compensation elements is designed to reward recent results and motivate long-term performance through a combination of cash and equity incentive awards.

The Compensation Committee has primary responsibility for assisting the Board in developing and evaluating potential candidates for executive positions, including the Chief Executive Officer, or CEO. As part of this responsibility, the Committee oversees the design, development and implementation of the compensation program for the CEO and the other Named Executive Officers. The Compensation Committee evaluates the performance of the CEO and determines CEO compensation in light of the goals and objectives of the compensation program. The CEO and the Compensation Committee assess the performance of the other Named Executive Officers and the Compensation Committee determines their compensation after considering initial recommendations from the CEO.

The Compensation Committee approves stock option grants for Named Executive Officers at the time of hire, and thereafter, the Compensation Committee annually reviews and approves stock option or RSU grants. Stock option and RSU grants are based on individual performance and contributions toward the achievement of our business objectives, as well as overall Company performance. Amounts are determined by comparing the level of equity-based compensation awarded to executives of competing companies, along with consideration for attracting, retaining and motivating the executive officers. The stock option and RSU grants made under the 2010 Plan have provisions allowing us to recoup awards if we are required to restate corporate financial statements.

Compensation Policies and Practices Regarding Risk Management

In fulfilling its role in assisting the Board in its risk oversight responsibilities, the Compensation Committee believes that our compensation policies and practices do not motivate imprudent risk taking. Specifically, the Compensation Committee reviewed the following features of our compensation programs that guard against excessive risk-taking:

- our annual incentive compensation is based on balanced performance metrics that we believe promote disciplined progress towards longer-term Company goals;
- we do not offer significant short-term incentives that might drive high-risk investments at the expense of long-term Company value; and
- our compensation awards are capped at reasonable and sustainable levels, as determined by a review of the Company’s economic position and prospects, as well as the compensation offered by comparable companies in the peer group.

Executive Officer Compensation

President and Chief Executive Officer. On October 23, 2014, we entered into an employment agreement with Ms. Valerie Palmieri when she was hired to serve as the Company’s Chief Operating Officer. In connection with Ms. Palmieri’s appointment to the position of President and Chief Executive Officer, the Company and Ms. Palmieri entered into an amended and restated employment agreement (the “Employment Agreement”), effective as of January 1, 2015 (the “Effective Date”). Pursuant to the Employment Agreement, the Company will pay Ms. Palmieri an annual base salary of $375,000. In addition, Ms. Palmieri will be eligible for a bonus of up to fifty percent (50%) of her base salary for achievement of reasonable Company and individual performance-related goals to be defined by the Board (the “Performance Goals”). If Ms. Palmieri is terminated without cause or resigns for good reason (as these terms are defined in the Employment Agreement) and provided that she complies with certain requirements (including signing a standard separation agreement), under the Employment Agreement: (i) she will be entitled to continued payment of her base salary as then in effect for a period of 12 months following the date of
termination; (ii) she will be entitled to continued health and dental benefits through COBRA premiums paid by the Company until the earlier of 12 months after termination or the time that she obtains employment with reasonably comparable or greater health and dental benefits and (iii) she will have a 12-month period after her termination of service (as employee, director or consultant) to exercise any and all of her options that had vested upon termination of employment to purchase Company common stock (subject to earlier expiration at the end of the option’s original term or Ms. Palmieri’s breach of her Employment Agreement or other agreement with the Company). In addition, if Ms. Palmieri is terminated without cause before she has completed the Performance Goals, she will be paid, on a pro rata basis, a bonus commensurate with the portion of the Performance Goals that have been achieved by the time of such termination. Finally, the Employment Agreement provides that if Ms. Palmieri’s employment is terminated without cause or for good reason within the 12-month period following a change of control (as such term is defined in the Employment Agreement), then, in addition to the severance obligations due to Ms. Palmieri as described above, 100% of any then-unvested options to purchase Company common stock previously granted by the Company will vest upon the date of such termination (subject to earlier expiration at the end of the option’s original term).

Chief Operating Officer.  On April 1, 2015, we entered into an employment agreement with Fred Ferrara. The employment agreement between the Company and Mr. Ferrara provided that the Company would initially pay Mr. Ferrara an annual base salary of $288,000. Mr. Ferrara’s base salary was increased to $310,000 in conjunction with his promotion to Chief Operating Officer in November 2016. Under the employment agreement, Mr. Ferrara is eligible for a bonus of up to 40% of his base salary for achievement of reasonable performance-related goals and milestones. In the event Mr. Ferrara is terminated without cause or resigns for good reason (as these terms are defined in the employment agreement), he is entitled to receive: (i) continued payment of his base salary as then in effect for a period of nine months following the date of termination; (ii) continued health and dental benefits paid by the Company until the earlier of nine months after termination or the time that Mr. Ferrara obtains employment with reasonably comparable or better health and dental benefits and (iii) a 12-month period after termination to exercise any and all of his vested options to purchase the Company’s common stock (subject to earlier expiration at the end of the option’s original term). Additionally, if Mr. Ferrara’s employment is terminated without cause or if he resigns for good reason within the 12-month period following a change in control (as the term is defined in the employment agreement), then, in addition to the severance obligations due to Mr. Ferrara as described above, 100% of any then-unvested options previously granted by the Company will vest upon the date of such termination.

Senior Vice President, Finance and Chief Accounting Officer. On April 4, 2012, we entered into an employment agreement with Eric J. Schoen, effective April 4, 2012. The employment agreement between the Company and Mr. Schoen provided that the Company would initially pay Mr. Schoen an annual base salary of $160,000, which has subsequently been increased to $250,000. Under the employment agreement, Mr. Schoen was eligible for a bonus of up to 30% of his base salary for achievement of reasonable performance-related goals and milestones, which has subsequently been increased to 40% of his base salary. The employment agreement provides that, in the event that Mr. Schoen is terminated without cause or resigns for good reason (as these terms are defined in the employment agreement), he is entitled to receive: (i) continued payment of his base salary as then in effect for a period of nine months following the date of termination; (ii) immediate vesting of 50% of any unvested options previously granted by the Company to him, in addition to a 24-month period after termination to exercise any and all of his vested options to purchase the Company’s common stock; and (iii) continued health and dental benefits paid by the Company until the earlier of nine months after termination or the time that Mr. Schoen obtains employment with reasonably comparable or better health and dental benefits. Additionally, the employment agreement provided that if Mr. Schoen’s employment is terminated without cause or if he resigns for good reason within the 12-month period following a change in control (as the term is defined in the employment agreement), then, in addition to the severance obligations due to Mr. Schoen as described above, 50% of any then-unvested options previously granted by the Company will vest upon the date of such termination.

2016 Summary Compensation Table

The compensation earned by the Named Executive Officers for the year ended December 31, 2016 and, to the extent required by the SEC executive compensation disclosure rules, the year ended December 31, 2015 was as follows:
<table>
<thead>
<tr>
<th>Name and Principal Position</th>
<th>Year</th>
<th>Salary</th>
<th>Bonus</th>
<th>Stock Awards</th>
<th>Option Awards&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>Non-Equity Incentive Plan&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>Nonqualified Deferred Compensation Earnings</th>
<th>All Other Compensation&lt;sup&gt;(3)&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie B. Palmieri</td>
<td>2016</td>
<td>$ 375,000</td>
<td>—</td>
<td>—</td>
<td>$ 581,909</td>
<td>$ 75,000</td>
<td>—</td>
<td>$ 682</td>
<td>$1,032,591</td>
</tr>
<tr>
<td>President and Chief Executive Officer</td>
<td>2015</td>
<td>$ 375,000</td>
<td>—</td>
<td>—</td>
<td>$ 590,720</td>
<td>$ 67,500</td>
<td>—</td>
<td>$ 682</td>
<td>$1,033,902</td>
</tr>
<tr>
<td>Fred Ferrara</td>
<td>2016</td>
<td>$ 294,187</td>
<td>—</td>
<td>—</td>
<td>$ 131,760</td>
<td>$ 60,000</td>
<td>—</td>
<td>$ 682</td>
<td>$ 486,629</td>
</tr>
<tr>
<td>Chief Information Officer (through October 31, 2016); Chief Operating Officer (effective November 1, 2016)</td>
<td>2015</td>
<td>$ 216,000</td>
<td>—</td>
<td>—</td>
<td>$ 230,850</td>
<td>$ 22,680</td>
<td>—</td>
<td>$ 161,494</td>
<td>$ 631,024</td>
</tr>
<tr>
<td>Eric J. Schoen</td>
<td>2016</td>
<td>$ 250,000</td>
<td>—</td>
<td>—</td>
<td>$ 55,035</td>
<td>$ 30,000</td>
<td>—</td>
<td>$ 682</td>
<td>$ 335,717</td>
</tr>
<tr>
<td>Vice President, Finance and Chief Accounting Officer (through July 11, 2016); Senior Vice President, Finance and Chief Accounting Officer (effective July 12, 2016)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Represents option awards granted to the named executive officers. The amounts reported in this column are valued based on the aggregate grant date fair value computed in accordance with ASC Topic 718, with the 2016 and 2015 performance-based options valued based on the probable achievement of the performance goals at the time of grant. Assuming maximum achievement of the performance goals, the grant date fair value of Ms. Palmieri’s 2016 performance-based options would be $727,500. Mr. Ferrara’s performance-based option would be $145,620 and Mr. Schoen’s performance-based option would be $63,120. For additional information regarding the assumptions made in calculating these amounts, see Note 9, Employee Benefit Plans, to the consolidated financial statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2016.

<sup>(2)</sup> Amount represents performance bonus for fiscal years 2016 and 2015.

<sup>(3)</sup> Includes Mr. Ferrara’s consulting income of $80,000 prior to his employment as Chief Information Officer and $81,124 of relocation assistance, including a relocation-related tax gross-up of $34,113. The relocation assistance received by Mr. Ferrara was valued based on the actual amounts paid to Mr. Ferrara or the relocation service provider, as applicable.

<sup>(4)</sup> All Other Compensation also includes Company paid insurance premiums of less than $1,000.
2016 Grants of Plan-Based Awards

The grants of plan-based awards to the Named Executive Officers during 2016 were as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Grant Date</th>
<th>Threshold</th>
<th>Target</th>
<th>Maximum</th>
<th>Threshold</th>
<th>Target</th>
<th>Maximum</th>
<th>Estimated future payouts under non-equity incentive plan awards(1)</th>
<th>Estimated future payouts under equity incentive plan awards(2)</th>
<th>All other option awards: Number of securities underlying options (#)(3)</th>
<th>Exercise or base price of option awards ($/sh)(4)</th>
<th>Grant date fair value of option awards($)(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie B. Palmieri</td>
<td>3/17/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>150,000</td>
<td>150,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1.57</td>
<td>65,067</td>
</tr>
<tr>
<td></td>
<td>3/17/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>450,000</td>
<td>—</td>
<td>1.57</td>
<td>424,350</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11/8/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>350,000</td>
<td>350,000</td>
<td>—</td>
<td>—</td>
<td>0.89</td>
<td>92,492</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>187,500</td>
<td>281,250</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Fred Ferrara</td>
<td>3/17/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>100,000</td>
<td>—</td>
<td>1.57</td>
<td>94,300</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11/2/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>50,000</td>
<td>—</td>
<td>0.91</td>
<td>23,600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11/8/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>60,000</td>
<td>60,000</td>
<td>—</td>
<td>—</td>
<td>0.89</td>
<td>13,860</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>124,000</td>
<td>186,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Eric J. Schoen</td>
<td>6/16/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>75,000</td>
<td>—</td>
<td>1.24</td>
<td>46,950</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11/8/2016</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>35,000</td>
<td>35,000</td>
<td>—</td>
<td>—</td>
<td>0.89</td>
<td>8,085</td>
<td></td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>100,000</td>
<td>150,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

(1) These columns show the potential value of the payout for each named executive officer in 2016 if the threshold, target or maximum goals were satisfied for all performance measures under the Company’s annual incentive plan. The performance goals and salary and bonus multiples for determining the payout are described in the “Compensation Discussion and Analysis” section. The 2016 payouts are included in the “2016 Summary Compensation Table”.

(2) These columns show the potential number of stock options which will vest if performance criteria are met during 2016 for the option granted to Ms. Palmieri on March 17, 2016 and 2017 for the options granted to each Named Executive Officer on November 8, 2016. The performance goals for determining vesting are described in the “Compensation Discussion and Analysis” section. The estimates used and maximum grant date fair value are described in the “2016 Summary Compensation Table”.

(3) Stock options granted vest 25% annually over a four year period.

(4) This column shows the exercise price for the stock options granted, which was the closing price of our common stock on the date of grant.

(5) This column shows the grant date fair value under ASC Topic 718 of stock options awards granted to Named Executive Officers in 2016, with the 2016 performance-based options valued based on the probable achievement of the performance goals at the time of grant. Assuming maximum achievement of the performance goals, the total grant date fair value of Ms. Palmieri’s 2016 option grants would be $727,500. Mr. Ferrara’s total would be $145,620 and Mr. Schoen’s total would be $63,120. The option fair value was calculated using the Black-Scholes value on the grant date and is the amount the Company will expense in its financial statements over the award’s vesting schedule assuming no change in probability of achievement, unless the named executive officer leaves the Company. More information regarding these awards is included in the Compensation Discussion and Analysis as well as in Note 9 to our Annual Report on Form 10-K for the year ended December 31, 2016.
The outstanding equity awards held by the Named Executive Officers as of December 31, 2016 were as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Option Awards</th>
<th>Stock Awards</th>
<th>Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that have not Vested</th>
<th>Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that have not Vested</th>
<th>Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that have not Vested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Securities Underlying Exercisable Options</td>
<td>Number of Securities Underlying Unearned Options</td>
<td>Number of Securities Underlying Unexercised Options</td>
<td>Number of Securities Underlying Unexercised Options</td>
<td>Option Exercise Price</td>
</tr>
<tr>
<td>Valerie Palmieri</td>
<td>94,791</td>
<td>80,209</td>
<td>—</td>
<td>$1.55</td>
<td>10/22/2024(1)</td>
</tr>
<tr>
<td></td>
<td>191,666</td>
<td>208,334</td>
<td>—</td>
<td>$1.95</td>
<td>1/2/2025(1)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>450,000</td>
<td>$1.57</td>
<td>3/16/2026(2)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>350,000</td>
<td>—</td>
<td>$0.89</td>
<td>11/7/2026(3)</td>
<td>—</td>
</tr>
<tr>
<td>Fred Ferrara</td>
<td>62,500</td>
<td>87,500</td>
<td>—</td>
<td>$1.74</td>
<td>4/1/2025(4)</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>100,000</td>
<td>$1.57</td>
<td>3/16/2026(2)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>—</td>
<td>50,000</td>
<td>$0.91</td>
<td>11/1/2026(2)</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>60,000</td>
<td>350,000</td>
<td>$0.89</td>
<td>11/7/2026(3)</td>
<td>—</td>
</tr>
<tr>
<td>Eric Schoen</td>
<td>2,500</td>
<td>—</td>
<td>—</td>
<td>$9.22</td>
<td>7/28/2020</td>
</tr>
<tr>
<td></td>
<td>3,400</td>
<td>—</td>
<td>—</td>
<td>$4.13</td>
<td>3/17/2021</td>
</tr>
<tr>
<td></td>
<td>20,000</td>
<td>—</td>
<td>—</td>
<td>$1.96</td>
<td>11/8/2021</td>
</tr>
<tr>
<td></td>
<td>25,000</td>
<td>—</td>
<td>—</td>
<td>$1.62</td>
<td>3/21/2022</td>
</tr>
<tr>
<td></td>
<td>50,000</td>
<td>—</td>
<td>—</td>
<td>$1.62</td>
<td>3/21/2022</td>
</tr>
<tr>
<td></td>
<td>80,625</td>
<td>9,375</td>
<td>—</td>
<td>$3.37</td>
<td>5/27/2023(1)</td>
</tr>
<tr>
<td></td>
<td>37,812</td>
<td>17,188</td>
<td>—</td>
<td>$3.09</td>
<td>3/26/2024(1)</td>
</tr>
<tr>
<td></td>
<td>37,500</td>
<td>—</td>
<td>—</td>
<td>$2.03</td>
<td>7/5/2025</td>
</tr>
<tr>
<td></td>
<td>75,000</td>
<td>—</td>
<td>—</td>
<td>$1.24</td>
<td>6/15/2026(2)</td>
</tr>
<tr>
<td></td>
<td>35,000</td>
<td>—</td>
<td>$0.89</td>
<td>11/7/2026(3)</td>
<td>—</td>
</tr>
</tbody>
</table>

(1) Stock options vest ratably on a monthly basis over a 48 month period from the vesting commencement date.
(2) Stock options vest in four equal annual installments beginning one year following the vesting commencement date.
(3) Represents stock options which will vest upon attainment of performance goals in 2017. The performance goals for determining vesting are described in the “Compensation Discussion and Analysis” section. The estimates used and maximum grant date fair value are described in the “2016 Summary Compensation Table”.
(4) Stock options vest over four years as follows: 25% of the shares vest one year following the vesting commencement date, with the remaining 75% vesting in equal monthly installments over the next three years.
Potential Payments Upon Termination

The following table sets forth amounts payable to the Named Executive Officers if such officer had been terminated as of December 31, 2016:

<table>
<thead>
<tr>
<th>Name</th>
<th>Termination Scenario</th>
<th>Continued Payment of Base Salary</th>
<th>Immediate Vesting of Stock Options(3)</th>
<th>Health and Dental Insurance Benefits(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie Palmieri</td>
<td>Termination(1)</td>
<td>$375,000</td>
<td>$</td>
<td>$25,848</td>
</tr>
<tr>
<td></td>
<td>Within 12 Months After Change-in Control(2)</td>
<td>375,000</td>
<td>21,000</td>
<td>25,848</td>
</tr>
<tr>
<td></td>
<td>For cause</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fred Ferrara</td>
<td>Termination(1)</td>
<td>232,500</td>
<td></td>
<td>22,147</td>
</tr>
<tr>
<td></td>
<td>Within 12 Months After Change-in Control(2)</td>
<td>232,500</td>
<td>5,600</td>
<td>22,147</td>
</tr>
<tr>
<td></td>
<td>For cause</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eric J. Schoen</td>
<td>Termination(1)</td>
<td>187,500</td>
<td>1,050</td>
<td>19,386</td>
</tr>
<tr>
<td></td>
<td>Within 12 Months After Change-in Control(2)</td>
<td>187,500</td>
<td>2,100</td>
<td>19,386</td>
</tr>
<tr>
<td></td>
<td>For cause</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Termination includes the following separation scenarios: involuntary termination not for cause or resignation for good reason (in all cases, assuming the executive is not entering into competitive or other activity detrimental to us).
(2) Termination of employment by us for reasons other than for cause or by Named Executive Officers for good reason within the 12-month period following a change in control (as defined in the respective employment agreements). In this case, the executive would receive the amounts included in this row as well as the amounts included in the row entitled “Termination.”
(3) Reflects the difference between the exercise price of all options that would have vested upon such a termination and $0.95 (the December 30, 2016 closing price of our common stock). These amounts are in addition to the existing value of options vested at December 31, 2016.
(4) Assumes each Named Executive Officer does not obtain employment with reasonably comparable or better health and dental benefits within the time period specified in the respective employment agreements.
PROPOSAL 2: ADVISORY VOTE TO APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

The Company is providing stockholders with an opportunity to vote to approve, on an advisory basis, the Company’s executive compensation, in accordance with Section 14A of the Exchange Act. The advisory vote to approve executive compensation is a non-binding vote on the compensation of the Company’s Named Executive Officers, as described in the “Compensation Discussion and Analysis” section, the tabular disclosure regarding such compensation, and the accompanying narrative disclosure, set forth in this proxy statement. The advisory vote to approve executive compensation is not a vote on the Company’s general compensation policies or the compensation of the Company’s Board. The Company is required to hold the advisory vote to approve executive compensation at least once every three years. At the 2011 Annual Meeting, the Company asked stockholders to indicate if it should hold an advisory vote to approve the compensation of named executive officers every one, two or three years. In accordance with the vote results at the 2011 Annual Meeting, the Board determined to implement an advisory vote on executive compensation every year until the next required vote on the frequency of stockholder votes on executive compensation, which will take place at the Annual Meeting.

We believe that our compensation policies and procedures seek to reward our Named Executive Officers for improving our financial and operating performance and leadership excellence, align their interests with those of our stockholders and encourage them to remain with us for long and productive careers. Because bonus and equity compensation play a key role in aligning our executives’ interests with our stockholders’ interests, annual incentives and equity incentives constitute an essential portion of Named Executive Officer compensation. We believe that our compensation elements simultaneously fulfill one or more performance, alignment and/or retention objectives. We believe that our philosophy and practices have resulted in executive compensation decisions that are appropriate and that have benefited the Company over time.

Specifically, the Compensation Committee believes that the structure of the executive compensation program support the following compensation objectives:

- Attract, retain, reward and motivate high performing executive talent;
- Align senior officer compensation with our corporate strategies, business objectives and the long-term interests of our stockholders;
- Increase the incentive to achieve key strategic, financial and operational performance measures by linking incentive award opportunities to the achievement of performance goals in these areas;
- Provide elements of compensation that, individually and in the aggregate, do not encourage excessive risk-taking; and
- Enhance the officers’ incentive to increase the Company’s long-term value, as well as promote retention of key people, by providing a portion of total compensation opportunities for senior management in the form of direct ownership in the Company through stock ownership.

The Compensation Committee believes that the design of the executive compensation program, which is intended to reward named executive officers for improving our financial and operating performance and leadership excellence, along with the limited use of executive perquisites and reasonable severance pay multiples, contribute to an executive compensation program that is competitive yet strongly aligned with stockholder interests.

For the reasons discussed above, the Board of Directors is asking you to indicate your support for our Named Executive Officer compensation by voting “FOR” the following “say-on-pay” resolution at the Annual Meeting:

“RESOLVED, that the compensation of the named executive officers of the Company, as disclosed in the proxy statement pursuant to the compensation disclosure rules of the SEC, including the Compensation
Discussion and Analysis, the Summary Compensation Table and the other compensation tables and accompanying narrative discussion, is approved.”

THE BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE “FOR” THE ADVISORY RESOLUTION RELATING TO THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS AS DISCLOSED IN THIS PROXY STATEMENT.
PROPOSAL 3: ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES TO APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

In accordance with Section 14A of the Exchange Act, the Company is providing stockholders with an opportunity to vote to approve, on an advisory basis, the frequency of future advisory votes on the Company’s executive compensation, such as we have included in Proposal Two. By voting on this proposal, you may indicate whether you would prefer that we hold an advisory vote on executive compensation every one year, every two years or every three years.

The Board of Directors has determined that stockholders should have an opportunity every one year to vote on the compensation of our Named Executive Officers. In reaching this determination, the Board considered that a one-year cycle will allow investors to provide more consistent feedback on the effectiveness of our short- and long-term compensation strategies and the related business outcomes for the Company so that our board and the Compensation Committee can thoughtfully respond to stockholders’ sentiments and implement any necessary changes to our executive compensation policies and procedures.

This is an advisory vote, which means that this proposal is not binding. Regardless, our Compensation Committee values the opinions expressed by stockholders and expects to implement the frequency that receives the greatest level of support from our stockholders. While we believe that a vote once every one year is the best choice for us, you are not voting to approve or disapprove our recommendation, but rather to make your own choice among a vote every one year, every two years or every three years. You may also abstain from voting on this Proposal.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE IN FAVOR OF A VOTE ON OUR EXECUTIVE COMPENSATION PROGRAM EVERY ONE YEAR.
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding beneficial ownership of our common stock as of April 15, 2017 (unless otherwise indicated), by (1) each person known by us to be the beneficial owner of more than five percent of the outstanding shares of our common stock, (2) each of our directors, (3) each of our Named Executive Officers, and (4) all of our directors and executive officers as a group. All shares are subject to the named person’s sole voting and investment power except where otherwise indicated.

Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. Shares of common stock, which are issued and outstanding, are deemed to be beneficially owned by any person who has or shares voting or investment power with respect to such shares. Shares of common stock which are issuable upon exercise of options or warrants or the vesting of RSUs are deemed to be issued and outstanding and beneficially owned by any person who has or shares voting or investment power over such securities only if such securities are exercisable within 60 days of April 15, 2017, and, in any event, solely for purposes of calculating that person’s percentage ownership of the common stock (and not for purposes of calculating the percentage ownership of any other person).

Except where otherwise indicated, the number of shares of common stock deemed outstanding and used in the denominator for determining percentage ownership for each person equals (i) 56,089,245 shares of common stock outstanding as of April 15, 2017, plus (ii) such number of shares of common stock as are issuable pursuant to RSUs, options or warrants held by that person (and excluding RSUs, options and warrants held by other persons) which may vest or be exercised within 60 days of April 15, 2017.

<table>
<thead>
<tr>
<th>Name and Address of Beneficial Owner</th>
<th>Number of Common Stock Shares Beneficially Owned</th>
<th>Percentage of Outstanding Shares Beneficially Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beneficial Owners of More than 5%:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack W. Schuler(1)</td>
<td>10,578,252</td>
<td>18.60%</td>
</tr>
<tr>
<td>28161 North Keith Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Forest, IL 60045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larry N. Feinberg(2)</td>
<td>9,825,289</td>
<td>17.34%</td>
</tr>
<tr>
<td>c/o Oracle Investment Management, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 Greenwich Avenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenwich, CT 06830</td>
<td></td>
<td></td>
</tr>
<tr>
<td>George H. Schuler(1)</td>
<td>10,051,610</td>
<td>17.32%</td>
</tr>
<tr>
<td>28161 North Keith Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Forest, IL 60045</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMR LLC(3)</td>
<td>5,252,463</td>
<td>9.36%</td>
</tr>
<tr>
<td>245 Summer Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston, MA 02210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matthew Strobeck(4)</td>
<td>3,135,599</td>
<td>5.55%</td>
</tr>
<tr>
<td>688 Pine Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burlington, VT 05401</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Directors and Named Executive Officers:
Based on the information provided in Amendment No. 6 to Schedule 13D filed with the SEC on February 17, 2017 by Larry N. Feinberg with respect to himself, Oracle Associates, LLC (“Oracle Associates”), Oracle Partners, L.P. (“Oracle Partners”), Oracle Investment Management, Inc. (“Investment Manager”), Oracle Ten Fund Master, L.P. (“Ten Fund”) and Oracle Institutional Partners, L.P. (“Institutional Partners”) (Mr. Feinberg, together with Oracle Associates, Oracle Partners, Investment Manager, Ten Fund and Institutional Partners, the “Oracle Reporting Persons”). The Oracle Reporting Persons reported that each of Mr. Feinberg and Oracle Associates has shared voting and dispositive power with respect to 8,333,333 shares of our common stock; Oracle Partners has shared voting and dispositive power with respect to 5,673,754 shares of our common stock; each of Investment Manager and Ten Fund has shared voting and dispositive power with respect to 2,595,980 shares of our common stock; and Institutional Partners has shared voting and dispositive power with respect to 1,555,555 shares of our common stock. Pursuant to the Stockholders Agreement, Oracle Partners and Ten Fund are together entitled to designate one individual to be nominated by the Company to serve on the Company’s Board of Directors. Oracle Associates is the general partner of each of Oracle Partners, Ten Fund and Institutional Partners. Investment Manager is the investment manager to Ten Fund. Mr. Feinberg is the managing member of Oracle Associates and the sole stockholder, director and president of Investment Manager. The ownership reported above includes 583,333 shares underlying warrants held by Institutional Partners. The warrants held by Institutional Partners may not be exercised to the extent such exercise would cause the holder of such warrant (together with the holder’s affiliates and any other persons acting as a group together with the holder or any of the holder’s affiliates) to beneficially own more than 19.99% of our common stock then outstanding.

(2) Based on the information provided in Amendment No. 6 to Schedule 13D filed with the SEC on February 22, 2017 by Larry N. Feinberg with respect to himself, Oracle Associates, LLC (“Oracle Associates”), Oracle Partners, L.P. (“Oracle Partners”), Oracle Investment Management, Inc. (“Investment Manager”), Oracle Ten Fund Master, L.P. (“Ten Fund”) and Oracle Institutional Partners, L.P. (“Institutional Partners”) (Mr. Feinberg, together with Oracle Associates, Oracle Partners, Investment Manager, Ten Fund and Institutional Partners, the “Oracle Reporting Persons”). The Oracle Reporting Persons reported that each of Mr. Feinberg and Oracle Associates has shared voting and dispositive power with respect to 8,333,333 shares of our common stock; Oracle Partners has shared voting and dispositive power with respect to 5,673,754 shares of our common stock; each of Investment Manager and Ten Fund has shared voting and dispositive power with respect to 2,595,980 shares of our common stock; and Institutional Partners has shared voting and dispositive power with respect to 1,555,555 shares of our common stock. Pursuant to the Stockholders Agreement, Oracle Partners and Ten Fund are together entitled to designate one individual to be nominated by the Company to serve on the Company’s Board of Directors. Oracle Associates is the general partner of each of Oracle Partners, Ten Fund and Institutional Partners. Investment Manager is the investment manager to Ten Fund. Mr. Feinberg is the managing member of Oracle Associates and the sole stockholder, director and president of Investment Manager. The ownership reported above includes 583,333 shares underlying warrants held by Institutional Partners. The warrants held by Institutional Partners may not be exercised to the extent such exercise would cause the holder of such warrant (together with the holder’s affiliates and any other persons acting as a group together with the holder or any of the holder’s affiliates) to beneficially own more than 19.99% of our common stock then outstanding.

(3) Based on information provided in the Schedule 13G filed with the SEC on August 10, 2015. In that filing, FMR LLC, Edward C. Johnson 3d and Abigail P. Johnson reported sole dispositive power over 6,175,000 shares of common stock. Edward C. Johnson 3d is a Director and the Chairman of FMR LLC and Abigail P. Johnson is a Director, the Vice Chairman, the Chief Executive Officer and the President of FMR LLC.

(4) Based on the information provided in Amendment No. 4 to Schedule 13D filed with the SEC on February 17, 2017 by Matthew Strobeck and Birchview Capital, LP (“Birchview LP”). Mr. Strobeck reported that he has shared voting and dispositive power with respect to 3,300,913 shares of our common stock and Birchview LP has shared voting and dispositive power with respect to 3,269,913 shares of our common stock and Birchview LP has shared voting and dispositive power with respect to 3,269,913 shares of our common stock.
common stock. Includes 416,666 shares underlying warrants exercisable within 60 days of April 15, 2017. Birchview LP serves as the investment manager of Birchview Fund LLC. Birchview Capital GP, LLC, a Delaware limited liability company (the “General Partner”), is the general partner of Birchview LP. Matthew Strobeck is the sole member of the General Partner.

(5) Includes 11,342 RSUs vesting and 21,050 shares issuable upon exercise of stock options exercisable within 60 days of April 15, 2017.
(6) Includes 12,801 RSUs vesting within 60 days of April 15, 2017.
(7) Includes 17,662 RSUs vesting, 9,901 common stock warrants and 219,687 shares issuable upon exercise of stock options exercisable within 60 days of April 15, 2017.
(8) Represents 9,901 common stock warrants exercisable within 60 days of April 15, 2017.
(9) Includes 13,126 RSUs vesting within 60 days of April 15, 2017.
(10) Includes 10,694 RSUs vesting and 9,901 common stock warrants exercisable within 60 days of April 15, 2017.
(11) Includes 467,186 shares issuable upon exercise of stock options exercisable within 60 days of April 15, 2017.
(12) Includes 106,250 shares issuable upon exercise of stock options exercisable within 60 days of April 15, 2017.
(13) Includes 290,691 shares issuable upon exercise of stock options exercisable within 60 days of April 15, 2017.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

2017 Private Placement

On February 13, 2017, the Company entered into a Securities Purchase Agreement in connection with a private placement, pursuant to which certain existing and new investors agreed to purchase 3,747,125 shares of the Company’s common stock at a price per share of $1.40 and 2,810,338 warrants at a price per warrant of $0.125. The warrants are exercisable for 2,810,338 shares of common stock at an exercise price of $1.80 per share. The purchasers included, among other investors, Valerie B. Palmieri, Fred Ferrara, Eric J. Schoen, James T. LaFrance, James S. Burns, Veronica G.H. Jordan, Oracle Partners, LP, the Jack W. Schuler Living Trust, certain trusts of which H. George Schuler is the trustee and Birchview Fund LLC. The private placement closed on February 17, 2017. Gross proceeds of the private placement to the Company totaled approximately $5.6 million.

Relationships Resulting from 2013 Private Placement

In connection with a May 8, 2013 private placement, on May 13, 2013, the Company entered into a Stockholders Agreement (the “Stockholders Agreement”) with certain of the purchasers in the private placement (the “2013 Purchasers”). Among other things, the Stockholders Agreement provides certain of the 2013 Purchasers with rights to participate in any future equity offerings by the Company on the same price and terms as other investors. In addition, Oracle Partners, LP and Oracle Ten Fund Master LP, together, and Jack W. Schuler (the “Principal Purchasers”), received rights to prohibit the Company from taking any of the following actions unless agreed to by at least one of the Principal Purchasers:

- Making any acquisition with a value greater than $2 million;
- Entering into, or amending the terms of our agreements with Quest Diagnostics, which consent shall not be unreasonably withheld, conditioned or delayed following good faith consultation with the Company;
- Submitting any resolution at a meeting of stockholders or in any other manner changing or authorizing a change in the size of our Board;
- Offering, selling or issuing any securities senior to the Company’s common stock;
- Amending our Certificate of Incorporation or Bylaws in any manner that effects the rights, privileges or economics of the Company’s common stock or warrants;
- Making any action that would result in a change in control of the Company or an insolvency event;
- Paying or declaring dividends or distributing the assets of the Company; or
• Adopting or amending any shareholder rights plan.

In addition, the Principal Purchasers each received the right to nominate a member to serve on our Board. Dr. Varma, currently a partner at Oracle Investment Management, Inc., was designated as a Board nominee by Oracle Partners, LP and Oracle Ten Fund Master, LP pursuant to the Stockholders Agreement. The Board appointed Dr. Varma as a director on September 12, 2013. James T. LaFrance was designated as a Board nominee by Jack W. Schuler. The Board appointed Mr. LaFrance as a director and Chairman of the Board on December 12, 2013.

The rights and prohibitions of the 2013 Purchasers under the Stockholders Agreement terminate for each 2013 Purchaser when it ceases to own or hold less than 50% of the shares, warrants or warrant shares than were purchased at the closing of the private placement.

Directors and Executive Officers

We have entered into indemnification agreements with each of our directors and executive officers, which require us to indemnify our directors and officers to the fullest extent permitted by law in the State of Delaware.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership and changes in ownership with the SEC and with any national securities exchange on which such securities are traded or quoted. Executive officers, directors and such stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. As a practical matter, we assist our executive officers and directors by completing and filing Section 16 reports on their behalf. Based solely on a review of the copies of such reports furnished to us, and the written representations of our executive officers and directors, we believe that our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, complied with all applicable filing requirements for the year ended December 31, 2016.
PROPOSAL 4: RATIFICATION OF THE SELECTION OF THE INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR VERMILLION

The Audit Committee of the Board has selected BDO USA, LLP, an independent registered public accounting firm, to audit our financial statements for the year ending December 31, 2017, and recommends that stockholders vote for ratification of such selection. Notwithstanding this selection, the Audit Committee, in its discretion, may direct the appointment of a new independent registered public accounting firm at any time during the year if the Audit Committee feels that such a change would be in the best interests of our stockholders. In the event of a negative vote on ratification, the Audit Committee may reconsider its selection.

BDO USA, LLP was appointed as our independent registered public accounting firm by the Audit Committee of the Board in April 2012. It is currently serving as our independent registered public accounting firm. BDO USA, LLP has represented to us that it is independent with respect to the Company within the meaning of the published rules and regulations of the SEC.

One or more representatives of BDO USA, LLP plan to attend the Annual Meeting and will be available to answer appropriate questions from stockholders and, although they do not expect to do so, they will have the opportunity to make a statement if they so desire.

Audit Fees and Non-Audit Fees

The following is a summary of the fees and services provided by BDO USA, LLP for 2016 and 2015.

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit fees</td>
<td>$236,590</td>
<td>$234,710</td>
</tr>
<tr>
<td>Audit-related fees</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Tax fees</td>
<td>58,596 (1)</td>
<td>20,135 (1)</td>
</tr>
<tr>
<td>All other fees</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$295,186</td>
<td>$254,845</td>
</tr>
</tbody>
</table>

(1) Represent fees for the preparation of our 2015 and 2014 federal and state tax returns. 2016 includes fees for preparation of a Section 382 Net Operating Loss limitation study.

Audit Committee Pre-Approval of Policies and Procedures

The Audit Committee is responsible for appointing, compensating and overseeing the work of the independent registered public accounting firm. The Audit Committee has established a pre-approval procedure for all audit and permissible non-audit services to be performed by our independent registered public accounting firm. The pre-approval policy requires that requests for services by the independent registered public accounting firm be submitted to our Senior Vice President, Finance and Chief Accounting Officer for review and approval. Any requests that are approved by the Senior Vice President, Finance and Chief Accounting Officer are then aggregated and submitted to the Audit Committee for approval at a meeting of the Audit Committee. Requests may be made with respect to either specific services or a type of service for predictable or recurring services.

All audit, audit-related, tax and other services, which include all permissible non-audit services, provided to us by BDO USA, LLP were pre-approved by the Audit Committee. Additionally, the Audit Committee concluded that the provision of those services by BDO USA, LLP were compatible with the maintenance of the independent registered public accounting firm’s independence.

REPORT OF THE AUDIT COMMITTEE

The Audit Committee reviews the Company’s financial reporting process on behalf of the Board. Management has the primary responsibility for the financial statements and the reporting process, including the system of internal financial controls. Management has represented to the Audit Committee that the Company’s consolidated financial statements for the fiscal year ended December 31, 2016 were prepared in accordance with generally accepted accounting principles, and the Audit Committee has reviewed and discussed the audited financial statements of the Company with management of the Company and BDO USA, LLP which audited the Company’s consolidated financial statements for the fiscal year ended December 31, 2016. In addition, the Audit Committee has discussed with BDO USA, LLP the matters required to be discussed by Auditing Standard No. 1301, Communications with Audit Committees, issued by the Public Company Accounting Oversight Board (“PCAOB”). The Audit Committee has also received from BDO USA, LLP the written disclosures and the letter required by the applicable requirements of the PCAOB regarding BDO USA, LLP’s communications with the audit committee concerning independence and has discussed with BDO USA, LLP the firm’s independence from the Company and its management. Based on the foregoing, the Audit Committee recommended to the Board that the audited financial statements be included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2016 for filing with the SEC.

Respectfully Submitted by:

Members of the Audit Committee

David Schreiber, Chairperson
Veronica G.H. Jordan, Ph.D.
Carl Severinghaus

1. The material in this report is not “soliciting material,” is not deemed “filed” with the SEC and is not to be incorporated by reference into any of our filings under the Securities Act, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.
OTHER MATTERS

We filed an Annual Report on Form 10-K for the year ended December 31, 2016 with the SEC on March 30, 2017. Stockholders may obtain a copy of this report, free of charge, by writing to Vermillion, Inc., Attn: Investor Relations, 12117 Bee Caves Road, Building Three, Suite 100, Austin, Texas 78738. In addition, copies of our annual, quarterly and current reports are available at http://www.vermillion.com.

Our management and our Board know of no matters to come before the Annual Meeting other than the matters referred to in the Notice of Annual Meeting of Stockholders. The persons named in the enclosed proxy will vote the shares represented thereby in accordance with the recommendation of the Board as to any proposal properly presented at the Annual Meeting, or if no recommendation is made by the Board, then pursuant to the authority granted in the proxy.

IMPORTANT NOTE

The matters to be considered at the Annual Meeting are of great importance to our stockholders. Accordingly, you are urged to read and carefully consider the information presented in this proxy statement. Your vote is important, no matter how many or how few shares you hold. Please sign and date the enclosed proxy card and return it today in the enclosed pre-addressed postage-paid envelope. If your shares are held in street name, only your broker or bank can vote your shares and only upon receipt of your specific instructions. Please return the enclosed proxy card to your broker and contact the person responsible for your account to ensure that a proxy card is voted on your behalf.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ Valerie B. Palmieri

Valerie B. Palmieri
President, Chief Executive Officer and Director

Austin, Texas
April 27, 2017
TO VOTE BY MAIL AS THE BOARD OF DIRECTORS RECOMMENDS ON ALL ITEMS BELOW, SIMPLY SIGN, DATE, AND RETURN THIS PROXY CARD.

VERMILLION, INC.’s Board of Directors recommends a vote “FOR” all director nominees listed in proposal 1, “FOR” proposals 2 and 4 and “1 Year” for proposal 3.

1. Election of directors: 01 James S. Burns 02 Veronica G.H. Jordan, Ph.D. 03 James T. LaFrance 04 Valerie B. Palieri 05 David R. Schreiber

(Instructions: To withhold authority to vote for any indicated nominee, write the number(s) of the nominee(s) in the box provided to the right.)

2. Advisory vote to approve the compensation of the Company’s named executive officers.

3. Advisory vote on the frequency of the advisory vote to approve the compensation of the Company’s named executive officers.

4. Proposal to ratify the selection of BDO USA LLP as the Company’s independent registered public accounting firm for the year ending December 31, 2017.

THIS PROXY WHEN PROPERLY EXECUTED WILL BE VOTED AS DIRECTED OR, IF NO DIRECTION IS GIVEN, WILL BE VOTED FOR THE NOMINEES LISTED IN PROPOSAL 1, FOR PROPOSALS 2 AND 4 AND FOR ONE YEAR FOR PROPOSAL 3.

Address Change? Mark box, sign, and indicate changes below: □

Date ____________________________

Signature(s) in Box
Please sign exactly as your name(s) appears on the Proxy. If held in joint tenancy, all persons should sign. Trustees, administrators, etc., should include title and authority. Corporations should provide full name of corporation and title of authorized officer signing the Proxy.
VERMILLION, INC.

ANNUAL MEETING OF STOCKHOLDERS

Thursday, June 21, 2017
8:00 a.m. (Eastern Daylight Time)
35 Nutmeg Drive, Suite 260
Trumbull, CT 06611

VERMILLION, INC.
12117 Bee Caves Road, Building Three, Suite 100
Austin, Texas 78738

proxy

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The signatory hereby appoints each of Valerie B. Palmieri and Eric J. Schoen, with full power of substitution, as the lawful attorney and proxy of the signatory, revoking all proxies previously given, and hereby authorizes each of them to vote as designated on the reverse side, and, in his or her discretion, upon such other business as may properly be presented at the meeting, all of the shares of common stock of VERMILLION, INC. which the signatory shall be entitled to vote at the Annual Meeting of Stockholders to be held on June 21, 2017, and at any adjournments or postponements thereof.

This proxy, when properly executed, will be voted in the manner directed by the stockholder(s) signing on the reverse side. IF NO CHOICE IS INDICATED, THIS PROXY WILL BE VOTED “FOR” THE NOMINEES LISTED IN PROPOSAL 1, “FOR” PROPOSALS 2 AND 4 AND “ONE YEAR” FOR PROPOSAL 3 ON THE REVERSE SIDE. This proxy may be revoked at any time prior to the time it is voted by any means described in the accompanying proxy statement.

PLEASE COMPLETE, DATE AND SIGN THIS PROXY AND MAIL IT PROMPTLY IN THE ENCLOSED ENVELOPE TO ASSURE REPRESENTATION OF YOUR SHARES.

(TO BE SIGNED ON REVERSE SIDE)