



April 4, 2018

Dear Pacific Biosciences of California, Inc. Stockholder:

You are cordially invited to attend our 2018 Annual Meeting of Stockholders (the “Annual Meeting”), which will be held on May 22, 2018 at 9:00 a.m. Pacific Time at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304.

During the Annual Meeting, stockholders will be asked to vote on the proposals set forth in the Notice of Annual Meeting of Stockholders and as more fully described in the accompanying proxy statement.

It is important that your shares are represented and voted at the Annual Meeting. Whether or not you plan to attend, please ensure your representation at the Annual Meeting by voting as soon as possible. We urge you to review carefully the proxy materials and to vote:

- “FOR” each of the three nominees for our Class II directors; and
- “FOR” the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018.

Thank you for your continued support of Pacific Biosciences.

Sincerely,

A handwritten signature in black ink that reads 'Michael W. Hunkapiller'.

Michael Hunkapiller, Ph.D.  
Chairman, President and Chief Executive Officer



**PACIFIC BIOSCIENCES OF CALIFORNIA, INC.**  
**NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS**  
**To Be Held on May 22, 2018**  
**9:00 a.m. Pacific Time**

Pacific Biosciences of California, Inc.'s 2018 Annual Meeting of Stockholders will be held on Tuesday, May 22, 2018 at 9:00 a.m. Pacific Time at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304. During the Annual Meeting, our stockholders will be asked:

- To elect each of the three Class II directors nominated by our Board of Directors and named in this Proxy Statement to serve for a three-year term and until their successors are duly elected and qualified;
- To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018; and
- To transact such other business as may properly come before the Annual Meeting and any adjournment or postponement thereof.

Stockholders of record who owned shares of our common stock at the close of business on April 3, 2018 are entitled to receive notice of, attend, and vote at the Annual Meeting. A complete list of these stockholders will be available at our corporate offices at 1305 O'Brien Drive, Menlo Park, California 94025 during regular business hours for ten days prior to the Annual Meeting. This list also will be available during the Annual Meeting. A stockholder may examine the list for any legally valid purpose related to the Annual Meeting.

If you received notice of how to access the proxy materials via the Internet, a proxy card was not sent to you and you may vote only by telephone or via the Internet. If you received a proxy card and other proxy materials by mail, you may vote by mailing a completed proxy card, by telephone or via the Internet. Your vote must be received by 11:59 p.m. Eastern Time, on Monday, May 21, 2018. For specific voting instructions, please refer to the information provided in the proxy statement, together with your proxy card or the voting instructions you received with the proxy statement. This proxy statement is being mailed to stockholders on or about April 12, 2018.

**YOUR VOTE IS IMPORTANT. Whether or not you plan to attend the Annual Meeting, please submit your vote via the Internet, telephone or mail as soon as possible.**

By Order of the Board of Directors,



Stephen M. Moore  
Vice President, General Counsel and Corporate Secretary

Menlo Park, California  
April 4, 2018

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**PACIFIC BIOSCIENCES OF CALIFORNIA, INC.**  
**1305 O'Brien Drive,**  
**Menlo Park, California 94025**

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**PROXY STATEMENT**  
**FOR THE ANNUAL MEETING OF STOCKHOLDERS**  
**To Be Held on May 22, 2018**

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**GENERAL INFORMATION**

We are providing you with these proxy materials in connection with the solicitation by the Board of Directors of Pacific Biosciences of California, Inc. of proxies to be used at our 2018 Annual Meeting of Stockholders (the "Annual Meeting"). The Annual Meeting will be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304 on May 22, 2018 at 9:00 a.m. Pacific Time. This Proxy Statement contains important information regarding our Annual Meeting, the proposals on which you are being asked to vote, information you may find useful in determining how to vote, and information about voting procedures. As used herein, "we," "us," "our," "Pacific Biosciences" or the "Company" refers to Pacific Biosciences of California, Inc., a Delaware corporation.

This Proxy Statement and the accompanying proxy card or voting instruction form will first be made available to our stockholders on or about April 12, 2018. See the section titled "Fiscal Year 2017 Annual Report and SEC Filings" for information on accessing our 2017 Annual Report to Stockholders.

The information provided in the "question and answer" format below is for your convenience only and is merely a summary of the information contained in this Proxy Statement. You should read this entire Proxy Statement carefully. Information contained on, or that can be accessed through, our website is not intended to be incorporated by reference into this Proxy Statement and references to our website address in this Proxy Statement are inactive textual references only.

**QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING AND THESE PROXY MATERIALS**

***What matters will be voted on at the Annual Meeting?***

The following matters will be voted on at the Annual Meeting:

- Proposal 1: The election of the each of the three Class II directors nominated by our Board of Directors and named in this Proxy Statement to serve for a three-year term and until their successors are duly elected and qualified;
- Proposal 2: The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018; and
- Such other business as may properly come before the Annual Meeting or any adjournment or postponement of the Annual Meeting.

***How does the Board of Directors recommend that I vote?***

Our Board of Directors recommends that you vote:

- "FOR" the election of each of the three Class II directors nominated by our Board of Directors and named in this Proxy Statement; and

- “FOR” the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018;

***Will there be any other items of business on the agenda?***

If any other items of business or other matters are properly brought before the Annual Meeting, your proxy gives discretionary authority to the persons named on the proxy card with respect to those items of business or other matters. The persons named on the proxy card intend to vote the proxy in accordance with their best judgment. Our Board of Directors does not intend to bring any other matters to be voted on at the Annual Meeting. We are not currently aware of any other matters that may properly be presented by others for action at the Annual Meeting.

***Who is entitled to vote at the Annual Meeting?***

Holders of our common stock at the close of business on April 3, 2018, which we refer to as the record date, may vote at the Annual Meeting. Each stockholder is entitled to one vote for each share of our common stock held as of the record date.

A complete list of these stockholders will be available at our corporate offices at 1305 O’Brien Drive, Menlo Park, California 94025 during regular business hours for the ten days prior to the Annual Meeting. This list also will be available during the Annual Meeting at the meeting location. A stockholder may examine the list for any legally valid purpose related to the Annual Meeting.

***What is the difference between holding shares as a stockholder of record and as a beneficial owner?***

*Stockholders of Record.* You are a stockholder of record if at the close of business on the record date your shares were registered directly in your name with Computershare Trust Company, N.A., our transfer agent.

*Beneficial Owner.* You are a beneficial owner if at the close of business on the record date your shares were held by a brokerage firm, bank or other nominee and not in your name. Being a beneficial owner means that, like many of our stockholders, your shares are held in “street name.” As the beneficial owner, you have the right to direct your broker, bank or nominee how to vote your shares by following the voting instructions your broker, bank or other nominee provides. If you do not provide your broker, bank or nominee with instructions on how to vote your shares, your broker, bank or nominee will not be able to vote your shares with respect to the proposals. Please see “*What if I do not specify how my shares are to be voted?*” for more information.

***Do I have to do anything in advance if I plan to attend the Annual Meeting in person?***

If you are a stockholder of record, you do not need to do anything in advance to attend or vote at the Annual Meeting in person. In order to enter the Annual Meeting, you must present a form of photo identification acceptable to us, such as a valid driver’s license or passport, as well as proof of share ownership. If you are a beneficial owner, you must bring a legal proxy from the organization that holds your shares in order to vote your shares at the Annual Meeting in person. Use of cameras, recording devices, computers and other personal electronic devices will not be permitted at the Annual Meeting. Photography and video are prohibited at the Annual Meeting.

***How do I vote and what are the voting deadlines?***

*Stockholders of Record.* If you are a stockholder of record, there are several ways for you to vote your shares:

- **By mail.** If you received printed proxy materials, you may submit your vote by completing, signing and dating each proxy card received and returning it in the prepaid envelope. Sign your name exactly as it appears on the proxy card. Proxy cards submitted by mail must be received no later than May 21, 2018 to be voted at the Annual Meeting.



- **By telephone or via the Internet.** You may vote your shares by telephone at 1-800-652-8683 or via the Internet at [www.investorvote.com/PACB](http://www.investorvote.com/PACB) by following the instructions provided in the proxy card. If you vote by telephone or via the Internet, you do not need to return a proxy card by mail. Internet and telephone voting are available 24 hours a day. Votes submitted by telephone or via the Internet must be received by 11:59 p.m. Eastern Time on May 21, 2018.
- **In person at the Annual Meeting.** You may vote your shares in person at the Annual Meeting. Even if you plan to attend the Annual Meeting in person, we recommend that you also submit your proxy card or voting instructions or vote by telephone or via the Internet by the applicable deadline so that your vote will be counted if you later decide not to attend the Annual Meeting.

*Beneficial Owners.* If you are a beneficial owner of your shares, you should have received the proxy materials and voting instructions from the broker, bank or other nominee holding your shares. You should follow the voting instructions provided by your broker, bank or nominee in order to instruct your broker, bank or other nominee on how to vote your shares. The availability of telephone and Internet voting will depend on the voting process of the broker, bank or nominee. Shares held beneficially may be voted in person at the Annual Meeting only if you obtain a legal proxy from the broker, bank or nominee giving you the right to vote the shares.

Whether or not you plan to attend the Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. To vote, you will need the control number. The control number will be included in the notice or on your proxy card if you are a stockholder of record, or included with your voting instructions received from your broker, bank or other nominee if you hold your shares of common stock in a “street name”.

Internet proxy voting is provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. Please be aware that you must bear any costs associated with your Internet access.

***Can I revoke or change my vote after I submit my proxy?***

*Stockholders of Record.* If you are a stockholder of record, you may revoke your proxy at any time before it is voted at the Annual meeting by:

- Signing and returning a new proxy card with a later date;
- Entering a new vote by telephone or via the Internet by 11:59 p.m. Eastern Time on May 21, 2018;
- Delivering a written revocation to our Corporate Secretary at Pacific Biosciences of California, Inc., 1305 O’Brien Drive, Menlo Park, California 94025, by 11:59 p.m. Eastern Time on May 21, 2018; or
- Attending the Annual Meeting and voting in person.

*Beneficial Owners.* If you are a beneficial owner of your shares, you must contact the broker, bank or other nominee holding your shares and follow their instructions for changing your vote.

***What if I do not specify how my shares are to be voted?***

*Stockholders of Record.* If you are a stockholder of record and you submit a proxy, but you do not provide voting instructions, your shares will be voted:

- “FOR” the election of each of the three Class II directors nominated by our Board of Directors and named in this Proxy Statement (Proposal 1);
- “FOR” the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018 (Proposal 2); and
- In the discretion of the named proxies regarding any other matters properly presented for a vote at the Annual Meeting.

*Beneficial Owners.* If you are a beneficial owner and you do not provide the broker, bank or other nominee that holds your shares with voting instructions, the broker, bank or other nominee will determine if it has the discretionary authority to vote on the particular matter. Under the rules of The NASDAQ Stock Market, brokers, banks and other nominees do not have discretion to vote on non-routine matters such as Proposal 1. Therefore, if you do not provide voting instructions to your broker, bank or other nominee, your broker, bank or other nominee may not vote your shares on Proposal 1.

***What constitutes a quorum, and why is a quorum required?***

We need a quorum of stockholders to hold our Annual Meeting. A quorum exists when at least a majority of the outstanding shares entitled to vote at the close of business on the record date are represented at the Annual Meeting either in person or by proxy. As of the close of business on the record date April 3, 2018, we had 131,871,842 shares of common stock outstanding and entitled to vote at the Annual Meeting, meaning that 65,935,921 shares of common stock must be represented in person or by proxy to constitute a quorum.

Your shares will be counted towards the quorum if you submit a proxy or vote at the Annual Meeting. Abstentions and broker non-votes will also count towards the quorum requirement. If there is not a quorum, a majority of the shares present at the Annual Meeting may adjourn the meeting to a later date.

***What is the effect of a broker non-vote?***

Brokers, banks or other nominees who hold shares of our common stock for a beneficial owner have the discretion to vote on routine proposals when they have not received voting instructions from the beneficial owner at least ten days prior to the Annual Meeting. A broker non-vote occurs when a broker, bank or other nominee does not receive voting instructions from the beneficial owner and does not have the discretion to direct the voting of the shares. Broker non-votes will be counted for purposes of calculating whether a quorum is present at the Annual Meeting, but will not be counted for purposes of determining the number of votes present in person or represented by proxy and entitled to vote with respect to a particular proposal. Thus, a broker non-vote will not impact our ability to obtain a quorum and will not otherwise affect the outcome of the vote on a proposal that requires the approval of a plurality of votes cast or on a proposal that requires the approval of a majority of the votes present in person or represented by proxy and entitled to vote (Proposals 1 and 2).

***What is the vote required for each proposal?***

<b>Proposal</b>	<b>Vote Required</b>	<b>Broker Discretionary Voting Allowed</b>
Proposal 1—Election of each of the three Class II directors	For each director, the votes cast for such nominee’s election must exceed the votes cast against such nominee’s election	No
Proposal 2—Ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm	Majority of the shares entitled to vote and present in person or represented by proxy	Yes

With respect to Proposal 1, you may vote FOR a nominee, AGAINST a nominee, or ABSTAIN from voting on a nominee. A nominee will be elected if the votes cast for such nominee’s election exceed the votes cast against such nominee’s election. You may not cumulate votes in the election of directors. If you ABSTAIN from voting on a nominee, the abstention will not be counted as votes “FOR” or “AGAINST” such nominee’s election and will not have an effect on the outcome of the vote.

With respect to Proposal 2, you may vote FOR, AGAINST or ABSTAIN. If you ABSTAIN from voting on this proposal, the abstention will have the same effect as a vote AGAINST Proposal 2.

***Who will count the votes?***

Computershare Trust Company, N.A., our transfer agent, has been engaged to receive and tabulate stockholder votes. Computershare will separately tabulate FOR and AGAINST votes, abstentions, and broker non-votes. Computershare will also certify the election results and perform any other acts required by the Delaware General Corporation Law.

***Who is paying for the costs of this proxy solicitation?***

We will bear the entire cost of proxy solicitation, including the preparation, assembly, printing, mailing and distribution of the proxy materials. Solicitations may be made personally or by mail, facsimile, telephone, messenger, or via the Internet by our personnel who will not receive additional compensation for such solicitation. In addition, we will reimburse brokerage firms and other custodians for their reasonable out-of-pocket expenses for forwarding the proxy materials to stockholders.

***How can I find the results of the Annual Meeting?***

Preliminary results will be announced at the Annual Meeting. Final results also will be published in a Current Report on Form 8-K to be filed with the SEC after the Annual Meeting.

***I share an address with another stockholder, and we received only one paper copy of the proxy materials. How may I obtain an additional copy of the proxy materials?***

The SEC has adopted rules that allow a company to deliver a single proxy statement or annual report to an address shared by two or more of its stockholders. This method of delivery, known as “householding,” permits us to realize significant cost savings, reduces the amount of duplicate information stockholders receive, and reduces the environmental impact of printing and mailing documents to our stockholders. Under this process, certain stockholders will receive only one copy of our proxy materials and any additional proxy materials that are delivered until such time as one or more of these stockholders notifies us that they want to receive separate copies. Any stockholders who object to or wish to begin householding may notify our Investor Relations Department at ir@pacificsciences.com or Investor Relations, Pacific Biosciences of California, Inc., 1305 O’Brien Drive, Menlo Park, CA 94025.

***What is the deadline to propose actions for consideration at next year’s annual meeting of stockholders or to nominate individuals to serve as directors?***

***Stockholder Proposals for 2019 Annual Meeting***

The submission deadline for stockholder proposals to be included in our proxy materials for the 2019 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act is December 6, 2018 except as may otherwise be provided in Rule 14a-8. All such proposals must be in writing and received by our Corporate Secretary at Pacific Biosciences of California, Inc., 1305 O’Brien Drive, Menlo Park, CA 94025 by close of business on the required deadline in order to be considered for inclusion in our proxy materials for the 2019 annual meeting of stockholders. Submission of a proposal before the deadline does not guarantee its inclusion in our proxy materials.

***Advance Notice Procedure for 2019 Annual Meeting***

Under our Bylaws, director nominations and other business may be brought at an annual meeting of stockholders only by or at the direction of the Board of Directors or by a stockholder entitled to vote who has submitted a proposal in accordance with the requirements of our Bylaws as in effect from time to time. For the 2019 annual meeting of stockholders, a stockholder notice must be received by our Corporate Secretary at Pacific Biosciences of California, Inc., 1305 O’Brien Drive, Menlo Park, CA 94025, no earlier than December 6, 2018

and no later than January 5, 2019. However, if the 2019 annual meeting of stockholders is advanced by more than 25 days prior to or delayed by more than 25 days after the one-year anniversary of the 2018 Annual Meeting of Stockholders, then, for notice by the stockholder to be timely, it must be received by our Corporate Secretary not earlier than the close of business on the 120th day prior to the 2019 annual meeting of stockholders and not later than the close of business on the later of (i) the 90th day prior to the 2019 annual meeting of stockholders, or (ii) the 10th day following the day on which public announcement of the date of such annual meeting is first made. Please refer to the full text of our advance notice Bylaw provisions for additional information and requirements. A copy of our Bylaws may be obtained by writing to our Corporate Secretary at the address listed above.

## CORPORATE GOVERNANCE

### Overview

The Board of Directors oversees our Chief Executive Officer and other senior management in the competent and ethical operation of our business and affairs and assures that the long-term interests of the stockholders are being served. The key practices and procedures of the Board of Directors are outlined in the Corporate Governance Guidelines available on our website at [www.pacb.com](http://www.pacb.com), under “Corporate Governance.”

### Board Leadership Structure

Pursuant to our Corporate Governance Guidelines, the roles of Chairman and Chief Executive Officer may be filled by the same or different individuals. This allows the Board of Directors flexibility to determine whether the two roles should be combined or separated based upon the needs of the Company and the Board of Director’s assessment of our leadership from time to time. The Board of Directors believes that, at this time, it is in the best interests of our Company and our stockholders for Michael Hunkapiller, Ph.D., to continue to serve as our Chairman and Chief Executive Officer, and William Ericson, an independent director, to continue to serve as Lead Independent Director.

Combining the roles of Chairman and Chief Executive Officer promotes unified leadership and direction for us, allowing for operational effectiveness and efficiencies that ensure the implementation of strategic initiatives and business plans to optimize stockholder value.

The Board of Directors believes the combined role of Chairman and Chief Executive Officer, together with the role of the Lead Independent Director, appropriately balances our leadership. The role of our Lead Independent Director helps ensure a strong, independent, and active Board of Directors. The Lead Independent Director presides over executive sessions without the presence of the non-independent directors or members of our management from time to time as deemed necessary or appropriate. The Lead Independent Director also has the authority to call meetings of the independent directors and is available for consultation or direct communication. The Board of Directors, including each of its committees, also has complete and open access to all members of management and the authority to retain independent advisors as members deem appropriate. In addition, the members of the Audit, Compensation, and Corporate Governance and Nominating Committees are independent directors, and the committee chairs regularly hold executive sessions without management, including the Chief Executive Officer, present.

### The Board’s Role in Risk Oversight

Our management has the day-to-day responsibility for identifying risks facing us, including implementing suitable mitigating processes and controls, assessing risks in relation to Company strategies and objectives, and appropriately managing risks in a manner that serves the best interests of the Company, our stockholders, and other stakeholders. Our Board of Directors is responsible for ensuring that an appropriate culture of risk management exists within the Company and for setting the right “tone at the top,” overseeing our aggregate risk profile, and assisting management in addressing specific risks.

Generally, various committees of our Board of Directors oversee risks associated with their respective areas of responsibility and expertise. For example, our Audit Committee oversees, reviews and discusses with management and the independent auditors risks associated with our internal controls and procedures for financial reporting and the steps management has taken to monitor and mitigate those exposures; our Audit Committee also oversees the management of other risks, including those associated with foreign exchange fluctuation, compliance with the United States Foreign Corrupt Practices Act of 1977 and cybersecurity. Our Compensation Committee oversees the management of risks associated with our compensation policies, plans and practices. Our Corporate Governance and Nominating Committee oversees the management of risks associated with director

independence and Board of Directors composition and organization. Our Science and Technology Committee assists the Board of Directors in its oversight of our strategies to make use of science and technology and our quality strategy and processes. Management and other employees report to the Board of Directors and/or relevant committee from time to time on risk-related issues.

### **Director Independence**

Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our Board of Directors has determined that none of Messrs. Ericson, Livingston and Mohr, and Drs. Botstein, Milligan and Shapiro, representing six of our eight directors has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is “independent” as that term is defined under the rules of The NASDAQ Stock Market.

Our Board of Directors also determined that Messrs. Livingston and Mohr and Dr. Milligan, who comprise our Audit Committee, Messrs. Ericson and Mohr and Dr. Milligan, who comprise our Compensation Committee, Mr. Ericson and Dr. Shapiro, who comprise our Corporate Governance and Nominating Committee, and Mr. Livingston who will, subject to his election at the Annual Meeting, become a member of our Corporate Governance and Nominating Committee effective immediately after the Annual Meeting, satisfy the independence standards for those committees established by applicable SEC rules, including Rule 10A-3 of the Exchange Act, and the rules of The NASDAQ Stock Market. In making this determination, our Board of Directors considered the relationships that each non-employee director has with us and all other facts and circumstances that our Board of Directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

The Board of Directors believes that the independence of the Board members satisfies the independence standards established by applicable SEC rules and the rules of The NASDAQ Stock Market.

### **Director Nominations**

Candidates for nomination to our Board of Directors are selected by the Corporate Governance and Nominating Committee in accordance with the committee’s charter, our Certificate of Incorporation and Bylaws, our Corporate Governance Guidelines, and the criteria adopted by the Board of Directors regarding director candidate qualifications. The Corporate Governance and Nominating Committee will evaluate all candidates in the same manner and using the same criteria, regardless of the source of the recommendation.

The Corporate Governance and Nominating Committee may retain recruiting professionals to assist in identifying and evaluating candidates for director nominees. The Corporate Governance and Nominating Committee considers factors such as character, integrity, judgment, diversity of experience (including age, gender, international background, race and professional experience), independence, area of expertise, corporate experience, length of service, potential conflicts of interest, other commitments and the like. The Corporate Governance and Nominating Committee considers the following minimum qualifications to be satisfied by any nominee to the Board of Directors: the highest personal and professional ethics and integrity; proven achievement and competence in the nominee’s field and the ability to exercise sound business judgment; skills that are complementary to those of the existing Board of Directors; the ability to assist and support management and make significant contributions to the Company’s success; and an understanding of the fiduciary responsibilities that is required of a member of the Board of Directors and the commitment of time and energy necessary to diligently carry out those responsibilities.

Based on the Corporate Governance and Nominating Committee’s recommendation, the Board of Directors selects director nominees and recommends them for election by our stockholders, and also fills any vacancies that may arise between annual meetings of stockholders.

The Corporate Governance and Nominating Committee will consider director candidates who are timely proposed by our stockholders in accordance with our Bylaws and other procedures established from time to time by the Corporate Governance and Nominating Committee.

If you would like the Corporate Governance and Nominating Committee to consider a prospective director candidate, please follow the procedures in our Bylaws and submit the candidate's name and qualifications to: Corporate Secretary, Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, CA 94025.

### **Codes of Business Conduct and Ethics**

We have adopted a code of business conduct that is applicable to all of our employees, officers, and directors. In addition, we have adopted a code of ethics that is applicable to our chief executive and senior financial and legal officers. Our code of business conduct is available on the Investor Relations page of our website at [www.pacb.com](http://www.pacb.com) under "Corporate Governance". We will post amendments to or waivers of our code of business conduct on the same website.

### **Communication with the Board of Directors**

Any stockholder communication with our Board of Directors or individual directors should be directed to Pacific Biosciences of California, Inc., c/o Corporate Secretary, 1305 O'Brien Drive, Menlo Park, CA 94025. The Corporate Secretary will forward these communications, as appropriate, directly to the director(s). The independent directors of the Board of Directors review and approve the stockholder communication process periodically in an effort to enable an effective method by which stockholders can communicate with the Board of Directors.

## BOARD OF DIRECTORS AND COMMITTEES OF THE BOARD

### Board and Committee Meetings

Our Board of Directors and its committees meet throughout the year on a set schedule, hold special meetings as needed, and act by written consent from time to time. During fiscal year 2017, each director attended at least 75% of the aggregate of (i) the total number of meetings of our Board of Directors held during the period for which he or she has been a director and (ii) the total number of meetings held by all committees of our Board of Directors on which he or she served during the periods that he or she served.

The names of the nominees and directors, their ages as of December 31, 2017 and certain other information about them are set forth below:

<u>Name of Director</u>	<u>Age</u>	<u>Position</u>	<u>Class and Term</u>
Michael Hunkapiller, Ph.D.	69	President, Chief Executive Officer and Chairman of the Board of Directors	Class II, term expires 2018
Kathy Ordoñez (1)	67	Chief Commercial Officer and Director, Executive Vice President and Director	Class III, term expires 2019
David Botstein, Ph.D.	75	Director	Class III, term expires 2019
William Ericson	59	Director	Class III, term expires 2019
Randy Livingston	64	Director	Class II, term expires 2018
John Milligan, Ph.D.	57	Director	Class I, term expires 2020
Marshall Mohr	62	Director	Class II, term expires 2018
Lucy Shapiro, Ph.D.	77	Director	Class I, term expires 2020

- (1) Ms. Ordoñez was appointed as Chief Commercial Officer and Executive Vice President for the Company as of October 30, 2017, and in connection therewith resigned as a member of both the Compensation Committee and the Corporate Governance and Nominating Committee effective as of such date. Ms. Ordoñez retained her role as the Chair of the Science and Technology Committee but stopped receiving compensation for this position as of October 30, 2017.

The principal occupations and positions and directorships for at least the past five years of our directors and director nominees, as well as certain information regarding their individual experience, qualifications, attributes and skills that led our Board of Directors to conclude that they should serve on the Board of Directors, are described below. There are no family relationships among any of our directors or executive officers.

**Michael Hunkapiller, Ph.D.** became our President and Chief Executive Officer in 2012. He is Chairman of our Board of Directors, and has served on our Board of Directors since 2005. Since November 2004, Dr. Hunkapiller has been a General Partner at Alloy Ventures, or Alloy, a venture capital firm. Prior to Alloy, Dr. Hunkapiller spent 21 years at Applied Biosystems Inc. At Applied Biosystems, he held various positions, most recently serving as president and general manager. Dr. Hunkapiller holds a Ph.D. in Chemical Biology from the California Institute of Technology and a B.S. in Chemistry from Oklahoma Baptist University. We believe that Dr. Hunkapiller possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his long history with us, as well as his extensive experience at Applied Biosystems.

**David Botstein, Ph.D.** has been a member of our Board of Directors since 2012. Effective January 2014, Dr. Botstein is the Chief Scientific Officer at Calico Life Sciences, L.L.C. Dr. Botstein was formerly Director of the Lewis-Sigler Institute for Integrative Genomics and Anthony B. Evnin Professor of Genomics at Princeton University, where he served from 2003 to 2013. From 1990 to 2003 he was Chairman of the Department of Genetics at Stanford University. Previously, he was Vice President for Science at Genentech, Inc. He is a member of the National Academy of Sciences and the Institute of Medicine, and has received numerous awards for his achievements in science. Dr. Botstein has made fundamental contributions to modern genetics, including the discovery of many yeast and bacterial genes and the establishment of key techniques that are commonly used



today. In 1980, Dr. Botstein and three colleagues proposed a method for mapping genes that laid the groundwork for the Human Genome Project. Dr. Botstein holds a Ph.D. in Human Genetics from the University of Michigan and an A.B. in Biochemical Sciences from Harvard. We believe that Dr. Botstein possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his extensive experience in the life sciences industry.

**William Ericson** has been a member of our Board of Directors since 2004 and our Lead Independent Director since 2010. Mr. Ericson is a Founding Partner at Wildcat Venture Partners where he focuses on investments in Digital Health. He is also a General Partner at Mohr Davidow Ventures (MDV) where he has led the firm's focus on personalized medicine investing since 2003. Mr. Ericson holds a B.S.F.S. from Georgetown University School of Foreign Service and a J.D. from Northwestern University School of Law. We believe that Mr. Ericson possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience with multiple companies in the life sciences industry and his focus on companies with molecular diagnostic platforms that will enable the vision of personalized medicine.

**Randy Livingston** has been a member of our Board of Directors since 2009. He has served as Vice President for Business Affairs and Chief Financial Officer of Stanford University since March 2001. In October 2017 he was also named University Liaison for Stanford Medicine and a director of Stanford Health Care at Lucile Packard Children's Hospital at Stanford. Before joining Stanford University, Mr. Livingston served as chief financial officer for multiple technology and life science companies in Silicon Valley. Mr. Livingston currently serves as a director of eHealth, Inc. Mr. Livingston holds a B.S. in Mechanical Engineering and an M.B.A. from Stanford University. We believe that Mr. Livingston possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his executive experience and his financial and accounting expertise with public companies.

**John F. Milligan, Ph.D.** has been a member of our Board of Directors since 2013. Dr. Milligan joined Gilead Sciences Inc. in 1990 as a research scientist and was made Director of Project Management and Project Team Leader for the Gilead Hoffmann-La Roche Tamiflu® collaboration in 1996. In 2002, Dr. Milligan was appointed Chief Financial Officer of Gilead. He was named Gilead's Chief Operating Officer in 2007 and President in 2008. Dr. Milligan was appointed Chief Executive Officer and elected to the board of directors of Gilead in 2016. Dr. Milligan is a Trustee of Ohio Wesleyan University. Dr. Milligan received his B.A. from Ohio Wesleyan University, his Ph.D. in biochemistry from the University of Illinois and was an American Cancer Society postdoctoral fellow at the University of California at San Francisco. We believe that Dr. Milligan possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his executive experience and his financial expertise in the life sciences industry.

**Marshall Mohr** has been a member of our Board of Directors since 2012. Since March 2006, he has been Senior Vice President and Chief Financial Officer of Intuitive Surgical, Inc., a provider of surgical robotics. Prior to joining Intuitive Surgical, Mr. Mohr served as Vice President and Chief Financial Officer of Adaptec, Inc. Before 2003, Mr. Mohr was an audit partner with PricewaterhouseCoopers LLP where he was most recently the managing partner of the firm's West Region Technology Industry Group and led its Silicon Valley accounting and audit advisory practice. Since 2005, Mr. Mohr has been a member of the board of directors and chairman of the audit committee of Plantronics, Inc., a provider of lightweight communications headsets and telephone headset systems, and also served as a member of the board of directors and chairman of the audit committee of Atheros Communications, Inc., a developer of semiconductor system solutions for wireless communications products, from November 2003 to May 2011 when Atheros was sold to Qualcomm, Inc. Mr. Mohr holds a Bachelor of Business Administration in Accounting and Finance from Western Michigan University. We believe that Mr. Mohr possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience in financial and accounting matters.

**Kathy Ordoñez** became our Chief Commercial Officer and Executive Vice President as of October 30, 2017. She has been a member of our Board of Directors since December 2014. Ms. Ordoñez brings more than 30

years of experience in the life sciences and diagnostics industries. From January 2012 until June 2013, Ms. Ordoñez was a Senior Vice President at Quest Diagnostics Incorporated, a leading provider of diagnostic information services, where she was initially responsible for leading their R&D effort and later provided oversight to multiple businesses commercializing diagnostic products and testing services. Ms. Ordoñez joined Quest Diagnostics as part of its acquisition in 2011 of Celera Corporation, a leading provider of genetic testing products for HIV resistance, cystic fibrosis and high complexity tissue transplantation. From April 2002 until May 2011, Ms. Ordoñez was the Chief Executive Officer at Celera, and she founded Celera Diagnostics in December 2000. From 1985 until 2000, Ms. Ordoñez held several senior positions at Hoffmann-La Roche, overseeing the formation of Roche Molecular Systems, where she served as President and Chief Executive Officer, and led the wide-scale commercial application of the Polymerase Chain Reaction (PCR) technology to the research, diagnostic and forensic fields. Ms. Ordoñez also served as Director, non-executive Chairman, and Chief Executive Officer of RainDance Technologies, Inc., which was sold to Bio-Rad Laboratories, Inc. in February 2017. We believe that Ms. Ordoñez possesses specific attributes that qualify her to serve as a member of our Board of Directors, including her extensive experience in the life sciences and diagnostic industries.

**Lucy Shapiro, Ph.D.** has been a member of our Board of Directors since 2012. Dr. Shapiro currently serves as the Virginia and D.K. Ludwig Professor of Cancer Research and the Director of the Beckman Center for Molecular and Genetic Medicine at Stanford University's School of Medicine, where she has been a faculty member since 1989. Dr. Shapiro is a co-founder and director of Anacor Pharmaceuticals, Inc. which was acquired by Pfizer Inc. in 2016. In 2016 she founded a second anti-infectives company, Boragen, LLC. In 1989, Dr. Shapiro founded Stanford University's Department of Developmental Biology, and served as its Chairman from 1989 to 1997. Prior to that, Dr. Shapiro served as Chair of the Department of Microbiology and Immunology in the College of Physicians and Surgeons of Columbia University. She received a B.A. from Brooklyn College and a Ph.D. in Molecular Biology from the Albert Einstein College of Medicine. Dr. Shapiro has received numerous awards including the National Medal of Science. She has been elected to the National Academy of Sciences, the American Academy of Microbiology, the American Academy of Arts and Sciences and the National Academy of Medicine for her work in the fields of molecular biology and microbiology. Dr. Shapiro previously served as a non-executive director of GlaxoSmithKline plc from 2001 to 2006. Dr. Shapiro was also a director of Gen-Probe, Inc. from 2008 to 2012. We believe that Dr. Shapiro possesses specific attributes that qualify her to serve as a member of our Board of Directors, including her extensive experience in the life sciences industry.

## **Board Committees**

Our Board of Directors has an Audit Committee, a Compensation Committee, a Corporate Governance and Nominating Committee and a Science and Technology Committee, each of which has the composition and the responsibilities described below. The Audit Committee, Compensation Committee, Corporate Governance and Nominating Committee, and Science and Technology Committee all operate under charters approved by our Board of Directors, which charters are available on the Investors Relations page of our website at [www.pacb.com](http://www.pacb.com) under "Corporate Governance". Our Board of Directors from time to time establishes additional committees to address specific needs.

The following table sets forth the four standing committees of the Board of Directors, the current members of each committee and the number of meetings held by each committee in fiscal year 2017:

<u>Name of Director</u>	<u>Audit</u>	<u>Compensation</u>	<u>Corporate Governance and Nominating</u>	<u>Science and Technology</u>
David Botstein, Ph.D.				X
William Ericson		X (chair)	X	
Randy Livingston (1)	X (chair)			
John Milligan, Ph.D.	X	X		
Marshall Mohr	X	X		
Kathy Ordoñez (2)				X (chair)
Lucy Shapiro, Ph.D. (3)			X (chair)	X
Number of Meetings Held During 2017	9	8	3	4

- (1) Mr. Livingston's appointment to the Corporate Governance and Nominating Committee becomes effective immediately after the Annual Meeting, subject to his election at the Annual Meeting.
- (2) Ms. Ordoñez was appointed as Chief Commercial Officer and Executive Vice President for the Company as of October 30, 2017, and in connection therewith resigned as a member and chair of the Compensation Committee and as a member of the Corporate Governance and Nominating Committee effective as of such date. Ms. Ordoñez retained her role as the Chair of the Science and Technology Committee.
- (3) Dr. Shapiro was appointed as chair of our Corporate Governance and Nominating Committee effective as of October 30, 2017, following Ms. Ordoñez' resignation from this committee.

#### ***Audit Committee***

Our Audit Committee oversees our corporate accounting and financial reporting process and assists the Board of Directors in monitoring our financial systems and our legal and regulatory compliance. Our Audit Committee is responsible for, among other things:

- selecting and hiring our independent auditors;
- appointing, compensating and overseeing the work of our independent auditors;
- approving engagements of the independent auditors to render any audit or permissible non-audit services;
- reviewing the qualifications and independence of the independent auditors;
- monitoring the rotation of partners of the independent auditors on our engagement team as required by law;
- reviewing our financial statements and critical accounting policies and estimates;
- reviewing the adequacy and effectiveness of our internal controls over financial reporting; and
- reviewing and discussing with management and the independent auditors the results of our annual audit, quarterly financial statements and publicly filed reports.

The members of our Audit Committee are Messrs. Livingston and Mohr and Dr. Milligan. Mr. Livingston serves as our Audit Committee chair. Our Board of Directors has determined that each member of the Audit Committee meets the financial literacy requirements under the rules of The NASDAQ Stock Market and the SEC and each of Messrs. Livingston and Mohr and Dr. Milligan qualify as Audit Committee financial experts as defined under SEC rules and regulations. We believe that the composition of our Audit Committee meets the requirements for independence under, and the functioning of our Audit Committee complies with, all applicable requirements of The NASDAQ Stock Market and SEC rules and regulations.

### ***Compensation Committee***

Our Compensation Committee oversees our corporate compensation policies, plans and programs. The Compensation Committee is responsible for, among other things:

- reviewing and recommending policies, plans and programs relating to compensation and benefits of our directors, officers and employees;
- reviewing and recommending compensation and the corporate goals and objectives relevant to compensation of our Chief Executive Officer;
- reviewing and approving compensation and corporate goals and objectives relevant to compensation for executive officers other than our Chief Executive Officer;
- evaluating the performance of our executive officers in light of established goals and objectives;
- developing in consultation with our Board of Directors and periodically reviewing a succession plan for our Chief Executive Officer; and
- administering our equity compensations plans for our employees and directors.

The members of our Compensation Committee are Messrs. Ericson and Mohr and Dr. Milligan. Ms. Ordoñez was also a member of our Compensation Committee but resigned from this role effective as of October 30, 2017 in connection with her appointment as Chief Commercial Officer and Executive Vice President for the Company. Mr. Ericson serves as the chair of our Compensation Committee. Our Board of Directors has determined that each member of our Compensation Committee is independent within the meaning of the independent director guidelines of The NASDAQ Stock Market. We believe that the composition of our Compensation Committee meets the requirements for independence under, and the functioning of our Compensation Committee complies with, all applicable requirements of The NASDAQ Stock Market and SEC rules and regulations.

### ***Corporate Governance and Nominating Committee***

Our Corporate Governance and Nominating Committee oversees and assists our Board of Directors in reviewing and recommending corporate governance policies and nominees for election to our Board of Directors. The Corporate Governance and Nominating Committee is responsible for, among other things:

- evaluating and making recommendations regarding the organization and governance of the Board of Directors and its committees;
- assessing the performance of members of the Board of Directors and making recommendations regarding committee and chair assignments;
- recommending desired qualifications for Board of Directors membership and conducting searches for potential members of the Board of Directors; and
- reviewing and making recommendations with regard to our corporate governance guidelines.

The members of our Corporate Governance and Nominating Committee are Mr. Ericson and Dr. Shapiro. Ms. Ordoñez was also a member and the chair of our Corporate Governance and Nominating Committee, from May 24, 2017 through October 30, 2017, when she resigned in connection with her appointment as our Chief Commercial Officer and Executive Vice President. Our Board of Directors appointed Dr. Shapiro to serve as the new chair of our Corporate Governance and Nominating Committee as of October 30, 2017. Our Board of Directors appointed Mr. Livingston to serve on our Corporate Governance and Nominating Committee effective immediately after the Annual Meeting, subject to his election at the Annual Meeting. Our Board of Directors has determined that each member of our Corporate Governance and Nominating Committee is independent within the meaning of the independent director guidelines of The NASDAQ Stock Market.

## Science and Technology Committee

Our Science and Technology Committee oversees and assists our Board of Directors in reviewing relevant science and technology matters related to the Company. The Science and Technology Committee is responsible for, among other things:

- serving in an advisory role and recommending other external advisors to assist the Company with the use of the Company's science and technology;
- overseeing the innovation strategy of the Company, including periodic reviews of the Company's research and development (R&D) portfolio and its overall competitiveness, the science and technology underlying major R&D initiatives, the competitive environment, and disruptive technology impacts;
- periodically conducting targeted reviews of the Company's patent portfolio and strategy;
- advising the Board of Directors on the scientific and R&D aspects of major technology-based transactions and licensing agreements that require Board of Directors approval;
- reviewing the Company's overall quality strategy and processes in place to monitor and control product quality;
- periodically reviewing results of product quality and quality system assessments by the Company and external parties; and
- reviewing important product quality issues and field actions by the Company.

The members of our Science and Technology Committee are Drs. Botstein and Shapiro and Ms. Ordoñez. Ms. Ordoñez serves as the chair of our Science and Technology Committee. In connection with her appointment as the Chief Commercial Officer and Executive Vice President of the Company effective as of October 30, 2017, she stopped receiving compensation for this position.

## Director Compensation

Employee directors are not compensated for Board of Directors services in addition to their regular employee compensation.

The following table sets forth information concerning compensation paid or accrued for services rendered to us by the non-employee members of our Board of Directors for the fiscal year ended December 31, 2017. Compensation paid to Dr. Hunkapiller is included in the section entitled "Executive Compensation" and excluded from the table below:

<u>Name</u>	<u>Fees earned or paid in cash (\$)</u>	<u>Option Awards (\$) (1)</u>	<u>Total (\$)</u>
David Botstein, Ph.D.	40,000	60,525	100,525
William Ericson	69,000	60,525	129,525
Randy Livingston	55,000	60,525	115,525
John Milligan, Ph.D.	52,000	60,525	112,525
Marshall Mohr	52,000	60,525	112,525
Kathy Ordoñez (2)	31,000	60,525	91,525
Lucy Shapiro, Ph.D.	45,000	60,525	105,525

- (1) Amounts shown represent the aggregate grant date fair value of the option awards computed in accordance with FASB ASC Topic 718. These amounts do not correspond to the actual value that will be recognized by the directors. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our financial statements.
- (2) Effective as of as of October 30, 2017, Ms. Ordoñez ceased being a non-employee director as a result of her appointment as Chief Commercial Officer and Executive Vice President for the Company. Accordingly, her compensation above as a non-employee director is reported from January 1, 2017 through October 29, 2017.

The aggregate number of shares subject to stock options outstanding and exercisable at December 31, 2017 for each non-employee director is as follows:

<u>Name</u>	<u>Aggregate Number of Stock Options Outstanding as of December 31, 2017</u>	<u>Aggregate Number of Stock Options Exercisable as of December 31, 2017</u>
David Botstein, Ph.D.	160,000	149,583
William Ericson	187,500	177,083
Randy Livingston	232,500	222,083
John Milligan, Ph.D.	135,000	124,583
Marshall Mohr	185,000	174,583
Kathy Ordoñez (1)	485,000	107,395
Lucy Shapiro, Ph.D.	58,334	47,917

- (1) Effective as of as of October 30, 2017, Ms. Ordoñez ceased being a non-employee director as a result of her appointment as our Chief Commercial Officer and Executive Vice President.

*Cash compensation:* Each non-employee member of the Board of Directors was eligible to receive the following cash compensation: (1) an annual retainer for each member of the Board of Directors of \$35,000; (2) the chair of our Audit Committee is paid an additional annual retainer of \$20,000, and members of our Audit Committee other than the chair are paid an additional annual retainer of \$10,000; (3) the chair of our Compensation Committee is paid an additional annual retainer of \$14,000, and members of our Compensation Committee other than the chair are paid an additional annual retainer of \$7,000; (4) the chair of our Corporate Governance and Nominating Committee is paid an additional annual retainer of \$10,000, and members of our Corporate Governance and Nominating Committee other than the chair are paid an additional annual retainer of \$5,000; (5) the chair of our Science and Technology Committee is paid an additional annual retainer of \$10,000, and the members of our Science and Technology Committee other than the chair are paid an additional annual retainer of \$5,000; and (6) our lead independent director is paid an additional annual retainer of \$15,000. We reimburse our non-employee directors for all reasonable out-of-pocket expenses incurred in the performance of their duties as directors.

*Equity Compensation:* Each new non-employee director receives a stock option grant to purchase 35,000 shares of our common stock under the terms of the 2010 Outside Director Equity Incentive Plan (the “Director Plan”). These initial awards will vest over three years, with one-third of the shares subject to the option vesting on the one-year anniversary of the date of grant, and the remaining shares vesting monthly over the following two years, provided such non-employee director continues to serve as a director through each vesting date. In addition, each non-employee director automatically receives an annual stock option grant to purchase 25,000 shares of our common stock on the date of the annual meeting beginning on the date of the first annual meeting that is held at least four months after such non-employee director received his or her initial award, provided such non-employee director continues to serve as a director through such date. Such annual awards vest monthly over one year, provided such non-employee director continues to serve as a director through each vesting date.

In the event of a “change in control,” as defined in our Director Plan, with respect to awards granted under the Director Plan to non-employee directors, the participant non-employee director will fully vest in and have the right to exercise awards as to all shares underlying such awards and all restrictions on awards will lapse, and all performance goals or other vesting criteria will be deemed achieved at 100% of target level and all other terms and conditions met.

## PROPOSAL 1: ELECTION OF DIRECTORS

Our Certificate of Incorporation provides for a classified Board of Directors. Each person elected as a Class II director at the Annual meeting will serve for a three-year term expiring on the date of the 2021 annual meeting of stockholders.

Our Board of Directors has nominated Michael Hunkapiller, Ph.D., Randy Livingston and Marshall Mohr for election as Class II directors at the Annual Meeting. Please refer to “Board of Directors and Committees of the Board” section above for the nominees’ biographies.

Each nominee will be elected separately by a majority vote. A given nominee will be elected if the votes cast for such nominee’s election exceed the votes cast against such nominee’s election. In the event a nominee is unable or declines to serve as a director, the proxies will be voted at the Annual Meeting for any nominee who may be designated by the Board of Directors to fill the vacancy. As of the date of this Proxy Statement, the Board of Directors is not aware of any nominee who is unable or will decline to serve as a director.

Summary information regarding our Class II nominees, as well as directors not up for election at the Annual Meeting is set forth below.

<u>Name of Director</u>	<u>Age</u>	<u>Principal Occupation</u>	<u>Director Since</u>
<b>Class II Nominees (term to expire in 2018)</b>			
Michael Hunkapiller, Ph.D.	69	Chairman, President and Chief Executive Officer of Pacific Biosciences of California, Inc.	2005
Randy Livingston	64	Vice President for Business Affairs and Chief Financial Officer of Stanford University	2009
Marshall Mohr	62	Senior Vice President and Chief Financial Officer of Intuitive Surgical, Inc.	2012
<b>Class III Directors (term to expire in 2019)</b>			
William Ericson	59	Managing Partner of Mohr Davidow Ventures and Founding Partner of Wildcat Venture Partners	2004
David Botstein, Ph.D.	75	Chief Scientific Officer of Calico Life Sciences	2012
Kathy Ordoñez	67	Chief Commercial Officer, Executive Vice President of Pacific Biosciences of California, Inc.	2014
<b>Class I Directors (term to expire in 2020)</b>			
John Milligan, Ph.D.	56	President & Chief Operating Executive Officer of Gilead Sciences, Inc.	2013
Lucy Shapiro, Ph.D.	77	Virginia and D.K. Ludwig Professor of Cancer Research and the Director of the Beckman Center for Molecular and Genetic Medicine at Stanford University’s School of Medicine	2012

There is no family relationship among any of the nominees, directors and/or any of our executive officers. Our executive officers serve at the discretion of the Board of Directors. Further information about our directors, including each of the Class II director nominees, is provided in the “Board of Directors and Committees of the Board” section above.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” EACH OF THE THREE CLASS II DIRECTORS NOMINEES TO SERVE AS A CLASS II DIRECTOR.**

## PROPOSAL 2: RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has appointed Ernst & Young LLP, independent registered public accounting firm, to audit our consolidated financial statements for the fiscal year ending December 31, 2018. Ernst & Young LLP has audited our consolidated financial statements since 2011. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting, will have the opportunity to make a statement if they desire to do so, and are expected to be available to respond to appropriate questions.

Stockholder ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm is not required by our Bylaws or otherwise. The Board of Directors, however, is submitting the appointment of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the appointment, the Audit Committee and the Board of Directors will reconsider whether or not to retain the firm. Even if the appointment is ratified, the Audit Committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if it determines that such a change would be in the best interests of our Company and our stockholders.

### Policy on Audit Committee's Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

The Audit Committee reviews and pre-approves all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services and tax services, as well as specifically designated non-audit services which, in the opinion of the Audit Committee, will not impair the independence of the independent registered public accounting firm. Pre-approval generally is provided for up to one year, and any pre-approval is detailed as to the particular service or category of services and generally is subject to a specific budget. The independent registered public accounting firm and our management are required to periodically report to the Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, including the fees for the services performed to date. In addition, the Audit Committee also may pre-approve particular services on a case-by-case basis, as necessary or appropriate.

The following table sets forth the approximate aggregate fees billed to us by Ernst & Young in fiscal years 2017 and 2016 (in thousands):

<u>Fee Category</u>	<u>2017</u>	<u>2016</u>
Audit Fees	\$1,273	\$964
Audit-related Fees	—	—
Tax Fees	—	—
All Other Fees	<u>2</u>	<u>2</u>
Total Fees	<u>\$1,275</u>	<u>\$966</u>

**Audit Fees** consisted of professional services rendered in connection with the audit of our annual financial statements and quarterly review of financial statements included in our Quarterly Reports on Form 10-Q. This category also includes advice on accounting matters that arose during the audit or the review of interim financial statements.

**Audit-Related Fees** consisted of fees for professional services that are reasonably related to the performance of the audit or review of our financial statements.

**Tax Fees** consisted of professional services rendered in connection with tax compliances and consulting services.



**All Other Fees** consisted of fees paid for a subscription to an accounting research database.

The Audit Committee has concluded that the provision of the non-audit services listed above was compatible with maintaining the independence of Ernst & Young.

**Vote Required**

The ratification of the appointment of Ernst & Young requires the affirmative vote of a majority of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote thereon. Abstentions will have the effect of a vote AGAINST the proposal.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE “FOR” THE RATIFICATION OF THE APPOINTMENT OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018.**

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

### Policies and Procedures for Related Party Transactions

We have adopted a formal written policy that our executive officers, directors, nominees for election as directors, beneficial owners of more than 5% of any class of our common stock and any member of the immediate family of any of the foregoing persons, are not permitted to enter into a related party transaction with us, where the aggregate amount involved will or may be expected to exceed \$120,000 in any calendar year, without the prior consent of our Audit Committee, subject to the pre-approval exceptions described below. If advance approval is not feasible then the related party transaction will be considered at the Audit Committee's next regularly scheduled meeting. In approving or rejecting any such proposal, our Audit Committee considers the facts and circumstances available and deemed relevant by our Audit Committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction. Our Audit Committee has reviewed certain types of related party transactions that it has deemed pre-approved even if the aggregate amount involved will exceed \$120,000, including employment of executive officers, director compensation, certain transactions with other organizations involving the purchase or sale of products or services in the ordinary course of business, transactions where all stockholders receive proportional benefits, transactions involving competitive bids, regulated transactions and certain banking-related services.

### Related Party Transactions

During 2017, we were party to the following transactions in which the amount involved exceeded or will exceed \$120,000, and in which any director, executive officer or holder of more than 5% of any class of our voting stock, or any member of the immediate family of or entities affiliated with any of them, had or will have a material interest.

#### *Employment of Related Persons*

We employ Kathryn Keho as our Senior Director, Vertical Marketing, who is the daughter of Dr. Michael Hunkapiller, our Chairman, Chief Executive Officer and President. Ms. Keho's compensation totaled \$250,800 in 2017. Her annual base salary was \$231,500 for the year ending December 31, 2017.

Ms. Keho was granted the following options to purchase shares of our common stock during 2015, 2016 and 2017:

<u>Grant Date</u>	<u>All other option awards: number of securities underlying options (#) (1)</u>	<u>Exercise or base price of option award (\$)</u>
2/17/2015	8,500	6.91
2/16/2016	18,000	8.90
2/15/2017	20,000	5.27

(1) The options vest at a rate of 1/48th of the total number of shares subject to the option each month over the next four years, subject to continued service with us.

We believe that Ms. Keho's compensation, which is periodically reviewed by the Compensation Committee, is comparable with compensation paid to other employees with similar levels of responsibility and years of experience.

#### *Stanford University*

Randy Livingston is the Vice President for Business Affairs and Chief Financial Officer of Stanford University. Lucy Shapiro, Ph.D., is the Director of the Beckman Center for Molecular and Genetic Medicine at

Stanford University's School of Medicine. During 2017, we recognized revenue relating to Stanford University with a total value of approximately \$499,800. As of December 31, 2017, \$71,600 of our accounts receivable balance of \$13,433,000 related to Stanford University. During 2016, we recognized revenue relating to Stanford University with a total value of approximately \$256,000. As of December 31, 2016, \$141,000 of our accounts receivable balance of \$11,421,000 related to Stanford University.

***Calico Life Sciences LLC***

David Botstein, Ph.D. is the Chief Scientific Officer of Calico Life Sciences, LLC. During 2017, we recognized revenue relating to Calico Life Sciences, LLC with a total value of approximately \$310,500. As of December 31, 2017, \$1,400 of our accounts receivable balance of \$13,433,000 related to Calico Life Sciences, LLC. During 2016, we recognized revenue relating to Calico Life Sciences, LLC with a total value of approximately \$575,000. As of December 31, 2016, none of our accounts receivable related to Calico Life Sciences, LLC.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of February 28, 2018 with respect to the beneficial ownership of our common stock by (i) each person the Company believes beneficially holds more than 5% of the outstanding shares of the Company's common stock based solely on the Company's review of SEC filings; (ii) each director and nominee; (iii) each named executive officer listed in the table entitled "Summary Compensation Table" under the section entitled "Executive Compensation"; and (iv) all directors and executive officers as a group. As of February 28, 2018, 130,693,552 shares of our common stock were issued and outstanding. Unless otherwise indicated, all persons named as beneficial owners of our common stock have sole voting power and sole investment power with respect to the shares indicated as beneficially owned. Unless otherwise noted below, the address of each stockholder listed on the table is c/o Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, California 94025.

Name and address of beneficial owner (1)	Number of Shares Owned (2)	Right to Acquire Shares (3)	Total Beneficial Ownership	Percent of Class (4)
<b>5% Stockholders:</b>				
Entities affiliated with Maverick Capital Ltd. (5)	11,223,094	—	11,223,094	8.6%
Entities affiliated with Oracle Investment Management Inc. (6)	8,453,375	—	8,453,375	6.5%
Blackrock Inc. (7)	8,155,624	—	8,155,624	6.2%
Entities affiliated with Capital World Investors. (8)	8,128,077	—	8,128,077	6.2%
Consonance Capital Management L.P. (9)	7,065,920	—	7,065,920	5.4%
<b>Named executive officers and directors:</b>				
David Botstein, Ph.D.	—	157,916	157,916	*
Michael Hunkapiller, Ph.D. (10)	4,937,246	2,159,138	7,096,384	5.4%
William Ericson (11)	5,598,397	185,416	5,783,813	4.4%
Randy Livingston	—	230,416	230,416	*
John Milligan, Ph.D.	—	132,916	132,916	*
Marshall Mohr	—	182,916	182,916	*
Lucy Shapiro, Ph.D.	101,666	56,250	157,916	*
Susan K. Barnes	347,417	1,407,936	1,755,353	1.3%
Kathy Ordoñez	—	146,977	146,977	*
Kevin Corcoran (12)	158,174	865,829	1,024,003	*
Michael Phillips	194,166	653,913	848,079	*
All directors and executive officers as a group (11 people)	11,337,066	6,179,623	17,516,689	13.4%

\* Represents beneficial ownership of less than 1%.

- (1) Unless otherwise indicated, all persons named as beneficial owners have sole voting power and sole investment power with respect to the shares indicated as beneficially owned and the address of each beneficial owner listed on the table is c/o Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, California 94025.
- (2) Excludes shares that may be acquired through the exercise of outstanding stock options.
- (3) Represents shares issuable upon exercise of options exercisable within 60 days after February 28, 2018; however, unless otherwise indicated, these shares do not include any options awarded after February 28, 2018.
- (4) For purposes of calculating the Percent of Class, shares that the person or entity had a right to acquire are deemed to be outstanding when calculating the Percent of Class of such person or entity.
- (5) Based on information taken from Schedule 13G/A filed on February 12, 2018 reporting on ownership as of December 31, 2017. This Schedule 13G is being filed on behalf of each of the following persons: Maverick Capital, Ltd.; Maverick Capital Management, LLC; Lee S. Ainslie III ("Mr. Ainslie"); and Andrew H. Warford ("Mr. Warford"). According to the Schedule 13G/A, each of the Maverick Capital, Ltd., Maverick Capital Management, LLC, Lee S. Ainslie III ("Mr. Ainslie") and Andrew H. Warford ("Mr. Warford") has

sole voting power as to 11,223,094 of these shares and sole dispositive power as to 11,223,094 of these shares. The address of the principal business office of (i) Maverick Capital, Ltd. and Maverick Capital Management, LLC is 300 Crescent Court, 18th Floor, Dallas, Texas 75201, and (ii) Mr. Ainslie and Mr. Warford is 767 Fifth Avenue, 11th Floor, New York, New York 10153.

- (6) Based on information taken from Schedule 13G/A, Amendment No. 2 filed on February 14, 2018 reporting on ownership as of December 31, 2017 by Oracle Associates, LLC and direct or indirect subsidiaries. Oracle Associates, LLC has shared voting power as to 7,646,875 of these shares and shared dispositive power as to 7,646,875 of these shares; Oracle Investment Management, Inc. has shared voting power as to 7,836,875 of these shares and shared dispositive power as to 7,836,875 of these shares; Oracle Partners, L.P. has shared voting power as to 5,683,437 of these shares and shared dispositive power as to 5,683,437 of these shares; Oracle Institutional Partners, L.P. has shared voting power as to 838,818 of these shares and shared dispositive power as to 838,818 of these shares; Oracle Ten Fund Master, L.P. has shared voting power as to 1,124,620 of these shares and shared dispositive power as to 1,124,620 of these shares; Oracle Investment Management Employees Retirement Fund has shared voting power as to 190,000 of these shares and shared dispositive power as to 190,000 of these shares; The Feinberg Family Foundation has shared voting power as to 41,500 of these shares and shared dispositive power as to 41,500 of these shares. The addresses of these entities are not reported on Schedule 13G.
- (7) Based on information taken from Schedule 13G/A filed on January 29, 2018 reporting on ownership as of December 31, 2017 by Blackrock Inc., which has sole voting power as to 7,977,124 of these shares and sole dispositive power as to 8,155,624 of these shares. The address of this entity is 55 East 52<sup>nd</sup> Street, New York, NY 10055.
- (8) Based on information taken from Schedule 13G filed on February 14, 2018 reporting on ownership as of December 31, 2017. Capital World Investors divisions of CRMC and Capital International Limited collectively provide investment management services under the name Capital World Investors. Capital World Investors has sole voting power as to 8,128,077 of these shares and sole dispositive power as to 8,128,077 of these shares. The address of this entity is 333 South Hope Street, Los Angeles, CA 90071.
- (9) Based on information taken from Schedule 13G filed on February 14, 2018 reporting on ownership as of December 31, 2017 by Consonance Capital Management L.P., Consonance Capital Management L.P. has voting power as to 6,719,997 of these shares and shared dispositive power as to 6,719,997 of these shares, and Consonance Capital Opportunity Fund Management L.P. has shared voting power as to 345,923 of these shares and shared dispositive power as to 345,923 of these shares. The address of these entities is 1370 Avenue of the Americas Floor 33, New York, NY 10019.
- (10) Number of shares owned includes 2,637,246 shares held of record by funds affiliated with Alloy Ventures where Dr. Hunkapiller is a General Partner. Dr. Hunkapiller disclaims beneficial ownership of any shares held of record by funds affiliated with Alloy Ventures except to the extent of his pecuniary interest therein.
- (11) Number of shares owned includes 5,598,397 shares held of record by funds affiliated with Mohr Davidow Ventures where Mr. Ericson is a Managing Partner. Mr. Ericson disclaims beneficial ownership of any shares held of record by funds affiliated with Mohr Davidow Ventures except to the extent of his pecuniary interest therein. Based on information taken from Schedule 13G filed on February 17, 2015. Shares of record includes (i) 5,074,066 shares held by MDV VII, L.P. as nominee for MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P. and MDV ENF VII(B), L.P.; (ii) 370,333 shares held by MDV VII Leaders' Fund, L.P.; (iii) 101,267 shares held by MDV ENF VII(A), L.P. and (iv) 52,731 shares held by MDV ENF VII(B), L.P. The address of these entities is c/o Mohr Davidow Ventures, 3000 Sand Hill Road, Building 3, Suite 290, Menlo Park, CA 94025. Each of Jonathan Feiber, Nancy Schoendorf, and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (12) On February 10, 2018, our board of directors determined that Kevin Corcoran no longer meets the definition of an executive officer under the Exchange Act. Mr. Corcoran will continue in his role as Senior Vice President, Market Development, and report to Ms. Ordoñez.

## EXECUTIVE OFFICERS

Biographical data for each of our executive officers as of April 4, 2018, including their ages as of December 31, 2017, is set forth below, except Dr. Hunkapiller's and Ms. Ordoñez' biographies, which are included under the heading "Board of Directors and Committees of the Board" above.

### Executive Officers

**Susan K. Barnes**, age 64, joined us in 2010 as our Senior Vice President and Chief Financial Officer and was promoted to Executive Vice President and Chief Financial Officer in December 2010. From 1997 to 2005, she was senior vice president, finance and chief financial officer of Intuitive Surgical, Inc. Ms. Barnes served on several boards of directors of public and private companies, including Northstar Neuroscience, Inc. from February 2006 to December 2009, where she also served as Audit Committee chair, and RAE Systems Inc. from September 2004 to May 2006, where she served as chair of the Audit Committee. Ms. Barnes holds an A.B. from Bryn Mawr College and an M.B.A. from the Wharton School, University of Pennsylvania.

**Michael Phillips**, age 67, joined us in 2005 as our Vice President of Product Development and since February 2010, has served as our Senior Vice President of Research and Development. Prior to joining us, Mr. Phillips held various management roles at Applied Biosystems spanning research and development, test, manufacturing operations and service support from 1986 to April 2005. His most recent position at Applied Biosystems was Senior Director, Research and Development. Mr. Phillips earned a B.S. in Bacteriology from the University of California, Davis.

## EXECUTIVE COMPENSATION

### Compensation Committee Report

*The following report of the Compensation Committee shall not be deemed to be “soliciting material” or to otherwise be considered “filed” with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 (the “Securities Act”) or the Exchange Act except to the extent that the Company specifically incorporates it by reference into such filing.*

The Compensation Committee has reviewed and discussed with management the disclosures contained in the following section entitled “Compensation Discussion and Analysis.” Based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the section entitled “Compensation Discussion and Analysis” be included in this Proxy Statement for the Annual Meeting.

### Members of the Compensation Committee

William Ericson (Chair)

Marshall Mohr

John Milligan, Ph.D.

### Compensation Discussion and Analysis

The following discussion and analysis of compensation arrangements of our named executive officers should be read together with the compensation tables and related disclosures set forth below. This discussion contains forward-looking statements that are based on our current considerations, expectations and determinations regarding future compensation programs. The actual amount and form of compensation and the compensation programs that we adopt may differ materially from current or planned programs as summarized in this discussion.

For the year ended December 31, 2017, our named executive officers were:

Name	Position
Michael Hunkapiller, Ph.D.	Chairman, Chief Executive Officer and President
Susan Barnes	Executive Vice President and Chief Financial Officer
Kathy Ordoñez	Executive Vice President and Chief Commercial Officer
Michael Phillips	Senior Vice President, Research & Development
Kevin Corcoran	Senior Vice President, Market Development

### Recent “Say-on-Pay” Vote

In June 2017, we held a nonbinding, stockholder advisory vote to approve the compensation of our named executive officers, commonly referred to as a “say-on-pay” vote. We received favorable support with over a majority of stockholder votes cast approving the proposal. As a result, the Compensation Committee has retained the same general approach for setting pay at the company. In addition, the shareholders approved our “say-on-pay frequency of every three years by majority vote. The Compensation Committee considers the outcome of these voting decisions when considering future compensation decisions.

### Compensation Philosophy and Objectives

Our executive compensation program is overseen and administered by the Compensation Committee of which each member is an independent member of our Board of Directors as defined in the listing rules.

The guiding principle in the development of our compensation strategy is to create and nurture a pay-for-performance culture, where contributions to enhancing stockholder value have the potential to be matched with appropriate financial rewards. The objectives of our compensation program are to:

- attract the best and brightest employees;
- motivate successful execution of our corporate objectives;
- ensure that broad-based compensation programs are aligned with company objectives that when achieved will promote an increase in the value of the Company for our stockholders; and
- ensure retention of key staff.

Our current executive compensation programs consist primarily of salary, incentive cash and equity which we issue in the form of stock options. Likewise, we maintain the compensation programs broadly for the majority of employees of the organization to align with the variable cash and equity pay component already provided to executive-level employees (other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer, who are not eligible for variable cash incentive compensation, as discussed below). We typically make new equity award grants under, and adjustments to the components of, our executive compensation program in connection with our yearly compensation review. These determinations are based in part upon market analysis performed by the independent compensation consultant retained by our Compensation Committee.

#### ***Components of our Executive Compensation Program***

##### *Compensation of the Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer.*

In 2013, our Chief Executive Officer and Chief Financial Officer proposed, and the Board of Directors approved, a pay program that eliminated base salaries and incentive cash compensation for the Chief Executive Officer and Chief Financial Officer to help the company manage cash expenses. In evaluating the compensation flexibility afforded by these executives, the Compensation Committee, in consultation with the independent compensation consultant developed a program that was comprised of equity awards and the opportunity to participate in standard employee benefits based on delivering a market-based compensation program, aligned with the long-term value created for our stockholders. The structures negotiated and proposed by the Compensation Committee were first implemented in 2013 as a one-year policy. The same arrangements related to cash compensation continued since then, including through 2017. The same structure was proposed by the Chief Commercial Officer and management to the Compensation Committee and approved by the Board of Directors for the Chief Commercial Officer hired in 2017. The Compensation Committee expects to review this compensation structure annually as part of the normal course review of executive compensation. The Board of Directors has the authority to approve changes to such compensation of the Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer at any time.

##### *Compensation of Our Named Executive Officers Other than Our CEO, CFO and CCO*

The components of our executive compensation program through fiscal 2017 (other than the Chief Executive Officer Chief Financial Officer and, in connection with her hiring, our current Chief Commercial Officer) have consisted primarily of base salaries and incentive cash bonuses, equity awards and broad-based benefits programs. We combine short-term compensation components, namely base salaries and variable cash incentives with long-term equity incentive compensation components to provide an overall compensation structure that is designed to financially reward executives for creating additional value for our stockholders, attract and retain key executives and provide incentive for the achievement of short-term and long-term corporate objectives. The Compensation Committee and the Board of Directors believe these elements are appropriate components of executive compensation and are consistent in the technology and life sciences industries. We do not provide a pension plan for our named executive officers or for the majority of our employees and none of our



named executive officers participate in a Company sponsored nonqualified deferred compensation plan. We provide a pension plan to employees at certain foreign subsidiaries in order to remain competitive or to conform to local statutory requirements.

#### *Role of Compensation Committee and Board*

The Compensation Committee has the authority to review and approve the compensation of all of our executive officers, other than our Chief Executive Officer, whose compensation is recommended by the Compensation Committee and approved by our Board of Directors. From time to time the Compensation Committee, in its discretion, also may recommend for approval by the Board of Directors any elements of compensation of other executive officers, to the extent that the Compensation Committee deems appropriate or advisable. The Compensation Committee does not have a formula for setting pay and considers a number of factors including experience, role criticality, external market data, internal comparisons, and the future contributions of the executive when setting the level and structure of pay. The Compensation Committee may form and delegate authority to subcommittees when appropriate. The Compensation Committee recently approved the formation of an Equity Award Grant Committee consisting of our Chief Executive Officer, Chief Financial Officer, Vice President of Human Resources and General Counsel and delegated authority to such committee to approve equity awards covering shares of our common stock, within the range of guidelines approved by the Board or Compensation Committee (based on job grade, job title, responsibility level, seniority level and/or other factors) and pursuant to our stock option granting policy approved by the Board (including any revision thereto approved by the Board or a committee thereof), to newly-hired employees who are below the level of vice president (or equivalent title) and who are not subject to Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

#### *Role of Compensation Consultant*

For fiscal year 2017, our Compensation Committee continued the engagement of Radford, an Aon Hewitt Consulting Company, as its compensation consultant to advise the Compensation Committee in matters related to executive compensation and broader employee compensation programs, including the prevailing market compensation environment and compensation trends. The Compensation Committee provided Radford with instructions regarding the goals of our executive compensation program and the parameters of the competitive review of executive officer compensation packages that it was to conduct. In particular, the Compensation Committee instructed Radford to analyze whether the compensation packages of our executive officers were consistent with our compensation philosophy and competitive relative to market comparables. The Committee further instructed Radford to evaluate the following components to assist the Committee in establishing fiscal year 2017 compensation: base salary; target and actual annual incentive compensation; target and actual total cash compensation (base salary and annual incentive compensation); long-term incentive compensation (equity awards); target and actual total direct compensation (base salary, annual incentive compensation and long-term incentive compensation); and beneficial ownership of our common stock. Radford provided to the Compensation Committee a detailed market analysis using compensation survey data for the technology and life sciences industries generally within a revenue range of \$50 million to \$200 million and with market capitalization between \$400 million and \$2 billion to reflect the market for talent at companies of a similar profile as the Company. The Compensation Committee does not rely on a specific named peer group at this time, instead relying on custom survey data from Radford Global Life Science Survey and Radford Technology Survey (the "Survey Data") to examine market information that is specific to the technical and scientific nature of the role requirements for our named executive officers. This information is used by the Compensation Committee to assist in determining the overall level of pay including base salary, target variable cash incentives, and equity awards, as applicable, for the named executive officers. Radford reports directly to the Compensation Committee and the Compensation Committee maintains sole authority to direct Radford's work. Radford provides general observations regarding our executive and broader employee compensation programs. The Compensation Committee meets with Radford in executive session, without management to address various matters under its charter.

### *Role of Executive Officers in Compensation Decisions*

For executive officers other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer, our Compensation Committee has historically sought and considered input from our Chief Executive Officer and Chief Financial Officer regarding our executive officers' responsibilities, performance, and compensation. Our Chief Executive Officer and Chief Financial Officer recommend base salary, target variable cash incentive opportunities, and equity award levels for our other executive officers (which also are compensation elements that are provided broadly to the majority of our employees), and advise our Compensation Committee regarding the executive compensation program's ability to attract, retain and motivate executive talent. Our Compensation Committee considers our Chief Executive Officer's and Chief Financial Officer's recommendations as well as any other relevant factors (for example, market data, Company performance, internal equity, and the executive's experience, tenure, skills, and historical and future expected contributions), and approves the specific compensation for all such executive officers. Our Compensation Committee discusses with the Chief Executive Officer the core operational and financial metrics to drive the business forward, and how various forms of variable and incentive compensation can be applied at the executive level to achieve our goals. Our Compensation Committee meets in executive session, without our Chief Executive Officer and Chief Financial Officer, when discussing or making recommendations regarding their compensation.

### *Base Salary*

Base salaries are provided to our named executive officers (other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer) to recognize each such executive's day-to-day contributions and in order to maintain an executive compensation program that is competitive and reflects appropriate market practices. The Compensation Committee determined base salaries for each of these named executive officers based on the executive's role and responsibilities, a review of any applicable market data and individual job performance. In its review of applicable market data, the Compensation Committee utilized the Survey Data. The Compensation Committee set the annual salaries for these named executive officers in consideration of the market data and subjective assessments of each executive officer's position, experience, responsibilities, and performance. The resulting annual base salaries for these named executive officers (other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer) generally aligned at approximately the 75<sup>th</sup> percentile for 2017 relative to the market data reviewed.

### *Variable Cash Incentives*

Variable cash incentives, structured as a percentage of base salary, are intended to correlate executive compensation with important corporate objectives that the Board of Directors and our Compensation Committee believe appropriately position the Company for value creation and thereby increase alignment of executives' interests with those of our stockholders. The achievement of such objectives provides our named executive officers (other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer) the opportunity to earn total cash compensation that is generally aligned at approximately the 50<sup>th</sup> percentile of the market data reviewed.

Variable cash incentives offered to these named executive officers during 2017 afforded the opportunity for executives to earn up to 45% of their base salary (which remained the same as in 2016) based on the achievement of certain corporate operational, product performance, and financial metrics, each with separate, varied weightings. Typically at the Chief Executive Officer's review and recommendation, based on performance, the Compensation Committee can adjust up or down the actual incentive cash paid for each of these named executive officers to reflect the individual's contributions to the Company's goals. During 2017, approximately 16.66% of the company objectives were achieved, resulting in executives receiving 16.66% of their target variable cash opportunity. The objectives with respect to the 2017 incentive bonuses were aggressive, but attainable. Consistent with prior years, we established these 2017 objectives to be stretch goals that are intentionally

challenging such that performance at target would require significant achievements across multiple performance criteria. For example, in each of the prior three years, the corporate objectives under our incentive cash program paid out at less than the target levels, as shown in the table below:

<u>Fiscal Year</u>	<u>Percentage of Corporate Objectives Achieved</u>	<u>Bonus Payout As a Percentage of Target Bonus Opportunity</u>
2017	17%	17%
2016	49%	49%
2015	95%	76%

The Compensation Committee believes that this approach appropriately motivates the participants in the incentive cash program to generate additional value for our stockholders and drive the success of our business.

Similar to 2017, the 2018 incentive plan for all of our executive officers will be based on the achievement of corporate operational and financial metrics. The goals and objectives we have established are aggressive, but attainable, and are based on goals we believe align the compensation of our senior management team and executives with the priorities for the Company that we anticipate will drive additional value for our stockholders. The Company must meet the target level of performance for the named executive officers (other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer) to earn the target award of 45% of base salary. The Company's Chief Executive Officer may recommend adjustments to these awards although the Compensation Committee retains the sole authority to approve cash incentive awards for the named executive officers.

#### *Equity Incentives*

We believe that equity awards more closely align the interests of our key employees with the development of long-term value for our stockholders. In particular, the Compensation Committee chose to grant equity awards entirely in the form of stock options, given that stock options only provide value to our key employees if the stock price increases following their grant. The Compensation Committee believes that stock options provide appropriate incentive for our executives to work toward increasing the long-term value of the Company for the benefit of our stockholders. Our equity-based incentives, comprised of options to purchase shares of our common stock, are subject to vesting over four years in order to incentivize our executive officers and key employees to remain in our employ during the vesting period. We maintain a stock option granting policy, pursuant to which stock options granted to our employees generally become effective on the first 15th day of the month to occur following approval of the equity award by the Compensation Committee (or the Board of Directors, as applicable). Any equity awards to be granted to newly hired employees generally are not considered for approval until at least the month following the month in which employment begins. If any equity awards are granted to continuing employees during a closed trading window, then the equity awards generally will not become effective until the first 15th day of the month to occur during the next open trading window following approval of the grant.

In determining equity awards for named executive officers, the Compensation Committee and the Board of Directors consider the market data provided by Radford outlining equity compensation practices in the technology and life sciences industries, including the size of the awards as a percent of the Company as well as on a grant date value basis. This information as well as overall company dilution are considered when determining any grants to our named executive officers. The Compensation Committee also considered the realized or unrealized value of prior equity awards. There is no set formula for weighting these factors given the critical nature of each role to the Company, and how this might vary from roles at similarly situated companies.

For our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer, given that they forgo any cash compensation, the only pay element for fiscal year 2017 was stock options provided to our Chief Executive Officer and Chief Financial Officer as part of the annual pay cycle and for our Chief Commercial

Officer as part of her new hire package. In determining the size of the stock option awards for these named executive officers, the Compensation Committee generally considered the levels of targeted total direct compensation (i.e., base salary, cash bonuses, and equity awards) of the Survey Data to ensure the overall policy is competitive. The Compensation Committee also considers the criticality of these roles to the Company as well as the retention objectives for maintaining leadership stability for leading the business forward. Accordingly, the stock option awards granted to our Chief Executive Officer were at approximately the 50<sup>th</sup> percentile while the grant to our Chief Financial Officer fell between the 50<sup>th</sup> and 75<sup>th</sup> percentiles, in each case with respect to targeted total direct compensation. For the Chief Commercial Officer, the stock option awards granted as part of her new hire offer approximated the 50<sup>th</sup> percentile with respect to targeted total direct compensation. Stock option awards to our other named executive officers, also are granted annually, provided that the Compensation Committee took into account that these other officers receive other elements of compensation in addition to equity awards. Generally, for our named executive officers other than our Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer, the Compensation Committee considered market data and the other factors outlined above. The final stock option awards were aligned with the 75<sup>th</sup> percentile as compared to Survey Data companies with respect to equity award compensation.

#### *Insider Trading Policy; Prohibition on Short Sales, Hedging & Pledging*

Employees of the Company, including executive officers, are prohibited by the Company's Insider Trading Policy from: (1) engaging in short sales of Company securities; or (2) engaging in transactions in publicly traded options, such as puts and calls, and other derivative securities with respect to the Company's securities. Company employees, including executive officers, are also prohibited by the Insider Trading Policy from pledging Company securities as collateral for loans.

#### *Benefits*

We provide the following benefits to our named executive officers on the same basis provided to our employees:

- health, dental and vision insurance;
- health savings account (HSA);
- life, travel accident, and accidental death and dismemberment insurance;
- a 401(k) plan;
- short-term and long-term disability insurance;
- health care, dependent care and commuter flexible spending accounts;
- an employee assistance program; and
- an employee stock purchase plan.

#### *Change of Control Severance Benefits*

We have entered into change of control severance agreements with each of our named executive officers as described further below under the section titled "Employment Agreement and Change of Control Arrangements." It is expected that from time to time, we would consider the possibility of an acquisition by another company or other change of control event. We recognize that the occurrence or possibility of such a transaction could be a distraction to the executive officers and could cause the individual to consider alternative employment opportunities. We believe that it is important to provide these individuals with severance benefits upon a qualifying termination in connection with a change of control to secure our executive officers' continued services to us notwithstanding the occurrence, possibility or threat of a change of control, provide them with an incentive to maximize our value in connection with a change of control for the benefit of our stockholders, and provide them with enhanced financial security. These change-of-control severance arrangements generally do not affect the determination of our named executive officers' key compensation elements.

### ***Tax Considerations***

We have not provided any executive officer or director with a gross-up or other reimbursement for tax amounts the executive might pay pursuant to Section 280G or Section 409A of the Internal Revenue Code of 1986, as amended (or the “Code”). Section 280G and related Code sections provide that executive officers, directors who hold significant stockholder interests and certain other service providers could be subject to significant additional taxes if they receive payments or benefits in connection with a change in control that exceeds certain limits, and that we or our successor could lose a deduction on the amounts subject to the additional tax. Code Section 409A also imposes additional significant taxes on the individual in the event that an executive officer, director or service provider receives “deferred compensation” that does not meet the requirements of Code Section 409A.

In 2017, due to the limitations of Code Section 162(m), we generally would have received a federal income tax deduction for compensation paid to our Chief Executive Officer and to certain other highly compensated officers only if the compensation was less than \$1,000,000 per person during the year or was “performance-based” under Code Section 162(m). We did not structure any of our compensation for our executive officers to qualify as performance-based compensation. We accumulated net operating losses over several years and could not currently benefit from deductions we might otherwise be able to take if we did qualify compensation as performance-based under Code Section 162(m). Further, Code Section 162(m) generally required a certain rigidity to qualify compensation as performance-based and we believe that currently it is in the company’s best interest to retain flexibility and to structure programs in a manner to incent our executives to drive long-term stockholder value. Nonetheless, our Compensation Committee maintained for 2017, and intends to continue to maintain, an approach to executive compensation that strongly links pay to performance.

### **Compensation Risk Assessment**

At the direction of the Compensation Committee, we previously reviewed our compensation practices and policies and our findings were presented to the Compensation Committee for consideration. After consideration of the information presented, the Compensation Committee has concluded that our compensation programs, including our executive compensation program, do not encourage excessive risk taking by our executives or other employees. As a result, we believe that our employee compensation program does not create risk that is reasonably likely to have a material adverse effect on our Company.

### **Compensation Committee Interlocks and Insider Participation**

None of our Compensation Committee members is or had ever been one of our officers or employees until January 2012 when Dr. Hunkapiller was appointed as our Chief Executive Officer and President. Upon appointment as our Chief Executive Officer and President, Dr. Hunkapiller resigned from our Compensation Committee. During fiscal 2016, Ms. Ordoñez and Dr. Hunkapiller served as directors of RainDance Technologies, Inc. (“RDT”) and, starting June 2016, Ms. Ordoñez served as Chief Executive Officer of RDT while also serving as a member of our Compensation Committee. Dr. Hunkapiller did not serve on RDT’s compensation committee. In February 2017, both Ms. Ordoñez and Dr. Hunkapiller ceased to serve as directors of RDT, and Ms. Ordoñez also ceased to serve as Chief Executive Officer of RDT, in connection with the acquisition of RDT by Bio-Rad Laboratories, Inc. In October 2017, Ms. Ordoñez was appointed as our Chief Commercial Officer. Upon appointment as our Chief Commercial Officer and Executive Vice President, Ms. Ordoñez resigned from our Compensation Committee.

## Executive Compensation Tables

### Summary Compensation Table

The following table provides information regarding the compensation of our named executive officers, for each of the years they were so designated during 2017, 2016 and 2015:

#### Summary Compensation Table

<u>Name and principal position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus (\$)</u>	<u>Other (\$)</u>	<u>Option Awards (\$)(1)</u>	<u>Total (\$)</u>
Michael Hunkapiller, Ph.D. President, Chief Executive Officer and Chairman of the Board of Directors	2017	1	—	—	1,343,160	1,343,161
	2016	1	—	—	1,985,160	1,985,161
	2015	1	—	—	1,445,120	1,445,121
Susan Barnes Executive Vice President and Chief Financial Officer	2017	1	—	—	839,475	839,476
	2016	1	—	—	1,240,725	1,240,726
	2015	1	—	—	903,200	903,201
Kathy Ordoñez Chief Commercial Officer, Executive Vice President and Director	2017	1	—	—	693,338	693,339
Kevin Corcoran Senior Vice President of Market Development	2017	336,800	24,515	—	335,790	697,105
	2016	327,000	66,218	—	561,240	954,458
	2015	317,000	107,273	—	436,450	860,723
Michael Phillips Senior Vice President of Research and Development	2017	336,800	24,515	—	335,790	697,105
	2016	327,000	66,218	—	561,240	954,458
	2015	317,000	107,273	—	436,450	860,723

- (1) Amounts shown represent the aggregate grant date fair value of the option awards computed in accordance with FASB ASC Topic 718. These amounts do not correspond to the actual value that will be recognized by our named executive officers. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our financial statements.

As of March 31, 2018, for the year ending December 31, 2018, the annual base salary for Michael Hunkapiller, Ph.D., Susan Barnes, Kathy Ordoñez and Michael Phillips is \$1, \$1, \$1 and \$336,800, respectively.

### Grants of Plan-Based Awards

The following table presents information concerning grants of plan-based awards to each of the named executive officers that were so designated during the fiscal year ended December 31, 2017:

#### Grants of Plan-Based Awards

<u>Name</u>	<u>Grant date</u>	<u>All other option awards: number of securities underlying options (#)</u>	<u>Exercise or base price of option awards (\$/Sh)</u>	<u>Grant date fair value of option awards (\$)(1)</u>
Michael Hunkapiller, Ph.D.	2/15/2017	400,000	5.27	1,343,160
Susan Barnes	2/15/2017	250,000	5.27	839,475
Kathy Ordoñez	11/15/2017	375,000	2.90	693,338
Kevin Corcoran	2/15/2017	100,000	5.27	335,790
Michael Phillips	2/15/2017	100,000	5.27	335,790

- (1) Amounts shown represent the aggregate grant date fair value of the option awards computed in accordance with FASB ASC Topic 718. These amounts do not correspond to the actual value that will be recognized by our named executive officers. The assumptions used in the valuation of these awards are consistent with the valuation methodologies specified in the notes to our financial statements.

The following table presents information concerning grants of plan-based awards made to each of the named executive officers that were so designated through March 31, 2018 for the fiscal year ending December 31, 2018:

<u>Name</u>	<u>Grant date</u>	<u>All other option awards: number of securities underlying options (#) (1)</u>	<u>All other awards: number of shares of stock or units (#)</u>		<u>Exercise or base price of option awards (\$/Sh)</u>
			<u>Time-based RSUs (2)</u>	<u>Performance- based RSUs (3)</u>	
Michael Hunkapiller, Ph.D.	3/15/2018	100,000			2.63
	3/15/2018		50,000	100,000	
Susan Barnes	3/15/2018	87,500			2.63
	3/15/2018		43,750	87,500	
Kathy Ordoñez	3/15/2018	87,500			2.63
	3/15/2018		43,750	87,500	
Kevin Corcoran	2/15/2018	80,000			2.54
	2/15/2018		17,500	28,967	
Michael Phillips	2/15/2018	70,000			2.54
	2/15/2018		15,000	28,967	

- (1) The shares subject to options will vest in equal monthly installments over the next four years.  
(2) The Time-based Restricted Stock Unit (RSU) will vest in equal annual installments over the next four years.  
(3) The performance-based RSUs will vest based on the Company's 2018 performance relative to 2018 goals and objectives.

### Outstanding Equity Awards at Fiscal Year-End

The following table presents certain information concerning equity awards held by the named executive officers that were so designated at the end of the fiscal year ended December 31, 2017:

### Outstanding Equity Awards at Fiscal Year-End

Name	Option Awards			
	Number of securities underlying outstanding options (#)		Option exercise price (\$/sh)	Option expiration date
	exercisable	unexercisable		
Michael Hunkapiller, Ph.D.	25,000	—	16.00	10/26/2020
	12,500	—	10.58	6/23/2021
	500,000	—	3.01	1/9/2022
	536,478	18,522	(1) 2.27	3/15/2023
	383,318	116,682	(1) 6.14	3/17/2024
	283,328	116,672	(2) 5.72	3/16/2025
	183,330	216,670	(2) 7.87	3/15/2026
	83,332	316,668	(2) 5.27	2/15/2027
Susan Barnes	327,942	—	8.50	2/22/2020
	125,000	—	13.72	12/15/2020
	250,000	—	(3) 4.79	2/15/2022
	37,916	10,846	(1) 2.27	3/15/2023
	229,990	70,010	(1) 6.14	3/17/2024
	177,080	72,920	(2) 5.72	3/16/2025
	114,581	135,419	(2) 7.87	3/15/2026
	52,082	197,918	(2) 5.27	2/15/2027
Kathy Ordoñez	35,000	—	(4) 6.98	12/17/2024
	25,000	—	(5) 5.79	5/20/2025
	25,000	—	(5) 8.98	5/17/2026
	14,583	10,417	(5) 3.81	5/24/2017
	7,812	367,188	(2) 2.90	11/15/2027
Kevin Corcoran	37,500	—	6.96	9/17/2018
	50,000	—	8.50	2/17/2020
	12,500	—	12.74	7/29/2020
	150,000	—	14.24	3/15/2021
	250,000	—	4.79	2/15/2022
	96,668	3,332	(3) 2.18	2/15/2023
	95,831	4,169	(2) 7.05	2/18/2024
	70,832	29,168	(2) 6.91	2/17/2025
	45,832	54,168	(2) 8.90	2/16/2026
	20,833	79,167	(2) 5.27	2/15/2027
Michael Phillips	62,500	—	6.96	9/17/2018
	87,501	—	8.50	2/17/2020
	5,000	—	12.74	7/29/2020
	6,000	—	11.64	6/15/2021
	150,000	—	4.79	2/15/2022
	74,168	3,332	(3) 2.18	2/15/2023
	95,831	4,169	(2) 7.05	2/18/2024
	70,832	29,168	(2) 6.91	2/17/2025
	45,832	54,168	(2) 8.90	2/16/2026
	20,833	79,167	(2) 5.27	2/15/2027



- (1) Stock option vests at the rate of 1/60th of the total number of shares subject to the option each month over the next five years.
- (2) Stock option vests at the rate of 1/48th of the total number of shares subject to the option each month over the next four years.
- (3) Stock option vests at the rate of 1/5th of the total number of shares subject to the option after one year and 1/60th per month for the next four years.
- (4) Stock option vests at the rate of 1/3th of the total number of shares subject to the option after one year and 1/36th per month for the next two years.
- (5) Stock option vests at the rate of 1/12th of the total number of shares subject to the option each month over the next one year.

***Option Exercises and Stock Vested at Fiscal Year-End***

The following table lists the number of shares acquired and the value realized as a result of option exercises by the named executive officers that were so designated for the year ended December 31, 2017. For option exercises, the value realized is calculated by multiplying the number of shares acquired by the difference between the exercise price and the market price of common stock on the exercise date.

<u>Name</u>	<u>Number of shares Acquired on Exercises (#)</u>	<u>Value Realized on Exercise (\$)</u>
Mike Hunkapiller	500,000	245,000
Susan Barnes	276,238	353,585
Kevin Corcoran	112,500	151,237

***Employment Agreements and Change of Control Arrangements***

For our Chief Executive Officer, Dr. Hunkapiller, upon the occurrence of involuntary termination, whether or not following a change of control, (i) 100% of any unvested equity will vest and (ii) he will receive salary continuation and benefits for 12 months. For the other named executive officers, upon the occurrence of involuntary termination within 12 months following a change of control, (i) 100% of any unvested equity will vest and (ii) the executive will receive salary continuation and benefits for 6 months.

The following table describes the potential payments and benefits to each of our named executive officers that were so designated as of December 31, 2017 following a termination of employment without cause, due to death or a disability or for good reason, based on the severance and change of control provisions described above and based on equity grants outstanding as of December 31, 2017. Salary amounts shown for Michael Hunkapiller, Ph.D. and Susan Barnes reflect revisions to their respective severance agreements as of January 1, 2018. Actual amounts payable to each executive listed below upon termination can only be determined definitively at the time of each executive's actual departure. In addition to the amounts shown in the table below, each executive would receive payments for amounts of base salary and vacation time accrued through the date of termination and payment for any reimbursable business expenses incurred.

## Potential Payments upon Involuntary Termination or Change of Control

<u>Compensation and benefits</u>	<u>Involuntary termination or change of control (\$)</u>
Michael Hunkapiller, Ph.D.	
Salary	—
Equity Acceleration (1)	6,853
Health care benefits	—
Total	<u>6,853</u>
Susan Barnes	
Salary	—
Equity Acceleration (1)	4,013
Health care benefits	100
Total	<u>4,113</u>
Kathy Ordoñez	
Salary	—
Equity Acceleration (1)	—
Health care benefits	—
Total	<u>—</u>
Kevin Corcoran	
Salary	168,400
Equity Acceleration (1)	1,533
Health care benefits	8,208
Total	<u>178,141</u>
Michael Phillips	
Salary	168,400
Equity Acceleration (1)	1,533
Health care benefits	9,042
Total	<u>178,975</u>

- (1) Calculated as the intrinsic value per option, multiplied by the number of options that become immediately vested upon involuntary termination or change of control. The intrinsic value per option is calculated as the excess of the closing market price on December 31, 2017, \$2.64 per share, over the exercise price of the option.

### **CEO Pay Ratio**

In August 2015, the SEC adopted rules implementing the “CEO pay ratio” disclosure requirements that were mandated by Congress pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act. The new rules require registrants to disclose the ratio of the median employee’s annual total compensation to the CEO’s annual total compensation. Our CEO pay ratio is calculated in accordance with the SEC’s final rules regarding the CEO pay ratio disclosure requirements promulgated pursuant to Item 402(u) of Regulation S-K.

December 31, 2017 is the date as of which we identified our employee population for the purposes of calculating our CEO pay ratio. To identify our median employee, we examined the 2017 total cash and equity compensation using payroll and equity plan records for January 1, 2017 through December 31, 2017 for all full-time, part-time, temporary and seasonal employees, excluding our CEO. Wages were annualized for full-time employees that were not employed by us for the entire calendar year. Compensation for our hourly employees

was not annualized. Other than the foregoing, we did not make any assumptions, adjustments or estimates with respect to our employees' total cash and equity compensation and used this consistently applied compensation measure to identify our median employee. After identifying the median employee, we calculated his/her annual total compensation using the same SEC rules we use for calculating the annual total compensation of our named executive officers, as set forth in the Summary Compensation Table above.

In 2017, the annual total compensation of our median employee was approximately \$157,357, and our CEO's annual total compensation was \$1,343,161 using the amount reported in the "Total" column of our Summary Compensation Table for 2017. The resulting ratio of the total annual compensation of our CEO to our median employee was approximately 9:1.

The pay ratio was calculated in accordance with SEC rules based upon our reasonable judgment and assumptions. The SEC rules do not specify a single methodology for identification of the median employee or calculation of the pay ratio, and other companies may use assumptions and methodologies that are different from those used by us in calculating their pay ratio. Accordingly, the pay ratio disclosed by other companies may not be comparable to the Company's pay ratio as disclosed above.

### ***Equity Compensation Plan Information***

The following table presents information about the Company's equity compensation plans as of December 31, 2017 (in thousands, except price data):

<b>Plan category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)</b>	<b>Weighted average exercise price of outstanding options, warrants and rights \$(1)</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</b>
Equity compensation plans approved by security holders (2)	25,404	6.10	6,795
Equity compensation plans not approved by security holders	—	—	—

(1) The weighted average exercise price is calculated based solely on outstanding stock options.

(2) Includes the following plans: the 2010 Equity Incentive Plan (the "2010 Plan") and the 2010 Outside Director Equity Incentive Plan (the "2010 Director Plan"), both of which we adopted upon the effectiveness of our initial public offering in October 2010. Our 2010 Plan provides that the number of shares available for issuance there under will be increased on the first day of each fiscal year beginning with the 2012 fiscal year in an amount equal to the least of (i) 10,000,000 shares, (ii) 5% of the outstanding shares of our common stock as of the last day of our immediately preceding year, or (iii) such number of shares of common stock determined by our board of directors. On January 1, 2018, the number of shares available for issuance under our 2010 Plan increased by 5,813,826 shares pursuant to these provisions. Our 2010 Director Plan provides that the number of shares available for issuance thereunder will be increased on the first day of each fiscal year beginning with the 2012 fiscal year in an amount equal to the lesser of (i) 1% of the outstanding shares on the last day of the immediately preceding fiscal year, or (ii) such number of shares of common stock determined by our board of directors. On January 1, 2018, the number of shares available for issuance under our 2010 Director Plan increased by 1,162,765 shares pursuant to these provisions. These increases are not reflected in the table above.

## AUDIT COMMITTEE REPORT

*The following audit committee report shall not be deemed incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, and shall not otherwise be deemed filed under these acts, except to the extent we specifically incorporate by reference into such filings.*

Our Audit Committee is composed of “independent” directors, as determined in accordance with NASDAQ Stock Market’s Rules and Rule 10A-3 of the Exchange Act. The Audit Committee has certain duties and powers as described in its written charter adopted by the Board of Directors. A copy of the charter can be found on our website at [www.pacb.com](http://www.pacb.com).

As described more fully in its charter, the purpose of the Audit Committee is to assist the Board of Directors with its oversight responsibilities regarding the integrity of our financial statements, our compliance with legal and regulatory requirements, assessing the independent auditor’s qualifications and independence, the performance and scope of independent audit procedures performed on our financial statements and internal control, and management’s process for assessing the adequacy of our system of internal control. Management is responsible for preparation, presentation, and integrity of our financial statements as well as our financial reporting process, accounting policies, internal control over financial reporting, and disclosure controls and procedures. The independent registered public accounting firm is responsible for performing an independent audit of our consolidated financial statements in accordance with generally accepted auditing standards and to issue a report thereon. The Audit Committee’s responsibility is to monitor and oversee these processes.

The Audit Committee has:

- reviewed and discussed our audited financial statements with management and Ernst & Young LLP, our independent auditors;
- discussed with Ernst & Young LLP the matters required to be discussed by Statement on Auditing Standards No. 114, as amended (AICPA, Professional Standards, Vol. 1. AU section 380) and adopted by the Public Company Accounting Oversight Board in Rule 3200T, and the Public Company Accounting Oversight Board Auditing Standard No. 1301 (Communications with Audit Committees); and
- received from Ernst & Young LLP the written disclosures and the letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent auditors’ communications with the Audit Committee concerning independence, and discussed with the auditors their independence.

In addition, the Audit Committee has regularly met separately with management and with Ernst & Young LLP.

Based on the review and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2017 for filing with the Securities and Exchange Commission.

### **Members of the Audit Committee**

Randy Livingston (Chair)

Marshall Mohr

John Milligan, Ph.D.

## OTHER INFORMATION

### **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Exchange Act requires our directors and executive officers, and persons who beneficially own more than 10% of our common stock, to file with the SEC reports about their ownership of common stock and other equity securities of the Company. Such directors, officers and 10% stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely on our review of the reports provided to us and on representations received from our directors and executive officers, we believe that all of our executive officers, directors and persons who beneficially own more than 10% of our common stock complied with all Section 16(a) filing requirements applicable to them with respect to transactions during fiscal year 2017.

### **Stockholder Proposals**

#### ***Stockholder Proposals for 2019 Annual Meeting***

The submission deadline for stockholder proposals to be included in our proxy materials for the 2019 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act is December 6, 2018 except as may otherwise be provided in Rule 14a-8. All such proposals must be in writing and received by our Corporate Secretary at Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, CA 94025 by close of business on the required deadline in order to be considered for inclusion in our proxy materials for the 2019 annual meeting of stockholders. Submission of a proposal before the deadline does not guarantee its inclusion in our proxy materials.

#### ***Advance Notice Procedure for 2019 Annual Meeting***

Under our Bylaws, director nominations and other business may be brought at an annual meeting of stockholders only by or at the direction of the Board of Directors or by a stockholder entitled to vote who has submitted a proposal in accordance with the requirements of our Bylaws as in effect from time to time. For the 2019 annual meeting of stockholders, a stockholder notice must be received by our Corporate Secretary at Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, CA 94025, no earlier than December 6, 2018 and no later than January 5, 2019. However, if the 2019 annual meeting of stockholders is advanced by more than 25 days prior to or delayed by more than 25 days after the one-year anniversary of the 2018 Annual Meeting of Stockholders, then, for notice by the stockholder to be timely, it must be received by our Corporate Secretary not earlier than the close of business on the 120th day prior to the 2019 annual meeting of stockholders and not later than the close of business on the later of (i) the 90th day prior to the 2019 annual meeting of stockholders, or (ii) the tenth day following the day on which public announcement of the date of such annual meeting is first made. Please refer to the full text of our advance notice Bylaw provisions for additional information and requirements. A copy of our Bylaws may be obtained by writing to our Corporate Secretary at the address listed above.

### **Stockholders Sharing the Same Address**

The SEC has adopted rules that allow a company to deliver a single proxy statement or annual report to an address shared by two or more of its stockholders. This method of delivery, known as "householding," permits us to realize significant cost savings, reduces the amount of duplicate information stockholders receive, and reduces the environmental impact of printing and mailing documents to our stockholders. Under this process, certain stockholders will receive only one copy of our proxy materials and any additional proxy materials that are delivered until such time as one or more of these stockholders notifies us that they want to receive separate copies. Any stockholders who object to or wish to begin householding may notify our Investor Relations Department at [ir@pacificsciences.com](mailto:ir@pacificsciences.com) or Investor Relations, Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, CA 94025.

**Fiscal Year 2017 Annual Report and SEC Filings**

Our financial statements for the fiscal year ended December 31, 2017 are included in our Annual Report on Form 10-K, which we will make available to stockholders at the same time as this Proxy Statement. Our Annual Report and this Proxy Statement are posted on our website at [www.pacb.com](http://www.pacb.com) and are available from the SEC at its website at [www.sec.gov](http://www.sec.gov). You may also obtain a copy of our Annual Report without charge by sending a written request to Investor Relations, Pacific Biosciences of California, Inc., 1305 O'Brien Drive, Menlo Park, CA 94025.

By Order of the Board of Directors

Menlo Park, California  
April 4, 2018



