PACIFIC BIOSCIENCES OF CALIFORNIA, INC.
Form DEF 14A
April 29, 2019
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a 6(e)(2))

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to §240.14a 11(c) or §240.14a 2

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(Name of Registrant as Specified In Its Charter)

Payment of Filing Fee (Check the appropriate box):

No fee required.

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(1)Title of each class of securities to which transaction applies: Common Stock, par value $[_____]

(2)Aggregate number of securities to which transaction applies: [_____] shares of Common Stock

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

(4)Proposed maximum aggregate value of transaction: $[____]

(5)Total fee paid: $[____]

Fee paid previously with preliminary materials.

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

(1)Amount Previously Paid:

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

(3)Filing Party:

(4)Date Filed:

April 29, 2019

Dear Pacific Biosciences of California, Inc. Stockholder:

You are cordially invited to attend our 2019 Annual Meeting of Stockholders (the "Annual Meeting"), which will be held on June 18, 2019 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 III 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, 2019.

Thank you for your continued support of Pacific Biosciences.

Sincerely,

Michael Hunkapiller, Ph.D.

Chairman, President and Chief Executive Officer

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

NOTICE OF 2019 ANNUAL MEETING OF STOCKHOLDERS

To Be Held on June 18, 2019

9:00 a.m. Pacific Time

Pacific Biosciences of California, Inc.'s 2019 Annual Meeting of Stockholders will be held on Tuesday, June 18, 2019 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 III 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, 2019; 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 22, 2019 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, June 17, 2019. 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 May 9, 2019.

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 29, 2019

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

1305 O'Brien Drive,

Menlo Park, California 94025

PROXY STATEMENT

FOR THE ANNUAL MEETING OF STOCKHOLDERS

To Be Held on June 18, 2019

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 2019 Annual Meeting of Stockholders (the "Annual Meeting"). The Annual Meeting will be at held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304 on June 18, 2019 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" refer 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 May 9, 2019. See the section titled "Fiscal Year 2018 Annual Report and SEC Filings" for information on accessing our 2018 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 III 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, 2019; 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 III 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, 2019.

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 22, 2019, 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 June 17, 2019 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 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 June 17, 2019.
- 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.

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 June 17, 2019;
- 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 June 17, 2019; or

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- 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 is the effect of giving a proxy?

Proxies are solicited by and on behalf of our Board of Directors. Michael Hunkapiller and Susan K. Barnes have been designated as proxies by our Board of Directors. When proxies are properly dated, executed and returned, the shares represented by such proxies will be voted at the Annual Meeting in accordance with the instructions of the stockholder. If no specific instructions are given, however, the shares will be voted in accordance with the recommendations of our Board of Directors. If any matters not described in this proxy statement are properly presented at the Annual Meeting, the proxy holders will use their own judgment to determine how to vote the shares. If the Annual Meeting is adjourned, the proxy holders can vote the shares on the new Annual Meeting date as well, unless you have properly revoked your proxy instructions, as described above.

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 III 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, 2019 (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 22, 2019, we had 152,674,751 shares of common stock outstanding and entitled to vote at the Annual Meeting, meaning that 76,337,376 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?

Proposal	Vote Required	Broker Discretionary Voting Allowed
Proposal 1 - Election of three Class III directors	Majority of the shares entitled to vote and present in person or represented by proxy	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 2020 Annual Meeting

The submission deadline for stockholder proposals to be included in our proxy materials for the 2020 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act is January 1, 2020 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 2020 annual meeting of stockholders. Submission of a proposal before the deadline does not guarantee its inclusion in our proxy materials.

Advance Notice Procedure for 2020 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 2020 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 January 1, 2020 and no later than January 31, 2020. However, if the 2020 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 2019 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 2020 annual meeting of stockholders and not later than the close of business on the later of (i) the 90th day prior to the 2020 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.

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, 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, Henry, Livingston and Mohr, and Drs. Botstein, Milligan and Shapiro, representing seven of our nine 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, Messrs. Ericson and Livingston, and Dr. Shapiro, who comprise our Corporate Governance and Nominating Committee, 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. Although the Board of Directors does not maintain a specific policy with respect to board diversity, the Board of Directors believes that it should be a diverse body and the Corporate Governance and Nominating Committee considers a broad range of backgrounds and experiences. In making determinations regarding nominations of directors, 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. Our code of business conduct is available on the Investor Relations page of our website at 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 2018, each director other than Lucy Shapiro 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. Dr. Shapiro attended 70% of the aggregate of (i) the total number of meetings of our Board of Directors held during the period and (ii) the total number of meetings held by all committees of our Board of Directors during the periods on which she served; however, excluding those meetings that Dr. Shapiro was unable to attend due to pre-existing conflicts, her attendance rate would have been at least 75%.

Although we do not have a formal policy regarding attendance by members of our Board of Directors at annual meetings of stockholders, we encourage, but do not require, our directors to attend. None of our eight then board members attended our 2018 annual meeting.

The names of the nominees and directors, their ages as of December 31, 2018 and certain other information about them are set forth below:

Name of Director	Age	Position	Class and Term
David Botstein, Ph.D.	76	Director	Class III, term expires 2019
William Ericson	60	Director	Class III, term expires 2019
Christian O. Henry (1)	50	Director	Class I, term expires 2020
Michael Hunkapiller, Ph.D.	70	President, Chief Executive Officer and Chairman of the Board of Directors	Class II, term expires 2021
Randy Livingston	65	Director	Class II, term expires

			2021
John F. Milligan, Ph.D.	58	Director	Class I, term expires 2020
Marshall Mohr	63	Director	Class II, term expires 2021
Kathy Ordoñez (2)	68	Director	Class III, term expires 2019
Lucy Shapiro, Ph.D.	78	Director	Class I, term expires 2020

(1) Mr. Henry was appointed to the Company's Board of Directors on July 27, 2018.
(2) Ms. Ordoñez resigned as Chief Commercial Officer and Executive Vice President of the Company on October 30, 2018.

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. Since January 2014, Dr. Botstein has been 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 concentrate on personalized medicine.

Christian O. Henry has been a member of our Board of Directors since 2018. Mr. Henry served as Executive Vice President & Chief Commercial Officer of Illumina, Inc. from 2015 through January 2017, and previously served as Senior Vice President & Chief Commercial Officer from 2014 to 2015, Senior Vice President & General Manager Genomic Solutions from 2012 to 2014, Senior Vice President, Chief Financial Officer & General Manager Life Sciences from 2010 to 2012, Senior Vice President, Corporate Development & Chief Financial Officer from 2009 to 2010, Senior Vice President & Chief Financial Officer from 2007 to 2009, and Vice President & Chief Financial Officer from 2005 to 2006. Prior to joining Illumina, Inc., Mr. Henry served as the Chief Financial Officer of Tickets.com, Inc. from 2003 to 2005. From 1999 to 2003, Mr. Henry served as Vice President, Finance & Corporate Controller of Affymetrix, Inc. (acquired by Thermo Fisher Scientific in 2016). In 1997, Mr. Henry joined Nektar Therapeutics (formerly Inhale Therapeutic Systems, Inc.), as Corporate Controller, and later as its Chief Accounting Officer from 1997 to 1999. In 1996, Mr. Henry served as General Accounting Manager of Sugen, Inc. Mr. Henry began his career in 1992 at Ernst & Young LLP, where he was a Senior Accountant through 1996. Mr. Henry currently serves as a director and chairman of the board of WAVE Life Sciences Ltd. Mr. Henry holds a B.A. in biochemistry and cell biology from the University of California, San Diego and an M.B.A., with a concentration in finance, from the University of California, Irvine. We believe that Mr. Henry possesses specific attributes that qualify him to serve as a member of our Board of Directors including his over 20 years of experience in growing companies in the life sciences industry.

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 and 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. On December 31, 2018 Dr. Milligan retired as Chief Executive Officer of Gilead and resigned from the Board of Directors. Dr. Milligan is the Chair of the board of trustees 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 has been a member of our Board of Directors since December 2014. She served as our Chief Commercial Officer and Executive Vice President from October 2017 to October 2018. 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 under “Corporate Governance”. Our Board of Directors from time to time establishes additional committees to address specific needs.

The following table sets forth (i) the four standing committees of the Board of Directors, (ii) the current members of each committee and (iii) the number of meetings held by each committee in fiscal year 2018:

Name of Director	Audit	Compensation	Corporate Governance and Nominating	Science and Technology
David Botstein, Ph.D.				X
William Ericson		X (chair)	X	
Randy Livingston (1)	X (chair)		X	
John F. Milligan, Ph.D.	X	X		
Marshall Mohr	X	X		
Kathy Ordoñez				X (chair)
			X (chair)	X

Lucy Shapiro, Ph.D.				
Number of meetings held during 2018	6	13	3	4
Christian O. Henry (2)		X		X

(1) Mr. Livingston was appointed to the Corporate Governance and Nominating Committee effective as of May 22, 2018.

(2) On April 11, 2019, Mr. Henry was appointed to serve on the Compensation Committee and the Science and Technology Committee of the Board, effective immediately after the Company's 2019 Annual Meeting of Stockholders.

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 member of our Audit Committee qualifies as an Audit Committee financial expert 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. Mr. Ericson serves as the chair of our Compensation Committee. On April 11, 2019, Mr. Henry was appointed to serve on the Compensation Committee of the Board, effective immediately after the Company’s 2019 Annual Meeting of Stockholders.

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 Messrs. Ericson and Livingston and Dr. Shapiro. 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 for the period of October 30, 2017 through October 30, 2018, she stopped receiving compensation for this position during that period.

On April 11, 2019, Mr. Henry was appointed to serve on the Science and Technology Committee of the Board, effective immediately after the Company's 2019 Annual Meeting of Stockholders.

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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, 2018. Compensation paid to Dr. Hunkapiller is included in the section entitled "Executive Compensation" and excluded from the table below:

Name	Fees earned or paid in cash ($)	Option Awards ($) (1)	Total ($)
David Botstein, Ph.D.	40,000	37,405	77,405
William Ericson	69,000	37,405	106,405
Christian O. Henry (2)	14,583	73,273	87,856
Randy Livingston	58,750	37,405	96,155
John F. Milligan, Ph.D.	52,000	37,405	89,405
Marshall Mohr	52,000	37,405	89,405
Kathy Ordoñez (3)	7,500	—	7,500
Lucy Shapiro, Ph.D.	50,000	37,405	87,405

(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) Mr. Henry was appointed to the Company's Board of Directors on July 27, 2018.

(3) Effective as of October 30, 2018, Ms. Ordoñez ceased to be Chief Commercial Officer and Executive Vice President for the Company, but continued to serve as a member of the Board of Directors. Accordingly, since employee directors are not compensated for Board of Directors services in addition to their regular employee compensation, her compensation only includes fees earned from November 1, 2018 to December 31, 2018.

The aggregate number of shares subject to stock options outstanding and exercisable, restricted stock units with time-based vesting ("RSUs") and restricted stock units with performance-based vesting ("PSUs") outstanding at December 31, 2018 for each non-employee director is as follows:

Name	Aggregate Number of Stock Options Outstanding as of December 31, 2018	Aggregate Number of Stock Options Exercisable as of December 31, 2018	Aggregate Number of RSUs Outstanding as of December 31, 2018	Aggregate Number of PSUs Outstanding as of December 31, 2018
David Botstein, Ph.D.	185,000	174,583	—	—
William Ericson	212,500	202,083	—	—
Christian O. Henry	35,000	—	—	—
Randy Livingston	257,500	247,083	—	—
John F. Milligan, Ph.D.	160,000	149,583	—	—
Marshall Mohr	210,000	199,583	—	—
Kathy Ordoñez (1)	547,500	204,788	43,750	87,500
Lucy Shapiro, Ph.D.	83,334	72,917	—	—

(1) Ms. Ordoñez's figures include the stock options, RSUs and PSUs granted to her during her tenure as Chief Commercial Officer and Executive Vice President from October 30, 2017 to October 30, 2018.

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 annual retainer of $20,000 and members of our Audit Committee other than the chair are paid an annual retainer of $10,000;

(3) the chair of our Compensation Committee is paid an annual retainer of $14,000, and members of our Compensation Committee other than the chair are paid an annual retainer of $7,000;

(4) the chair of our Corporate Governance and Nominating Committee is paid an annual retainer of $10,000, and members of our Corporate Governance and Nominating Committee other than the chair are paid an annual retainer of $5,000;

(5) the chair of our Science and Technology Committee is paid an annual retainer of $10,000, and the members of our Science and Technology Committee other than the chair are paid an annual retainer of $5,000; and

(6) our lead independent director is paid an 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 III director at the Annual Meeting will serve for a three-year term expiring on the date of the 2022 annual meeting of stockholders.

Our Board of Directors has nominated David Botstein, Ph.D., William Ericson, and Kathy Ordoñez for election as Class III 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 III nominees, as well as directors not up for election at the Annual Meeting is set forth below.

Name of Director	Age	Principal Occupation	Director Since
Class III Directors (term to expire in 2019)			
David Botstein, Ph.D.	76	Chief Scientific Officer of Calico Life Sciences	2012
William Ericson	60	Managing Partner of Mohr Davidow Ventures and Founding Partner of Wildcat Venture Partners	2004
Kathy Ordoñez	68	Director	2014
Class II Directors (term to expire in 2021)			
Michael Hunkapiller, Ph.D.	70	Chairman, President and Chief Executive Officer of Pacific Biosciences of California,	2005

		Inc.	
Randy Livingston	65	Vice President for Business Affairs and Chief Financial Officer of Stanford University	2009
Marshall Mohr	63	Senior Vice President and Chief Financial Officer of Intuitive Surgical, Inc.	2012
Class I Nominees (term to expire in 2020)			
Christian O. Henry	50	Director	2018
John F. Milligan, Ph.D.	58	President & Chief Operating Executive Officer of Gilead Sciences, Inc.	2013
Lucy Shapiro, Ph.D.	78	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 are no family relationships 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 III DIRECTORS NOMINEES TO SERVE AS A CLASS III DIRECTOR.

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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, 2019. 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 2018 and 2017 (in thousands):

Fee Category	2018	2017
Audit Fees	$ 1,117	$ 1,273
Audit-related Fees	—	—
Tax Fees	—	—
All Other Fees	2	2
Total Fees	$ 1,119	$ 1,275

Audit Fees consisted of professional services rendered in connection with the audit of our annual consolidated financial statements and quarterly review of our condensed financial statements. 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 compliance 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, 2019.

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 2018, 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, Market Development, who is the daughter of Dr. Michael Hunkapiller, our Chairman, Chief Executive Officer and President. Ms. Keho's annual base salary was $250,000 for the year ended December 31, 2018.

Ms. Keho was granted the following options to purchase shares of our common stock during 2016, 2017 and 2018:

Grant Date	All other option awards: number of securities underlying options (#) (1)	Exercise or base price of option award ($)
2/16/2016	18,000	8.90
2/15/2017	20,000	5.27
2/15/2018	20,000	2.54

(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. For the years ended December 31, 2018, 2017 and 2016, we recognized revenue relating to Stanford University with a total value of approximately $241,000, $499,800 and $256,000, respectively. As of December 31, 2018 and 2017, $46,000 and $71,600, respectively, out of our accounts receivable balance of $8,595,000 and $13,433,000, respectively, related to Stanford University.

Calico Life Sciences LLC

David Botstein, Ph.D. is the Chief Scientific Officer of Calico Life Sciences, LLC. For the years ended December 31, 2018, 2017 and 2016, we recognized revenue relating to Calico Life Sciences, LLC with a total value of approximately $67,000, $310,500 and 575,000, respectively. As of December 31, 2018 and 2017, $0 and $1,400, respectively, of our accounts receivable balance of $8,595,000 and $13,433,000, respectively, related to Calico Life Sciences, LLC.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of March 31, 2019 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 March 31, 2019, 152,672,252 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)
5% Stockholders:				
BlackRock Inc. (5)	11,256,330	—	11,256,330	7.4%
Magnetar Financial LLC. (6)	9,421,984	—	9,421,984	6.2%
Named executive officers and directors:				
Michael Hunkapiller, Ph.D. (7)	4,959,211	2,573,739	7,532,950	4.9%
William Ericson (8)	5,598,397	212,500	5,810,897	3.8%
David Botstein, Ph.D.	—	185,000	185,000	*
Christian O. Henry	—	—	—	*
Randy Livingston	—	257,500	257,500	*
John F. Milligan, Ph.D.	—	160,000	160,000	*
Marshall Mohr	—	210,000	210,000	*
Lucy Shapiro, Ph.D.	101,666	83,334	185,000	*
Susan K. Barnes	683,308	1,355,800	2,039,108	1.3%
Kathy Ordoñez (9)	23,955	252,965	276,920	*
Michael Phillips	217,213	685,372	902,585	*
Kevin Corcoran (10)	163,115	—	163,115	*
All directors and executive officers as a group (12 people)	11,746,865	5,976,210	17,723,075	11.6%

* 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 or the vesting of RSUs and PSUs.

(3) Represents shares issuable upon exercise of options exercisable within 60 days after March 31, 2019, RSUs and PSUs that vest within 60 days after March 31, 2019; however, unless otherwise indicated, these shares do not include any options, RSUs and PSUs awarded after March 31, 2019.

(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 filed on February 11, 2019 reporting on ownership as of December 31, 2018 by BlackRock, Inc., which has sole voting power as to 10,979,791 of these shares and sole dispositive power as to 11,256,330 of these shares. The address of this entity is 55 East 52nd Street, New York, NY 10055.

(6) Based on information taken from Schedule 13D filed on November 16, 2018 reporting on ownership by Magnetar Financial LLC., which has shared voting power as to 9,421,984 of these shares and shared dispositive power as to 9,421,984 of these shares. The address of this entity is 1603 Orrington Avenue, 13th Floor, Evanston, Illinois 60201.

(7) 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.

(8) 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.

(9) Effective as of October 30, 2018, Ms. Ordoñez ceased being Chief Commercial Officer and Executive Vice President for the Company and returned back to be a member of Board of Director.

(10) On February 10, 2018, our board of directors determined that Mr. Corcoran no longer met the definition of an executive officer under the Exchange Act. Mr. Corcoran continued in his role as Senior Vice President, Market Development, and reported to Ms. Ordoñez who was our then Executive Vice President and Chief Commercial Officer. Mr. Corcoran terminated his employment with the Company in November 2018. Mr. Corcoran exercised all his vested options in February 2019. The balance of shares owned by Mr. Corcoran was 163, 115 shares as of November 2018, his termination date.

CHANGE IN CONTROL

On November 1, 2018, we entered into an Agreement and Plan of Merger (the "Merger Agreement") with Illumina, Inc., a Delaware corporation ("Illumina"), and FC Ops Corp., a Delaware corporation and a wholly owned subsidiary of Illumina ("Merger Subsidiary"). The Merger Agreement provides that, subject to the terms and conditions set forth therein, Merger Sub will merge with and into the Company (the "Merger"), with the Company surviving the Merger and becoming a wholly owned subsidiary of Illumina.

Under the Merger Agreement, at the effective time of the Merger, (a) each issued and outstanding share of the Company's common stock (other than shares (i) owned or held in treasury by the Company or owned by Illumina or Merger Subsidiary, (ii) held by any subsidiary of the Company or Illumina (other than Merger Subsidiary) or (iii) held by stockholders who have properly exercised and perfected appraisal rights under Delaware law) and (b) each outstanding share of the Company's restricted stock, will be cancelled and automatically converted into the right to receive a price of $8.00 per share in cash, without interest (the "Merger Consideration"). This price represents a total enterprise value of approximately $1.2 billion. In addition, subject to certain exceptions, each share of the Company's common stock underlying restricted stock units and stock options (whether vested or unvested) will be converted into the right to receive the Merger Consideration (or, in the case of a stock option, the spread between the Merger Consideration and the applicable exercise price), without interest.

The Company has made customary representations, warranties and covenants in the Merger Agreement, including covenants not to, during the pendency of the Merger, solicit alternative transactions or, subject to certain exceptions, not to enter into discussions concerning, or provide confidential information in connection with, an alternative transaction. Each of Illumina and Merger Subsidiary has also made customary representations, warranties and covenants in the Merger Agreement.

The Merger Agreement contains certain customary termination rights for Illumina and the Company, including a right to terminate the Merger Agreement if the Merger is not completed by November 1, 2019, unless otherwise extended pursuant to the terms of the Merger Agreement. The Merger Agreement further provides that, upon termination of the Merger Agreement under certain specified circumstances, the Company will be obligated to pay Illumina a termination fee of $43.00 million. Specifically, if the Merger Agreement is terminated in connection with the Company accepting a superior offer or due to the withdrawal by the Company's board of directors of its recommendation of the Merger, then the termination fee will be payable by the Company to Illumina upon termination. The termination fee will also be payable in certain circumstances if the Merger Agreement is terminated and, prior to such termination, a proposal to acquire greater than 50% of the common stock or assets of the Company is publicly announced, and the Company enters into an agreement for, or completes, any transaction involving the acquisition of greater than 50% of its stock or assets within one year of the termination. In certain other circumstances related to antitrust approvals, Illumina may be required to pay the Company a termination fee of $98.00 million. Specifically, if the Merger Agreement is terminated after November 1, 2019 (as such date may be extended pursuant to the Merger Agreement), then the termination fee will be payable by Illumina upon termination of the Merger Agreement if the other conditions to closing not relating to antitrust or competition laws have been satisfied or validly waived. In no event will either party be entitled to receive more than one termination fee payment. In addition to the termination fees described above, each party remains liable to the other for any additional damages if such party (i) intentionally fails to fulfill a condition to the performance of the obligations of the other party, (ii) commits a material breach of the covenants required to be performed by it, or (ii) commits a willful and intentional breach of any of its representations and warranties.

Consummation of the Merger is subject to the satisfaction or waiver of customary closing conditions, including (i) approval of the Merger Agreement by the Company's stockholders, (ii) the absence of any law or order in certain jurisdictions restraining, enjoining or otherwise prohibiting the Merger, (iii) the expiration or termination of the

waiting period under the United States Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and clearance under the antitrust laws of certain non-United States jurisdictions. The transaction is not subject to any financing condition.

At a Special Meeting of Stockholders held on January 24, 2019, the Company's stockholders, among other things, approved the adoption of the Merger Agreement. the Company and Illumina have each received a request for additional information and documentary material, commonly referred to as a "second request," from the United States Federal Trade Commission (the "FTC") in connection with the Merger. The FTC's "second request" has the effect of extending the waiting period applicable to the consummation of the Merger until the 30th day after substantial compliance by the Company and Illumina with the "second request," unless the waiting period is extended voluntarily by the parties or terminated sooner by the FTC. The parties have entered into a timing agreement with the FTC that extends the waiting period of the "second request" to mid-2019. the Company and Illumina continue to expect the Merger to be completed in mid-2019, at which time the Company will become a wholly owned subsidiary of Illumina and will cease to be a publicly traded company.

Illumina does not beneficially own directly or indirectly any percentage of the Company's voting securities.

EXECUTIVE OFFICERS

Biographical data for each of our executive officers as of December 31, 2018, including their ages as of December 31, 2018, is set forth below, except Dr. Hunkapiller's and Ms. Ordoñez's biographies, which are included under the heading "Board of Directors and Committees of the Board" above. Note that Ms. Ordoñez resigned as Chief Commercial Officer and Executive Vice President of the Company on October 30, 2018.

Executive Officers

Susan K. Barnes, age 65, 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 68, 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 F. 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, 2018, our named executive officers were:

Name	Position
Michael Hunkapiller, Ph.D.	Chairman, Chief Executive Officer and President
Susan K. Barnes	Executive Vice President and Chief Financial Officer
Kathy Ordoñez (1)	Former Executive Vice President and Chief Commercial Officer
Michael Phillips	Senior Vice President, Research & Development
Kevin Corcoran (2)	Senior Vice President, Market Development

(1) Ms. Ordoñez resigned as Chief Commercial Officer and Executive Vice President of the Company on October 30, 2018.

(2) On February 10, 2018, our board of directors determined that Mr. Corcoran no longer met the definition of an executive officer under the Exchange Act. Mr. Corcoran continued in his role as Senior Vice President, Market Development, and reported to Ms. Ordoñez who was our then Executive Vice President and Chief Commercial Officer. Mr. Corcoran terminated his employment with the Company in November 2018.

Recent “Say-on-Pay” Vote

In May 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 91%, a majority of stockholder votes cast approving the proposal. As a result, the Compensation Committee retained the same general approach for setting pay at the Company for 2018. 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 executive compensation program consists primarily of salary, incentive cash and equity (which historically, we have issued in the form of stock options, but in 2018 included a mix of stock options, restricted stock units and performance-based restricted stock units). Likewise, we maintain 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 our then Chief Commercial Officer, who did not participate in our variable pay program, as the Compensation Committee intended at the beginning of the year that their 2018 awards be made in equity rather than cash). We typically make new equity award grants annually and consider 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 as well as by the Company’s business priorities and in consideration of the Company’s resources.

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, may also 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. In 2018, the Compensation Committee 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 2018, our Compensation Committee continued the engagement of Radford, a subsidiary of Aon, plc., 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 peers. The Committee further instructed Radford to evaluate the following components to assist the Committee in establishing fiscal year 2018 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 $300 million; and
- a market capitalization between $200 million and $1.5 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 then 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.

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 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.

For 2018, to reward performance and for shareholder alignment, the Compensation Committee introduced a performance-based equity plan for the three roles whereby shares would be earned based on achievement of the Company's performance goals for 2018 under the cash incentive plan for the broader company, as well as based on two, 3-year operating metrics relating to cash flow. These changes were implemented to reinforce our commitment to pay for performance and to ensure that equity was being earned based on performance that the executives could directly impact. With respect to the one-year performance goals, the Compensation Committee considered that the Chief Executive Officer, Chief Financial Officer and then Chief Commercial Officer did not participate in the cash incentive plan. Given the importance of the performance goals under the cash incentive plan, the Compensation Committee believed that it would be appropriate for a portion of their equity awards to be subject to the same performance criteria. In determining the performance goals for the 3-year operating metrics relating to cash flow, the Compensation Committee considered the importance of increasing shareholder value in part by driving profitability in 2018. In addition, given the broader roles of the Chief Executive Officer, Chief Financial Officer, and Chief Commercial Officer in driving the Company's business, the Compensation Committee believed that these performance goals were appropriate for a portion of their equity awards. The Compensation Committee was assisted by Radford and reviewed Survey Data provided by Radford to consider the appropriateness of the awards and award sizes in relation to market practices.

In November 2018, the Board of Directors approved a one-time, discretionary, cash bonus of $1,030,000 to our Chief Executive Officer and $617,500 to our Chief Financial Officer, as compensation for their services. These named executive officers previously had received $1 per year as cash compensation for their services and the bonuses were intended to recognize their commitment to the best interests of the Company and to appropriately compensate them for their services. In approving these amounts, the Board of Directors considered the Survey Data that Radford previously had provided in early 2018 as part of the annual executive compensation review process. The Board of Directors generally considered cash compensation (salary and target cash incentive) at approximately the 50th percentile of the Survey Data for setting the bonus amounts to be paid to the Chief Executive Officer and Chief Financial Officer. In addition, on July 26, 2018, the Compensation Committee of the Board approved a cash bonus of $170,000 to Ms. Ordoñez as compensation and recognition for her work as our Chief Commercial Officer and Executive Vice President. In approving this one time bonus for our then Chief Commercial Officer, the Compensation Committee considered Survey Data from Radford, certain expenses incurred by her in relation to the performance of her duties, and her performance and responsibilities, including with respect to efforts with certain strategic partnerships.

As part of its annual executive compensation review process, on February 15, 2019, the Board of Directors decided to reinstate base salaries and target bonus opportunities of our Chief Executive Officer and Chief Financial Officer, effective January 1, 2019 as follows:

Name	2019 Base Salary	2018 Base Salary
Michael Hunkapiller, Ph.D.	$ 582,900	$ 1
Susan K. Barnes	$ 401,500	$ 1

The Board reinstated base salaries and incentive cash compensation for our Chief Executive Officer and Chief Financial Officer in light of the transaction with Illumina, and the desire to return to more standard market practices with respect to executive compensation by providing a mix of cash and equity compensation to these executives. In recommending to the Board the amount of the base salaries for the Chief Executive Officer and Chief Financial Officer, the Compensation Committee engaged Radford to review relevant Survey Data, as well as considered subjective assessments of each of the Chief Executive Officer’s and Chief Financial Officer’s position, experience, responsibilities, and performance.

In connection with the annual base salary increases, for the Company’s 2019 fiscal year, Dr. Hunkapiller’s annual target bonus opportunity was set at 100% of his base salary and Ms. Barnes’ annual target bonus opportunity was set at 65% of her base salary. Consistent with prior years, Dr. Hunkapiller and Ms. Barnes did not participate in the Company’s 2018 bonus plan. The 2019 bonuses for both Dr. Hunkapiller and Ms. Barnes will be based upon the achievement of seven categories of performance objectives, each with separate, varied weightings ranging between 6% and 38% (inclusive) per category, that consist of corporate operational, product performance and financial metrics, and that are aggressive, but attainable, and align the compensation of Dr. Hunkapiller and Ms. Barnes with the priorities for the Company.

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 and Chief Financial 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 2018 for executives other than our Chief Executive Officer, Chief Financial Officer and then 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.

Base Salary

For 2018, base salaries were provided to our named executive officers (other than our Chief Executive Officer, Chief Financial Officer and then 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 then Chief Commercial Officer) generally aligned at approximately the 75th percentile for 2017 relative to the market data reviewed. For the year ended December 31, 2018, the base salary for Mr. Phillips and Mr. Corcoran was $345,000 and 336,800, respectively. Mr. Corcoran ended his employment with the Company in November 2018.

As part of its annual executive compensation review process, the Board of Directors decided to reinstate base salaries and target bonus opportunities of our Chief Executive Officer and Chief Financial Officer, effective January 1, 2019.

Variable Cash Incentives of Our Named Executive Officers Other than Our CEO, CFO and CCO

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 then Chief Commercial Officer) the opportunity to earn total cash compensation that is generally aligned at approximately the 50th percentile of the market data reviewed.

Variable cash incentives offered to these named executive officers during 2018 afforded the opportunity for the executives to earn up to 45% of their base salary (which remained the same as in 2017 and 2016) based on the achievement of certain corporate operational, product performance, and financial metrics, each with separate, varied weightings. These performance goals for 2018 consisted of net cash use exclusive of certain financings (weighted at 20%), total product service and certain other GAAP-based revenue recognized in 2018 (weighted at 30%), qualify-related objectives (weighted at 16%), research and development (weighted at 20%), marketing efforts (weighted at 6%) and certain operational goals (weighted at 8%). Generally, threshold achievement of the applicable goal resulted in payout with respect to that goal of 80%, up to a maximum of 125% payout for maximum achievement, and 100% payout at target achievement. Typically, the Chief Executive Officer provides an evaluation of the Company's overall performance against goals and makes a recommendation for the funding of the plan and the individual awards. Based on the Committee's assessment, the final awards are determined, making adjusts up or down for the actual incentive cash paid for each of these named executive officers, to reflect the individual's contributions to the Company's goals. During 2018, approximately 45.60% of the Company objectives were achieved, resulting in executives receiving 45.60% of their target variable cash opportunity. The objectives with respect to the 2018 incentive bonuses were aggressive, but attainable. Consistent with prior years, we established these 2018 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:

Fiscal Year	Percentage of Corporate Objectives Achieved	Bonus Payout As a Percentage of Target Bonus Opportunity
2018	46%	46%
2017	17%	17%
2016	49%	49%

The Compensation Committee believes that this approach appropriately motivates the participants to deliver on the in-year operating performance to earn additional cash and equity compensation. The annual goals are set by the Compensation Committee and approved by the Board of Directors and are aligned with the Company's strategic plan. Similar to 2018, the 2019 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 then Chief Commercial Officer) to earn the target award of 45% of base salary. Our Chief Executive Officer may recommend adjustments to these awards although the Compensation Committee retains the sole authority to approve awards for the named executive officers under the plan. For 2019, any awards under the plan are expected to be paid only in cash.

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. Historically, the Compensation Committee has relied solely on 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. For 2018, the Compensation Committee approved the introduction of both time-based restricted stock units (RSUs) and performance-based restricted stock units (PSUs) to continue to align the executives' interest with that of our shareholders and create a more direct link between pay and performance. Our time-based stock option to purchase shares of our common stock grants 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 Survey 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.

In early 2018, the Compensation Committee and the Board of Directors considered equity award grants for our named executive officers. For our Chief Executive Officer, Chief Financial Officer and then Chief Commercial Officer, given that they were forgoing cash compensation, the only pay element for fiscal year 2018, similar to 2017, was equity compensation. In 2018, awards to the Chief Executive Officer, Chief Financial Officer and Chief Commercial Officer were issued in the form of stock options, time-based restricted stock units (or RSUs) and performance-based restricted stock units (or "PSUs"). For PSUs, 50% of the PSUs are tied to the one-year operating goals under the annual incentive plan and 50% the PSUs are tied to a 3-year performance period (2018, 2019, and 2020). The one-year operating goals have a performance period covering 2018 and consisted of the same performance goals as applied to the variable cash incentive program described above. The three-year performance goals for the second PSU award was granted to focus on the longer-term goals of the business and to drive longer term success. The Compensation Committee selected two operating metrics that were equally weighted in the plan to assess performance including annual operating cash flow and quarterly operating cash flow. 100% of the shares subject to this PSU award will vest if both goals are achieved over the three-year performance period, subject to continued service through the end of 2020 (or if later, upon certification of performance). In January 2019, the Compensation Committee reviewed the extent of achievement of performance under the PSU award tied to the one-year operating goals and determined that performance was achieved at 45.6% with respect to 2018 operating goals.

In determining the size of the equity 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 compensation package is competitive. The Compensation Committee also considered the criticality of these roles to the Company as well as the retention objectives for maintaining leadership stability for leading the business forward. Generally, compensation to the named executive officers is designed to deliver pay in the range around the 50th percentile. Equity awards to our other named executive officers, are considered by the Compensation Committee in the context of the total compensation mix that may be issued between salary, cash incentives and long-term compensation. Generally, for our named executive officers other than our Chief Executive Officer, Chief Financial Officer and then Chief Commercial Officer, the Compensation Committee considered market data and the other factors outlined above. The final equity awards were issued as a mix of options, time-based restricted stock unit awards and performance-based restricted stock unit awards, made in the range of the 50th to 75th percentiles 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 in Control Severance Benefits

We have entered into change in control severance agreements with each of our named executive officers as described further below under the section titled “Employment Agreements and Change in Control Arrangements.” It is expected that from time to time, we would consider the possibility of an acquisition by another company or other change in 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 in control to secure our executive officers’ continued services to us notwithstanding the occurrence, possibility or threat of a change in control, provide them with an incentive to maximize our value in connection with a change in control for the benefit of our stockholders, and provide them with enhanced financial security. These change in 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 2018, 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 employees only if the compensation was less than $1,000,000 per person during the year. As a result of the Tax Cuts and Jobs Act of 2017, the ability to rely on the "performance-based" compensation exception under Code Section 162(m) was eliminated in 2017. Thus, following the effectiveness of this change, we generally will not be able to take a deduction for any compensation paid to our named executive officers and certain other employees in excess of $1,000,000. We did not structure our compensation for our executive officers to qualify as performance-based compensation under Code Section 162(m). 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 had required a certain rigidity to qualify compensation as performance-based and we believed that it was in the Company's best interest to retain flexibility and to structure programs in a manner to incentivize our executives to drive long-term stockholder value. Nonetheless, our Compensation Committee maintained for 2018, 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 and Executive Vice President. Upon appointment as our Chief Commercial Officer and Executive Vice President, Ms. Ordoñez resigned from our Compensation Committee. Ms. Ordoñez resigned as our Chief Commercial Officer and Executive Vice President on October 30, 2018.

There were not any director interlocks among members of our Board of Directors in 2018.

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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 2018, 2017 and 2016:

Summary Compensation Table

Name and principal position	Year	Salary ($)	Bonus ($)	Option Awards ($) (1)	Stock Awards ($) (2)	Other ($)	Total ($)
Michael Hunkapiller, Ph.D.	2018	1	1,030,000	153,490	427,375	—	1,610,866
President, Chief Executive Officer	2017	1	—	1,343,160	—	—	1,343,161
and Chairman of the Board of Directors	2016	1	—	1,985,160	—	—	1,985,161
Susan K. Barnes	2018	1	617,500	134,304	373,953	—	1,125,758
Executive Vice President and Chief	2017	1	—	839,475	—	—	839,476
Financial Officer	2016	1	—	1,240,725	—	—	1,240,726
Kathy Ordoñez (3)	2018	1	170,000 (4)	134,304	373,953	—	678,258
Chief Commercial Officer and member	2017	1	—	693,338	—	—	693,339
of the Board of Directors	2016	—	—	—	—	—	—
Michael Phillips	2018	345,000	35,397	103,768	132,826	—	616,991
Senior Vice President of Research	2017	336,800	24,515	335,790	—	—	697,105
and Development	2016	327,000	66,218	561,240	—	—	954,458
Kevin Corcoran (5)	2018	336,800	—	118,592	139,176	—	594,568
Senior Vice President of Market	2017	336,800	24,515	335,790	—	—	697,105
Development	2016	327,000	66,218	561,240	—	—	954,458

(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.

(2) Amounts shown represent the aggregate grant date fair value of the stock awards granted, determined in accordance with ASC 718, Compensation – Stock Compensation. Stock awards granted in 2018 included a) RSUs and the grant date fair value of these RSUs is based on the closing price of our common stock on the date of grant, and b) PSUs and the grant date fair value of these PSUs is based on the maximum value of the restricted stock units on the grant date, assuming all performance conditions will be achieved.

(3)

Effective as of October 30, 2018, Ms. Ordoñez ceased being Chief Commercial Officer and Executive Vice President for the Company, but continued to serve as a member of Board of Directors. Accordingly, disclosure above for Ms. Ordoñez also included the options, RSUs and PSUs granted to her during her Chief Commercial Officer and Executive Vice President period from October 30, 2017 to October 30, 2018.

(4) On July 26, 2108, the Compensation Committee of the Board agreed to award a cash bonus of $170,000 to Ms. Ordoñez as compensation for her work as our Chief Commercial Officer and Executive Vice President.

(5) On February 10, 2018, our board of directors determined that Kevin Corcoran no longer met the definition of an executive officer under the Exchange Act. Mr. Corcoran continued in his role as Senior Vice President, Market Development, and reported to Ms. Ordoñez who was our then Executive Vice President and Chief Commercial Officer. Mr. Corcoran terminated his employment with the Company in November 2018.

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, 2018:

Grants of Plan-Based Awards

		Estimated Future Payouts Under Equity Incentive Plan Awards (1)				
Name	Grant date	Threshold (#)	Target (#)	Maximum (#)	All other option awards: number of securities underlying options (#) (2)	All other awards: number of shares of stock or units (#) (3)	Exercise or base price of option awards ($/Sh)
Michael Hunkapiller, Ph.D.	3/15/2018				100,000		2.63
	3/15/2018	–	100,000	112,500		50,000	2.63
Susan K. Barnes	3/15/2018				87,500		2.63
	3/15/2018	–	87,500	98,438		43,750	2.63
Kathy Ordoñez	3/15/2018				87,500		2.63
	3/15/2018	–	87,500	98,438		43,750	2.63
Michael Phillips (4)	2/15/2018				70,000		2.54
	2/15/2018	–	29,835	37,294		15,000	2.54
Kevin Corcoran (5)	2/15/2018				80,000		2.54
	2/15/2018	–	29,835	37,294		17,500	2.54

(1) The amounts shown in the “Threshold”, “Target” and “Maximum” columns reflect the potential number of shares that may be earned for our performance-bases restricted stock units, which will vest based on certain performance conditions to be achieved for the specified performance periods.
(2) Shares subject to options will vest in equal monthly installments over the next four years.
(3) The RSUs will vest in equal annual installments over the next four years.
(4) Mr. Phillips received a cash incentive bonus of $35,397 in February 2019 for his services delivered for the year ended December 31, 2018.
(5) On February 10, 2018, our board of directors determined that Mr. Corcoran no longer met the definition of an executive officer under the Exchange Act. Mr. Corcoran continued in his role as Senior Vice President, Market Development, and reported to Ms. Ordoñez who was our then Executive Vice President and Chief Commercial Officer. Mr. Corcoran terminated his employment with the Company in November 2018.

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, 2019 for the fiscal year ending December 31, 2019:

Name	Grant date	Time-based RSUs (1)	Exercise or base price of stock awards ($/Sh)	Grant date fair value of option awards ($) (2)
Michael Hunkapiller, Ph.D.	2/15/2019	38,750	7.13	276,288
Susan K. Barnes	2/15/2019	21,250	7.13	151,513
Michael Phillips	2/15/2019	8,000	7.13	57,040
Michael Phillips	3/15/2019	7,500	7.36	55,200

(1) The RSUs will vest on the earlier of the (i) one-year anniversary of the date of grant of the RSU awards and (ii) the completion of the Merger, subject to the recipient's continued service with us through the vesting date.

(2) The Amounts shown represent the aggregate grant date fair value of the stock awards computed in accordance with FASB ASC Topic 718.

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, 2018:

Outstanding Equity Awards at Fiscal Year-End

		Option Awards					Stock Awards	
		Number of securities underlying outstanding options (#)						
Name	Grant Date	exercisable	unexercisable		Option exercise price ($/sh)	Option expiration date	Number of unearned Shares/Units That Have Not Vested (#) (1)	Market or Payout Value of Unearned Shares/Units That have Not Vested (2)
Michael Hunkapiller, Ph.D.	10/26/2010	25,000	—		16.00	10/26/2020		
	6/23/2011	12,500	—		10.58	6/23/2021		
	1/9/2012	500,000	—		3.01	1/9/2022		
	3/15/2013	555,000	—		2.27	3/15/2023		
	3/17/2014	483,314	16,686	(3)	6.14	3/17/2024		
	3/16/2015	383,327	16,673	(4)	5.72	3/16/2025		
	3/15/2016	283,328	116,672	(4)	7.87	3/15/2026		
	2/15/2017	183,330	216,670	(4)	5.27	2/15/2027		
	3/15/2018	20,833	79,167	(4)	2.63	3/15/2028	162,500	1,202,500
Susan K. Barnes	2/22/2010	327,942	—		8.50	2/22/2020		
	12/15/2010	125,000	—		13.72	12/15/2020		
	3/17/2014	289,988	10,012	(3)	6.14	3/17/2024		
	3/16/2015	239,579	10,421	(4)	5.72	3/16/2025		
	3/15/2016	177,080	72,920	(4)	7.87	3/15/2026		
	2/15/2017	114,581	135,419	(4)	5.27	2/15/2027		
	3/15/2018	—	69,272	(4)	2.63	3/15/2028	142,188	1,052,191
Kathy Ordoñez	12/17/2014	35,000	—		6.98	12/17/2024		
	5/20/2015	25,000	—		5.79	5/20/2025		
	5/17/2016	25,000	—		8.98	5/17/2026		
	5/24/2017	25,000	—		3.81	5/24/2017		
	11/15/2017	76,560	273,440	(4)	2.90	11/15/2027		
	3/15/2018	18,228	69,272	(4)	2.63	3/15/2028	142,188	1,052,191
Michael Phillips	2/17/2010	87,501	—		8.50	2/17/2020		
	7/29/2010	5,000	—		12.74	7/29/2020		
	6/15/2011	6,000	—		11.64	6/15/2021		
	2/15/2012	150,000	—		4.79	2/15/2022		

2/15/2013	77,500	—		2.18	2/15/2023		
2/18/2014	100,000	—		7.05	2/18/2024		
2/17/2015	95,831	4,169	(4)	6.91	2/17/2025		
2/16/2016	70,832	29,168	(4)	8.90	2/16/2026		
2/15/2017	45,832	54,168	(4)	5.27	2/15/2027		
2/15/2018	14,583	55,417	(4)	2.54	2/15/2028	52,294	386,976

(1) Stock awards not vested include the RSUs, with time-based vesting granted on March 15, 2018, and RSUs with performance-based vesting granted on March 15, 2018. RSUs with time-based vesting vest over four years at a rate of 25% annually. RSUs with performance-based vesting is based on the maximum value of the restricted stock units vested assuming all performance conditions will be achieved.

(2) The value of stock awards not vested was computed by multiplying the closing price of $7.40 for the Company's common stock on December 31, 2018.

(3) 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.

(4) 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.

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, 2018. 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.

Name	Number of shares Acquired on Exercises (#)	Value Realized on Exercise ($)
Susan K. Barnes	316,990	992,767
Kathy Ordoñez	25,000	116,000

Employment Agreements and Change in Control Arrangements

We entered into change in control agreements with Dr. Hunkapiller, Ms. Barnes and Mr. Phillips. We also previously entered into a change in control agreement with Ms. Ordoñez. In connection with Ms. Ordoñez's resignation from her role as Chief Commercial Officer and Executive Vice President on October 30, 2018, she no longer is eligible to receive any severance benefits under that agreement.

The change in control agreements with Dr. Hunkapiller, Ms. Barnes and Mr. Phillips provide that if, on or within 12 months following a change in control (as defined in the change in control agreements), we terminate his or her employment with us for a reason other than "cause," his or her death or "disability," or he or she resigns for "good reason," in each case, as set forth in the applicable change in control agreement, he or she would be entitled to:

- continuing payments of base salary in effect immediately before the termination of his or her employment or, if greater, the base salary as in effect immediately before the merger, for a period of (1) in the case of Dr. Hunkapiller, 12 months; and (2) in the case of Ms. Barnes, and Mr. Phillips, six months, in each case from the date of termination of employment;
- 100 percent of the unvested portion of his or her then-outstanding equity awards will vest immediately and, to the extent applicable, become exercisable; and
- company-paid or company-reimbursed premiums for continuation coverage as applicable, pursuant to COBRA for himself or herself and his or her eligible dependents (as applicable), subject to his or her timely election to continue such coverage, for up to 12 months (for Dr. Hunkapiller) or six months (for Ms. Barnes and Mr. Phillips) following termination of employment, except that, in the case of Dr. Hunkapiller, if we determine in our sole discretion that we cannot provide the COBRA benefits without potentially violating applicable law, then we will provide instead a taxable monthly payment in an amount equal to the monthly COBRA premium, regardless of whether he elects COBRA continuation coverage.
- In order to receive the severance benefits under the change in control agreement, the executive officer must execute and not revoke a separation and release of claims agreement in our favor. The executive officer also is required to comply with the terms of his or her confidential information and invention assignment agreement previously entered into with us, including obligations relating to non-solicitation of our employees for a period of 12 months following the termination of his or her employment.

Each severance agreement provides that, if any payment or benefits to the applicable named executive officer (including the payments and benefits under his or her severance agreement) would constitute a "parachute payment" within the meaning of Section 280G of the Internal Revenue Code and therefore would be subject to an excise tax under Section 4999 of the Internal Revenue Code, then such payments and benefits will be either (1) reduced to the largest portion of the payments and benefits that would result in no portion of the payments and benefits being subject to the excise tax; or (2) not reduced, whichever, after taking into account all applicable federal, state, and local employment taxes, income taxes and the excise tax, results in his or her receipt, on an after-tax basis, of the greater payments and benefits.

Under the change in control agreements for each of Dr. Hunkapiller, Ms. Barnes and Mr. Phillips, the following definitions are used:

- "Cause" generally means (1) conviction of any felony; (2) conviction of any crime involving moral turpitude or dishonesty that causes, or is likely to cause, material harm to us; (3) participation in a fraud or willful act of dishonesty against us that causes, or is likely to cause, material harm to us; (4) intentional and material damage to our property; or (5) material breach of our proprietary information and inventions agreement;
- "Disability" means an executive is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months; and
- "Good reason" generally means an executive's termination of employment within thirty days following the expiration of any cure period (discussed below) following the occurrence of one or more of the following, without his or her express written consent: (1) (i) for each of Ms. Barnes and Mr. Phillips, a material reduction of his or her duties, authority, or responsibilities, relative to the executive's duties, authority, or responsibilities as in effect immediately prior to such reduction; provided, however, that a reduction in duties, authority, responsibilities solely by virtue of our being acquired and made part of a larger entity (for example, where he or she retains essentially the same responsibility and duties of the subsidiary, business unit or division substantially containing our business following a change in control) shall not constitute good reason; (ii) for Dr. Hunkapiller, a material reduction of his duties, authority, or responsibilities, relative to his duties, authority, or responsibilities as in effect immediately prior to such reduction, or any change which results in his ceasing to serve as Pacific Biosciences' chief executive officer, except that ceasing to serve as president of Pacific Biosciences or executive chairman of the Pacific Biosciences Board will not constitute good reason; (2) for each of Dr. Hunkapiller, Ms. Barnes and Mr. Phillips, a material reduction by Pacific Biosciences in his or her annualized base pay as in effect immediately prior to such reduction (in other words, a reduction of more than 10 percent of his or her annualized base compensation in any one year, other than a reduction applicable to executives generally that does not adversely affect him or her to a greater extent than other similarly-situated executives); (3) for each of Dr. Hunkapiller, Ms. Barnes and Mr. Phillips, the relocation of his or her principal place of performing his or her duties as an employee of Pacific Biosciences by more than 50 miles; or (4) for each of Dr. Hunkapiller, Ms. Barnes and Mr. Phillips, Pacific Biosciences' failure to obtain the assumption of the change in control agreement by a successor; except that, in order for an event to qualify as good reason, he or she must not terminate employment without first providing Pacific Biosciences with written notice of the acts or omissions constituting the grounds for good reason within 90 days of the initial existence of the grounds for good reason and a reasonable cure period of not less than 30 days following the date of such notice.

The closing of the transactions contemplated under the merger agreement with Illumina will constitute a "change in control" under the change in control agreements.

Treatment of Equity Awards in Merger Agreement

At or immediately prior to the effective time of the completion of the Merger, each in-the-money company option, including any that are held by our named executive officers, will be canceled and converted into the right to receive a cash amount equal to the product of (1) the excess of the per share Merger Consideration over the applicable per share exercise price of such canceled company option, multiplied by (2) the aggregate number of shares of common stock subject to the in-the-money company option immediately before the effective time of the Merger. Any company option that is not an in-the-money company option will be canceled as of the effective time of the Merger without any amount payable in exchange. Holders of unvested company options (including company options that are not in-the-money company options) will be given an opportunity to exercise any unvested company options prior to, and contingent upon the consummation of the transactions contemplated by the Merger Agreement.

At or immediately prior to the effective time of the Merger, each company RSU award, including any that are held by our named executive officers, will be canceled and converted into the right to receive a cash amount equal to the product of (1) the per share Merger Consideration, multiplied by (2) the total number of shares of common stock subject to such company RSU award immediately prior to the effective time of the merger. At or immediately prior to the effective time of the Merger, each company performance-based RSU award, including any that are held by our named executive officers, will be canceled and converted into the right to receive a cash amount equal to the product of (1) the per share Merger Consideration, multiplied by (2) the number of shares of common stock that would be payable if such company performance-based RSU award had vested at target performance.

Each of Dr. Hunkapiller, Mses. Barnes and Ordoñez, and Mr. Phillips holds awards of company performance-based RSUs that provide that, if a “change in control” (as defined in the applicable company equity incentive plan under which the award was granted) occurs during the applicable performance period (or during the period after the end of the applicable performance period but before the applicable determination date), then effective as of immediately before the completion of the change in control, all of the applicable performance goals automatically will be deemed to have been achieved at the target level, such that 100 percent of the target number of shares subject to the award will be considered eligible to vest based on the individual’s continued status as a service provider through the applicable vesting date, and the applicable performance goals no longer will apply to the award.

The following table describes the potential payments and benefits to each of our named executive officers that were so designated as of December 31, 2018 in the event of a change in control, following a termination of employment without cause, due to death or a disability or for good reason, based on the severance and change in control provisions described above and based on equity grants outstanding as of December 31, 2018. Salary amounts shown for Michael Hunkapiller, Ph.D. and Susan K. Barnes reflect revisions to their respective severance agreements as of January 1, 2019. Salary amounts as of December 31, 2018, would have resulted in no salary severance payments to Dr. Hunkapiller or Ms. Barnes. 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 in Control

Compensation and benefits	Involuntary termination or change in control ($)
Michael Hunkapiller, Ph.D.	
Salary	582,900
Performance-based cash bonus	582,900
Equity Acceleration (1)	1,998,169
Health care benefits	—
Total	3,163,969
Susan K. Barnes	
Salary	200,750
Performance-based cash bonus	260,975
Equity Acceleration (1)	1,620,242
Health care benefits	50
Total	2,082,017
Kathy Ordoñez	
Salary	—
Equity Acceleration (1)	2,532,157
Health care benefits	—
Total	2,532,157
Michael Phillips	
Salary	172,500
Equity Acceleration (1)	718,526
Health care benefits	9,508
Total	900,534

(1) Including shares subject to options and stock awards. (i) For shares subject to options, calculated as the intrinsic value per option, multiplied by the number of options that become immediately vested upon involuntary termination or change in control. The intrinsic value per option is calculated as the excess of the closing market price on December 31, 2018, $7.40 per share, over the exercise price of the option. (ii) Stock awards include RSUs and PSUs. The value of stock awards was computed by multiplying the closing price of $7.40 for the Company's common stock on December 31, 2018.

CEO Pay Ratio

Pursuant to Item 402(u) of Regulation S-K and Section 953(b) of the Dodd-Frank Act, presented below is the ratio of annual total compensation of our CEO to the annual total compensation of our median employee (excluding our CEO). The ratio presented below is a reasonable estimate calculated in a manner consistent with Item 402(u).

The median employee used as the basis for comparison in 2018 is the same median employee selected in 2017. December 31, 2017 is the date as of which we identified our employee population for the purposes of identifying 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. The median employee remained employed in the same job classification and received similar earnings in 2018 as in 2017.

In 2018, the annual total compensation of our median employee was approximately $166,966, and our CEO's annual total compensation was $1,610,866 using the amount reported in the "Total" column of our Summary Compensation Table for 2018. The resulting ratio of the total annual compensation of our CEO to our median employee was approximately 10:1.

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, 2018 (in thousands, except price data):

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights ($)(1)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders (2)	26,157,584	5.66	11,298,000
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 thereunder 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, 2019, the number of shares available for issuance under our 2010 Plan increased by 7,512,221 shares pursuant to these provisions. The increase is 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 charter adopted by the Board of Directors. A copy of the charter can be found on our website at 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 consolidated 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 consolidated financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2018 for filing with the Securities and Exchange Commission.

Members of the Audit Committee

Randy Livingston (Chair)

Marshall Mohr

John F. 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 2018.

Stockholder Proposals

Stockholder Proposals for 2020 Annual Meeting

The Corporate Governance and Nominating Committee has a policy regarding the consideration of director candidates (the "Stockholder Nomination Policy"). Under the Stockholder Nomination Policy, the Corporate Governance and Nominating Committee will consider recommendations for candidates to the Board of Directors from stockholders holding at least five percent (5%) of the Company's common stock continuously for at least twelve (12) months prior to the date of the submission of the recommendation.

The submission deadline for stockholder proposals to be included in our proxy materials for the 2020 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act is January 1, 2020 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 2020 annual meeting of stockholders. Submission of a proposal before the deadline does not guarantee its inclusion in our proxy materials.

Advance Notice Procedure for 2020 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 2020 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 January 1, 2020 and no later than January 31, 2020. However, if the 2020 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 2019 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 2020 annual meeting of stockholders and not later than the close of business on the later of (i) the 90th day prior to the 2020 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 or (650) 521-8450 or Investor Relations, Pacific Biosciences of California, Inc., 1305 O’Brien Drive, Menlo Park, CA 94025.

Fiscal Year 2018 Annual Report and SEC Filings

Our financial statements for the fiscal year ended December 31, 2018 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 and are available from the SEC at its website at 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 29, 2019

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