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 $extsf{ extsf{ iny line integral}}$

Filed by a Party other than the Registrant \Box

Check the appropriate box:

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

Pacific Biosciences of California, Inc.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

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



April 27, 2012

Dear Pacific Biosciences of California, Inc. Stockholder:

You are cordially invited to attend our 2012 Annual Meeting of Stockholders, which will be held on June 13, 2012 at 8:00 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 each of the two proposals set forth in the Notice of Annual Meeting of Stockholders and described in the Proxy Statement, which describe the formal business to be conducted at the Meeting.

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 nominees for our Class II directors; and
- FOR the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012.

Thank you for your continued support of Pacific Biosciences.

Sincerely,

Michael h. Hunkapiller

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

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

NOTICE OF 2012 ANNUAL MEETING OF STOCKHOLDERS

June 13, 2012

8:00 a.m. Pacific Time

Pacific Biosciences of California, Inc.'s 2012 Annual Meeting of Stockholders will be held on Wednesday, June 13, 2012 at 8:00 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 the three directors nominated by our Board of Directors and named in the proxy statement as Class II directors to serve for a three year term;
- To ratify the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for 2012;
- 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 17, 2012 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 1380 Willow Road, 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. A stockholder may examine the list for any legally valid purpose related to the Annual Meeting.

Your vote is important. Whether or not you plan to attend the Annual Meeting, please vote as soon as possible. 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 over the Internet. Your vote must be received by 11:59 p.m. Eastern Time, on Tuesday, June 12, 2012. 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.

By Order of the Board of Directors,

Stephen M. Moore Vice President, Legal Affairs and Corporate Secretary

Menlo Park, California April 27, 2012

TABLE OF CONTENTS

GENERAL INFORMATION	Page 1
OLEVERAL INFORMATION OUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING AND THESE PROXY MATERIALS	1
	1
CORPORATE GOVERNANCE	5
<u>Overview</u>	5
Board Leadership Structure	5
<u>The Board's Role in Risk Oversight</u>	5
Director Independence	6
Director Nominations	6
Code of Business Conduct and Ethics	7
Communication with the Board of Directors	7
BOARD OF DIRECTORS AND COMMITTEES OF THE BOARD	8
Board and Committee Meetings	8
Board Committees	8
Director Compensation	10
PROPOSAL 1—ELECTION OF DIRECTORS	12
PROPOSAL 2—RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	15
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	17
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	19
EXECUTIVE OFFICERS	22
EXECUTIVE COMPENSATION	23
Compensation Discussion and Analysis	23
Executive Compensation Tables	29
OTHER INFORMATION	35

PACIFIC BIOSCIENCES OF CALIFORNIA, INC. 1380 Willow Road Menlo Park, California 94025

PROXY STATEMENT FOR THE ANNUAL MEETING OF STOCKHOLDERS June 13, 2012

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 2012 Annual Meeting of Stockholders. The Annual Meeting will be at held at Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, California 94304 on June 13, 2012 at 8:00 a.m. Pacific Time. This proxy statement contains important information regarding our Annual Meeting, the proposals on which you are being asked to vote, information you may find useful in determining how to vote, and information about voting procedures. As used herein, "we," "us," "our," "Pacific Biosciences" or the "Company" refers to Pacific Biosciences of California, Inc., a Delaware corporation.

This proxy statement, accompanying proxy card or voting instruction form, and our 2011 Annual Report to Stockholders will be made available to our stockholders on or about April 27, 2012.

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: To elect the three directors nominated by our Board of Directors and named in this proxy statement as Class II directors to serve for a three year term;
- 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, 2012; 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?

The Board of Directors recommends that you vote:

- FOR the election of the three directors nominated by our Board of Directors and named in this proxy statement as Class II directors to serve for a three year term; and
- FOR ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012.

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.

-1-

Who is entitled to vote at the Annual Meeting?

Holders of our common stock at the close of business on April 17, 2012, 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 1380 Willow Road, 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 Shareholder Services, 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 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 or nominee how to vote your shares by following the voting instructions your broker or other nominee provides. If you do not provide your broker or nominee with instructions on how to vote your shares, your broker 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. 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.

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 12, 2012 to be voted at the Annual Meeting.
- By telephone or over the Internet. You may vote your shares by telephone or via the Internet 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 through the Internet must be received by 11:59 p.m. Eastern Time on June 12, 2012.
- 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 or other nominee holding your shares. You should follow the voting instructions provided by your broker or nominee in order to instruct your broker or other nominee on how

-2-

to vote your shares. The availability of telephone and Internet voting will depend on the voting process of the broker or nominee. Shares held beneficially may be voted in person at the Annual Meeting only if you obtain a legal proxy from the broker or nominee giving you the right to vote the shares.

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 12, 2012;
- Delivering a written revocation to our Corporate Secretary at Pacific Biosciences of California, Inc., 1380 Willow Road, Menlo Park, California 94025, by 11:59 p.m. Eastern Time on June 12, 2012; or
- Attending the Annual Meeting and voting in person.

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

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

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

- FOR the election of the three Class II directors nominated by our Board of Directors and named in this proxy statement (Proposal 1);
- FOR the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2012 (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 or other nominee that holds your shares with voting instructions, the broker or other nominee will determine if it has the discretionary authority to vote on the particular matter. Under the NYSE's rules, brokers 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 or other nominee, your broker 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, we had 55,582,052 shares of common stock outstanding and entitled to vote at the Annual Meeting, meaning that 27,791,027 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 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 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 a plurality of votes cast (Proposal 1) or the approval of a majority of the votes present in person or represented by proxy and entitled to vote (Proposal 2).

What is the vote required for each proposal?

Proposal	Vote Required	Broker Discretionary Voting Allowed?
Proposal 1 – Election of three Class II directors	Plurality of votes cast	No
Proposal 2 – Ratification of the appointment of Ernst &	Majority of the shares entitled to vote and present	Yes
Young LLP as our independent registered public	in person or represented by proxy	
accounting firm		

With respect to Proposal 1, you may vote FOR all nominees, WITHHOLD your vote as to all nominees, or FOR all nominees except those specific nominees from whom you WITHHOLD your vote. The three nominees receiving the most FOR votes will be elected. You may not cumulate votes in the election of directors. If you ABSTAIN from voting on Proposal 1, the abstention 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 an AGAINST vote.

Who will count the votes?

Computershare Shareowner Services, our transfer agent, has been engaged to receive and tabulate stockholder votes. Computershare will separately tabulate FOR, AGAINST and WITHHOLD 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?

Pacific Biosciences 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 Pacific Biosciences 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 within four business days after the Annual meeting. If the official results are not available at that time, we will provide preliminary voting results in the Form 8-K and will provide the final results in an amendment to the Form 8-K as soon as they become available.

CORPORATE GOVERNANCE

Overview

The Board 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 shareholders are being served. The key practices and procedures of the Board are outlined in the Corporate Governance Guidelines available on the Company's website at *www.pacificbiosciences.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 flexibility to determine whether the two roles should be combined or separated based upon the needs of the Company and the Board's assessment of our leadership from time to time. The Board believes that, at this time, it is in the best interests of Pacific Biosciences and its stockholders for Dr. Hunkapiller to serve as the Chairman and Chief Executive Officer, and Mr. Ericson, an independent director, to serve as Lead Independent Director. Dr. Hunkapiller does not currently serve on any Board committees in his capacity as a director.

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

The Board believes the combined role of Chairman and Chief Executive Officer, together with the role of the Lead Independent Director, appropriately balances the Company's leadership. The role of our Lead Independent Director helps ensure a strong, independent, and active Board. The Lead Independent Director presides over executive sessions without the presence of the non-independent directors or members of the Company's 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, including each of its committees, also has complete and open access to all members of management and the authority to retain 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 day-to-day responsibility for identifying risks facing the Company, 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, its 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 accountants, our major risk exposures and the steps management has taken to monitor and mitigate those exposures. Our Compensation Committee oversees 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 composition and organization. Management and other employees report to the Board and/or relevant committee from time to time on risk-related issues.

-5-

Director Independence

Under the rules of The NASDAQ Stock Market, independent directors must comprise a majority of a listed company's board of directors within a specified period of the closing of its initial offering. In addition, the rules of The NASDAQ Stock Market require that, subject to specified exceptions, each member of a listed company's audit, compensation and corporate governance and nominating committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended. Under the rules of The NASDAQ Stock Market, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, the director does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the Audit Committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

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. Brook Byers, William Ericson, Randy Livingston, Marshall Mohr, David Singer and Ms. Susan Siegel, representing six of our seven 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. Byers, Livingston, Mohr and Singer, who comprise our Audit Committee, Mr. Ericson and Ms. Siegel, who comprise our Compensation Committee, and Messrs. Byers and Singer and Ms. Siegel, who comprise our Nominating and Corporate Governance Committee, satisfy the independence standards for those committees established by applicable SEC rules 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 our company and all other facts and circumstances our Board of Directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

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 regarding director candidate qualifications. The Corporate Governance and Nominating Committee will evaluate all candidates in the same manner and using the same criteria, regardless of the source of the recommendation.

The Corporate Governance and Nominating Committee may retain recruiting professionals to assist in identifying and evaluating candidates for director nominees. The Corporate Governance and Nominating Committee considers factors such as character, integrity, judgment, diversity of experience (including age, gender, international background, race and professional experience), independence, area of expertise, corporate experience, length of service, potential conflicts of interest, other commitments and the like. The Corporate Governance and Nominating Committee requires the following minimum qualifications to be satisfied by any nominee to the Board: 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; 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 and the commitment of time and energy necessary to diligently carry out those responsibilities.

-6-

Based on the Corporate Governance and Nominating Committee's recommendation, the Board 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., 1380 Willow Road, Menlo Park, CA 94025.

Code of Business Conduct and Ethics

We have adopted a code of business conduct that is applicable to all of our employees, officers and directors. In addition, we have adopted a code of ethics that is applicable to our chief executive and senior financial officers. Our code of business conduct is available on the Investor Relations page of our website at *www.pacificbiosciences.com*.

Communication with the Board of Directors

Any stockholder wishing to communicate with any of our directors may write to the director, c/o Corporate Secretary, Pacific Biosciences of California, Inc., 1380 Willow Road, Menlo Park, CA 94025. The Corporate Secretary will forward these communications directly to the director(s). The independent directors of the Board review and approve the stockholder communication process periodically in an effort to enable an effective method by which stockholders can communicate with the Board.

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. The Board of Directors met seven times during fiscal year 2011. Each director attended at least 75% or more of (a) the total number of meetings of the Board of Directors held during fiscal year 2011 and (b) the total number of meetings held by all committees of the Board of Directors on which such director served during fiscal year 2011. While we do not have a formal policy regarding director attendance at annual meetings of stockholders, we strongly encourage our directors to attend. All of our directors except for Mr. Ericson attended the 2011 annual meeting of stockholders.

Board Committees

Our Board of Directors has an Audit Committee, a Compensation Committee and a corporate governance and nominating committee, each of which has the composition and the responsibilities described below. The Audit Committee, Compensation Committee and Corporate Governance and Nominating 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.pacificbiosciences.com* under "Corporate Governance."

The following table sets forth the three standing committees of the Board of Directors, the members of each committee and the number of meetings held by each committee in fiscal year 2011:

Name of Director	Audit	Compensation	Corporate Governance Nominating
Brook Byers	ü		ü
William Ericson		ü (Chair)	
Michael Hunkapiller, Ph.D(1)		ü	
Randy Livingston	ü (Chair)		
Marshall Mohr(2)	ü		
Susan Siegel		ü	ü
David Singer	ü		ü (Chair)
Number of Meetings Held During 2011:	11	7	4

(1) Dr. Hunkapiller served as a member of our Compensation Committee until his appointment as our Chairman on October 25, 2011.

(2) Mr. Mohr joined the Audit Committee upon his appointment to the Board of Directors on January 18, 2012. Upon his election to the Board of Directors at the annual meeting on June 13, 2012, Mr. Mohr will join the Compensation Committee.

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

- selecting and hiring our independent auditors;
- appointing, compensating and overseeing the work of our independent auditors;
- approving engagements of the independent auditors to render any audit or permissible non-audit services;
- reviewing the qualifications and independence of the independent auditors;
- monitoring the rotation of partners of the independent auditors on our engagement team as required by law;
- reviewing our financial statements and reviewing our critical accounting policies and estimates;

-8-

- 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, our quarterly financial statements and our publicly filed reports.

The members of our Audit Committee are Messrs. Byers, Livingston, Mohr and Singer. Mr. Livingston serves as our Audit Committee chairman. Our Board of Directors has determined that each member of the Audit Committee meets the financial literacy requirements under the rules of The NASDAQ Stock Market and the SEC and each of Messrs. Livingston, Mohr and Singer qualify as Audit Committee financial experts as defined under SEC rules and regulations. Our Board of Directors has concluded that the composition of our Audit Committee meets the requirements for independence under the current requirements of The NASDAQ Stock Market and SEC rules and regulations. We believe that the functioning of our Audit Committee complies with the applicable requirements of The NASDAQ Stock Market and SEC rules and regulations. The Audit Committee meet 11 times during fiscal year 2011.

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 Mr. Ericson and Ms. Siegel. Mr. Ericson serves as the chairman of our Compensation Committee. Our Board of Directors has determined that each member of our Compensation Committee is independent within the meaning of the independent director guidelines of The NASDAQ Stock Market. We believe that the composition of our Compensation Committee meets the requirements for independence under, and the functioning of our Compensation Committee complies with, any applicable requirements of The NASDAQ Stock Market and SEC rules and regulations. The Compensation Committee met seven times during fiscal year 2011.

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. Byers and Singer and Ms. Siegel. Mr. Singer serves as the chairman of our Corporate Governance and Nominating Committee. 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. Our Corporate Governance and Nominating Committee met four times in fiscal year 2011.

Our Board of Directors may from time to time establish other committees.

Director 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, 2011. The table excludes Mr. Hugh Martin, who was a named executive officer and did not receive director compensation in the fiscal year ended December 31, 2011, and Mr. Marshall Mohr, who was appointed to the Board in January, 2012. Dr. Hunkapiller received compensation for serving as a director until his appointment as our Chief Executive Officer and President on January 5, 2012.

	Fees earned or paid in	Option awards	
Name	cash (\$)	(\$) ⁽¹⁾⁽³⁾	Total (\$)
Brook Byers	\$ 50,000	\$71,160	\$121,160
William Ericson	\$ 64,000	\$71,160	\$135,160
Michael Hunkapiller, Ph.D	\$ 42,000	\$71,160	\$113,160
Susan Siegel	\$ 47,000	\$71,160	\$118,160
David Singer	\$ 55,000	\$71,160	\$126,160
Randy Livingston	\$ 55,000	\$99,630	\$154,630

(1) Amounts shown represent the aggregate grant date fair value of the option awards computed in accordance with FASB Topic ASC 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) The aggregate number of shares subject to stock options outstanding at December 31, 2011 for each director is as follows:

Name	Aggregate Number (#) of Stock Options Outstanding as of December 31, 2011
Brook Byers	37,500
William Ericson	37,500
Michael Hunkapiller, Ph.D	37,500
Susan Siegel	39,400
David Singer	37,500
Randy Livingston	82,500

Non-employee directors receive an annual retainer of \$35,000. The chair of our Audit Committee is paid an additional annual retainer of \$20,000, and members of our Audit Committee other than the chair are paid an additional annual retainer of \$10,000. The chair of our Compensation Committee is paid an additional annual retainer of \$14,000, and members of our Compensation Committee other than the chair are paid an additional annual retainer of \$7,000. The chair of our Corporate Governance and Nominating Committee is paid an additional annual retainer of \$10,000, and members of our Corporate Governance and Nominating Committee other than the chair are paid an additional annual retainer of \$5,000. Our lead independent director is paid an additional annual retainer of \$15,000.

-10-

During the first quarter of 2012, our Compensation Committee in consultation with the compensation consultant conducted a review of our outside director compensation policy relative to prevailing market data. Based on its review, the Compensation Committee concluded that the cash compensation afforded to our non-employee directors approximates the 50th percentile of the market data and therefore recommended no changes to existing cash compensation levels. The Compensation Committee also determined that the outside director equity compensation fell below the 50th percentile and recommended the amendment to the outside director equity compensation closer to the 50th percentile.

Our outside director equity compensation policy is intended to formalize the granting of equity compensation to our non-employee directors under the 2010 Outside Director Equity Incentive Plan (the "Director Plan"). The policy provides for automatic and nondiscretionary grants of nonstatutory stock options subject to the terms and conditions of the policy and the 2010 Director Plan.

Under the policy, during 2011, and until the 2012 Annual Meeting, each non-employee director was automatically granted a stock option to purchase 25,000 shares of our common stock on the date such person was appointed to the Board. In addition, each non-employee director was automatically granted an annual stock option to purchase 12,500 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. Our Audit Committee chairperson was automatically granted an additional annual stock option to purchase 5,000 shares of our common stock on the date of 2011 Annual Meeting.

Our Board of Directors has amended our outside director equity compensation policy effective March 14, 2012. Beginning with our 2012 Annual Meeting, each non-employee director who first becomes a non-employee director will be automatically granted an initial stock option to purchase 35,000 shares of our common stock under the Director Plan on the date such person first becomes a non-employee director. A director who is an employee and who ceases to be an employee, but who remains a director will not receive such an initial award. The 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.

Under the amended outside director equity compensation policy, each non-employee director will be automatically granted an annual stock option to purchase 25,000 shares of our common stock under the Director Plan on the date of each 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. No awards are granted for committee participation. Such annual awards will vest monthly over one year, provided such non-employee director continues to serve as a director through each vesting date.

The exercise price of all stock options granted pursuant to the policy will be equal to the fair market value of our common stock on the date of grant. The term of all stock options granted pursuant to the policy will be 10 years.

The administrator of the Director Plan in its discretion may change or otherwise revise the terms of awards granted under the outside director equity compensation policy.

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.

-11-

PROPOSAL 1

ELECTION OF DIRECTORS

General

Our Certificate of Incorporation provides for a classified Board of Directors. Each person elected as a Class II director at the Annual meeting will serve for a three-year term expiring on the date of the 2015 annual meeting of stockholders. Our Board of Directors has nominated Michael Hunkapiller, Randy Livingston and Marshall Mohr for election as Class II directors at the Annual Meeting. The three nominees receiving the highest number of votes will be elected at the Annual Meeting. 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 is not aware of any nominee who is unable or will decline to serve as a director. Each Class II director will serve until the Company's 2015 Annual Meeting of Stockholders and until he or she is succeeded by another qualified director who has been elected, or, if earlier, until his or her death, resignation or removal. Each Class II director nominee is currently a director of the Company and is standing for re-election.

Information regarding our Class II nominees, as well as directors not up for election at the Annual meeting is set forth below. Hugh Martin, formerly a Class I director, resigned from our Board of Directors effective April 2, 2012.

Name of Nominee	Age	Principal Occupation	Director Since
Class II Director Nominees			
Michael Hunkapiller, Ph.D	63	Chairman, President and Chief Executive Officer of Pacific Biosciences of California, Inc.	2005
Randy Livingston	58	Vice President for Business Affairs and Chief Financial Officer of Stanford University	2009
Marshall Mohr	56	Senior Vice President and Chief Financial Officer of Intuitive Surgical, Inc.	2012
Class III Directors (term expires 2013)			
William Ericson	53	Managing Partner of Mohr Davidow Ventures	2004
David Singer	49	Registered Investment Advisor, Hedge Fund Manager and Partner of Maverick Capital Ltd.	2006
Class I Directors (term expires 2014)			
Brook Byers	66	Managing Partner of Kleiner Perkins Caufield & Byers	2004
Susan Siegel	51	General Partner of Mohr Davidow Ventures	2006

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

Michael Hunkapiller, Ph.D has served as our Chairman since October 2011 and as our President and Chief Executive Officer since January, 2012. Dr. Hunkapiller has been a member of 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 (now Life Technologies). 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 experience at Applied Biosystems, where he helped

-12-

grow the company from a startup to a public company with almost \$2 billion in annual revenue, leading groundbreaking innovations, including the development of the automated DNA sequencing systems used to sequence the human genome. He is also a member of the National Academy of Engineering.

William Ericson has been a member of our Board of Directors since 2004 and our Lead Independent Director since 2010. Mr. Ericson is a Managing Partner at Mohr Davidow Ventures, or MDV, a venture capital firm. He joined MDV in 2000 after more than a decade of working closely with entrepreneurs to start and build innovative businesses in the role of lawyer, board member, entrepreneur and investor, and has led MDV's focus on personalized medicine investing since 2003. Mr. Ericson holds a B.S.F.S. from Georgetown University School of Foreign Service and a J.D. from Northwestern University School of Law. We believe that Mr. Ericson possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience with multiple companies in the life sciences industry and his focus on companies with molecular diagnostic platforms that will enable the vision of personalized medicine.

Brook Byers has been a member of our Board of Directors since 2004. Mr. Byers has been a venture capital investor since 1972 and is a Managing Partner of Kleiner Perkins Caufield & Byers. He has been closely involved with more than 50 new technology-based ventures, many of which have already become public companies. He formed the first life sciences practice group in the venture capital profession in 1984 and led Kleiner Perkins Caufield & Byers to become a premier venture capital firm in the medical, healthcare and biotechnology sectors. Mr. Byers served on the board of directors of Genomic Health, Inc. from 2001 to 2011. Mr. Byers holds a B.S. degree in Electrical Engineering from the Georgia Institute of Technology and an M.B.A from Stanford University. We believe that Mr. Byers possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience with growing multiple companies in the life sciences industry and his leadership in personalized medicine initiatives.

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. Before joining Stanford, Mr. Livingston served as the executive vice president, chief financial officer and a director of OpenTV Corp. from 1999 to 2001. Before joining OpenTV in 1999, Mr. Livingston served as a consultant and part-time chief financial officer for Silicon Valley technology companies with such diverse specialties as genomics, Internet commerce, medical devices, chemical synthesis and enterprise software. Previously, he was director of corporate development at Apple Computer and chief financial officer for Taligent, a 400-employee Apple-IBM-Hewlett-Packard joint venture system software company. Mr. Livingston currently serves as a director of Genomic Health, Inc. and 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.

Marshall Mohr has been a member of our Board of Directors since January 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.

-13-

Susan Siegel has been a member of our Board of Directors since 2006. Since March 2007, she has been a General Partner at Mohr Davidow Ventures, where she leads investments in life sciences, healthcare and personalized medicine. From April 1998 to April 2006, Ms. Siegel was at Affymetrix, Inc. where she served as President and as a member of the board of directors. Ms. Siegel led Affymetrix through its commercial growth to approximately \$400 million in revenues, rewarding shareholders with a multi-billion dollar market cap. Ms. Siegel holds a B.S. in Biology from the University of Puerto Rico and a M.S. in Biochemistry and Molecular Biology from Boston University Medical School. We believe that Ms. Siegel possesses specific attributes that qualify her to serve as a member of our Board of Directors, including her experience of growing biotechnology companies for over 25 years by bringing key enabling technologies to the forefront of biomedical research and healthcare, and for her pioneering leadership in personalized medicine.

David Singer has been a member of our Board of Directors since 2006. Since 2004, Mr. Singer has been a registered investment advisor managing hedge funds and private investment funds at Maverick Capital Ltd., a private investment firm, where he is responsible for the firm's private investments globally. He became a partner of Maverick Capital Ltd. in 2008. Previously Mr. Singer was an entrepreneur, acting as the founding President and Chief Executive Officer of three healthcare companies, including Affymetrix, Inc. He currently serves on a number of private company boards and previously served on the board of directors of Affymetrix from 1993 to June 2008, Concept Therapeutics from 1998 to June 2008, and Oscient Pharmaceuticals from February 2004 to June 2006, and has served as the senior financial officer of two publicly traded companies. Mr. Singer holds a B.A. from Yale University and an M.B.A. from Stanford University. We believe that Mr. Singer 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 experience with both public and private companies.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" ALL THREE CLASS II DIRECTOR NOMINEES TO SERVE AS CLASS II DIRECTORS.

-14-

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, 2012. 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 by-laws or otherwise. The Board, 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 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 the Company and its 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 the Company's 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.

Changes in Accountants

On June 16, 2011, our Audit Committee approved the replacement of PricewaterhouseCoopers LLP with Ernst & Young LLP as our independent registered public accounting firm. The reports of PricewaterhouseCoopers on our financial statements for the last two fiscal years contained no adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles. During our two most recent fiscal years and the subsequent interim period preceding the change in accountants, there were no disagreements with PricewaterhouseCoopers on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements if not resolved to the satisfaction of PricewaterhouseCoopers, would have caused it to make reference to the subject matter of the disagreements in connection with its report on the financial statements for such years. Effective June 16, 2011, Ernst & Young was engaged as our independent registered public accounting firm to audit our financial statements.

-15-

The following table sets forth the approximate aggregate fees billed to the Company by Ernst & Young in fiscal year 2011 of \$0.4 million and PricewaterhouseCoopers in fiscal years 2011 and 2010 of \$0.5 million and \$1.4 million, respectively:

Fee Category	<u>2011</u> (In	2010 thousands)
Audit Fees	\$848	\$ 316
Audit-Related Fees	11	1,006
Tax Fees	—	115
All Other Fees	—	_
Total Fees	\$859	\$1,437

Audit Fees consisted of professional services rendered in connection with the audit of the Company's annual financial statements and quarterly review of financial statements included in the Company's Quarterly Reports on Form 10-Q.

Audit-Related Fees comprise fees for professional services that are reasonably related to the performance of the audit or review of the Company's financial statement and the initial public offering.

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

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

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

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, 2012.

-16-

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 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 is to consider the relevant facts and circumstances available and deemed relevant to 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 Board of Directors has delegated to the chair of our Audit Committee the authority to pre-approve or ratify any request for us to enter into a transaction with a related party, in which the amount involved is less than \$120,000 and where the chair is not the related party. Our Audit Committee has also 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, transactions where all stockholders receive proportional benefits, transactions involving competitive bids, regulated transactions and certain banking-related services. Certain of the transactions described below were entered into prior to the adoption of this policy. For those transactions, the Audit Committee retrospectively reviewed and ratification of the transaction. If a member of the Audit Committee was related to the transaction in any way, that member recused hims

Related Party Transactions

In fiscal 2011, 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.

Collaboration Agreement

During June 2010, we entered into a collaboration agreement with Gen-Probe Incorporated, or Gen-Probe, a holder of more than 5% of our convertible preferred stock, regarding the research and development of instruments integrating our SMRT technologies and Gen-Probe's sample preparation technologies for use in clinical diagnostics. Subject to customary termination rights, the initial term of the collaboration will end on the earlier of (i) December 15, 2012 and (ii) six months after we achieve certain development milestones. During the collaboration period, each party will be free to sell instrument systems that incorporate its own technology but, subject to limited exceptions, neither party may jointly develop integrated sequencing systems for clinical diagnostics with any third party nor license its technology to any third party for such use. In addition, the collaboration agreement provides each party with preferred access to certain products of the other party when commercially available, both during and after the collaboration period. During 2011, we sold an instrument and other products and services to Gen-Probe with a total value of approximately \$915,000.

Stanford University

One of our directors, Randy Livingston, is the Vice President for Business Affairs and Chief Financial Officer of Stanford University. In 2011, Stanford purchased an instrument and other products and services totaling approximately \$747,000. Our Board of Directors has reviewed and discussed this related party transaction and has determined that it is not a bar to Mr. Livingston's independent director status.



Employment of Related Persons

We employed Roger Martin as our Senior Director, Quality, who is the brother of Hugh Martin, our former Chairman, Chief Executive Officer and President. Mr. Roger Martin's compensation totaled \$143,764 in 2011. Mr. Roger Martin's employment was terminated in September 2011 as part of a company restructuring. In connection with the restructuring, Mr. Roger Martin was paid severance and termination benefits totaling \$52,903. The severance and termination benefits paid to Mr. Roger Martin were comparable to those paid to other employees with similar levels of responsibility and years of experience. We believe that Mr. Roger Martin's compensation, which is reviewed by the Compensation Committee, was comparable with compensation paid to other employees with similar levels of responsibility and years of experience.

We employ Kathryn Keho as our Senior Manager, Scientific Collaborations, who is the daughter of Dr. Michael Hunkapiller, our Chairman, Chief Executive Officer and President. Ms. Keho's compensation totaled \$187,536 in 2011 and her current annual base salary is \$190,000. On May 16, 2011, Ms. Keho was granted an option to purchase 5,000 shares of our common stock at an exercise price per share of \$11.70 and on November 15, 2011 she was granted an option to purchase 20,000 shares of our common stock at an exercise price per share of \$3.30. Twenty percent of such options will vest on the first anniversary date of each grant, and the remaining shares vest at a rate of 1/60th of the total number of shares subject to the option each month thereafter, subject to continued service with us. We believe that Ms. Keho's compensation, which is reviewed by the Compensation Committee, is comparable with compensation paid to other employees with similar levels of responsibility and years of experience.

-18-

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of March 31, 2012 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, 2012, 55,579,219 shares of our common stock were issued and outstanding. Unless otherwise indicated, all persons named as beneficial owners of the 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., 1380 Willow Road, Menlo Park, California 94025.

	Shares of Common Stock Beneficially Owned	_
Name and address of beneficial owner	Shares	Percentage
Entities affiliated with Mohr Davidow Ventures(1)	4,598,397	8.3%
Entities affiliated with Maverick Capital Ltd.(2)	3,543,333	6.4%
Samana Capital, LP(3)	3,376,500	6.1%
KPCB Holdings, Inc.(4)	3,317,378	6.0%
Gen-Probe Incorporated(5)	3,276,540	5.9%
Deerfield Capital, L.P.(6)	2,997,251	5.4%
Deemein Capitai, L.P.(0)	2,997,251	5.4%
Named executive officers and directors:		
Brook Byers(7)	3,342,030	6.0%
William Ericson(8)	4,623,049	8.3%
Michael Hunkapiller, Ph.D(9)	2,761,898	5.0%
Randy Livingston(10)	57,568	*
Hugh C. Martin(11)	1,361,181	2.4%
Marshall Mohr		*
Susan Siegel(12)	91,233	*
David Singer(13)	24,652	*
Susan K. Barnes(14)	269,881	*
Michael Glynn		*
Michael Phillips(15)	311,266	*
Stephen Turner, Ph.D(16)	1,361,649	2.4%
All directors and executive officers as a group (12 people)(17)	13,053,592	23.5%

(*) Represents beneficial ownership of less than 1%.

(1) Includes (i) 4,113,179 shares held of record 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) 345,722 shares held of record by MDV VII Leaders' Fund, L.P.; and (iii) 77,625 shares held by MDV ENF VII(A), L.P. and 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. Jon Feiber, Bill Ericson, and Nancy Schoendorf have shared voting and investment powers with respect to the shares, and each disclaims beneficial ownership except to the extent of any pecuniary interest therein.

(2) Includes 3,543,333 shares held by Maverick Capital, Ltd. Maverick Capital, Ltd. is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 and, as such, may be deemed to have beneficial ownership of the shares held by Maverick Capital, Ltd. Maverick Capital Management, LLC is the general partner of Maverick Capital, Ltd. Lee S. Ainslie III is the manager of Maverick Capital Management, LLC and is granted sole investment discretion, including the ability to vote and dispose of the

-19-

shares, pursuant to Maverick Capital Management, LLC's regulations. The address for the entities affiliated with Maverick Capital, Ltd. is 300 Crescent Court, 18th Floor, Dallas, TX 75201.

- (3) Includes 3,376,500 shares reported by Samana Capital, L.P on February 14, 2012. The address of this entity is Samana Capital, L.P., 35 Ocean Reef Drive, Suite 142, Key Largo, Florida 33037.
- (4) Includes 3,235,533 shares of common stock held by Kleiner Perkins Caufield & Byers XI-A, L.P. and 81,845 shares of common stock held by Kleiner Perkins Caufield & Byers XI-B, L.P. The shares are held for convenience in the name of "KPCB Holdings, Inc. as nominee" for the account of entities affiliated with Kleiner Perkins Caufield & Byers and other individuals and entities that each exercises its own voting and dispositive control over the shares for its own account. KPCB Holdings, Inc. has no voting, dispositive or pecuniary interest in any such shares. The address for these entities is 2750 Sand Hill Road, Menlo Park, CA 94025. Brook Byers, John Doerr, Joseph Lacob, Raymond Lane, Ted Schlein and Russ Siegelman have shared voting and investment powers with respect to the shares, and each disclaims beneficial ownership except to the extent of any pecuniary interest therein.
- (5) Includes 3,276,540 shares held of record by Gen-Probe Incorporated. The address of this entity is 10210 Genetic Center Drive, San Diego, CA 92121. Carl W. Hull, Gen-Probe's President and Chief Executive Officer, exercises voting power over such shares. Gen-Probe's board of directors, comprised of John W. Brown, Armin M. Kessler, Carl W. Hull, John C. Martin, Ph.D., Phillip M. Schneider, Lucy Shapiro, Ph.D., Abraham D. Sofaer and Patrick J. Sullivan, exercises dispositive power over the shares. The board of directors of Gen-Probe acts by majority vote and no one member may act individually to sell these securities. Each disclaims beneficial ownership of the shares except to the extent of any pecuniary interest therein.
- (6) Includes (i) 412,500 shares held by Deerfield Special Situations Fund, L.P.; (ii) 774,402 shares held by Deerfield Private Design Fund L.P.; (iii) 1,247,535 shares held by Deerfield Private Design International, L.P.; and (iv) 562,814 shares held by Deerfield Special Situations Fund International Limited, L.P. The address of these entities is c/o Deerfield Partners, 780 Third Avenue, 37th Floor, New York, NY 10017.
- (7) Includes (i) 3,317,378 shares held by entities affiliated with Kleiner Perkins Caufield & Byers (see Footnote (2)) where Mr. Byers is a Managing Director and (ii) 24,652 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012. Mr. Byers disclaims beneficial ownership of any shares held by entities affiliated with Kleiner Perkins Caufield & Byers except to the extent of his pecuniary interest therein.
- (8) Includes (i) 4,598,397 shares held of record by funds affiliated with Mohr Davidow Ventures where Mr. Ericson is a Managing Director and (ii) 24,652 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012. 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.
- (9) Includes (i) 100,000 shares held of record by Dr. Hunkapiller; (ii) 2,637,246 shares held of record by funds affiliated with Alloy Ventures where Dr. Hunkapiller is a General Partner; and (iii) 24,652 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012. 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.
- (10) Includes 57,568 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012.
- (11) Includes (i) 342,458 shares held of record by Mr. Martin; (ii) 417,901 shares held of record by Hugh Martin Trust UAD 07/14/09; and (iii) 600,822 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012.
- (12) Includes (i) 65,000 shares held of record by Ms. Siegel; and (ii) 26,333 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012. Susan Siegel is not affiliated with any of the funds affiliated with Mohr Davidow Ventures that have invested in us.
- (13) Includes 24,652 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012.
- (14) Includes (i) 47,058 shares held of record by Ms. Barnes and (ii) 222,823 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012.
- (15) Includes (i) 140,812 shares held of record by Mr. Phillips and (ii) 170,454 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012.

-20-

- (16) Includes (i) 1,085,251 shares held of record by Stephen W. and Andrea P. Turner, Tenants by the Entirety; (ii) 7,812 shares held of record by Andrea Turner; and (iii) 268,586 shares issuable upon exercise of options exercisable within 60 days after March 31, 2012.
- (17) Includes 1,387,342 shares issuable upon exercise of options held by our current executive officers and directors exercisable within 60 days after March 31, 2012. This excludes Stephen Turner as he ceased being an executive officer during 2011.

EXECUTIVE OFFICERS

Biographical data for each of our current executive officers is set forth below, except Dr. Hunkapiller's biography, which is included under the heading "Proposal 1 – Election of Directors" above.

Executive Officers

Susan K. Barnes, age 58, joined us in February 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 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.

Kevin Corcoran, age 53, joined Pacific Biosciences in 2007 as our Vice President of software and informatics development. In March of 2011 Mr. Corcoran was promoted to Senior Vice President responsible for all systems related development for the PacBio RS SMRT Sequencing System and in March 2012 became our Senior Vice President of Market Development and is responsible for overall management for developing and increasing market opportunities for our current and future products. Mr. Corcoran served as President and CEO of Lynx Therapeutics from 2002-2004 where he was responsible for the development and commercialization of a massively parallel short read sequencing technology - MPSS. While at Lynx, Mr. Corcoran jointly acquired with Solexa management the DNA cluster amplification technology, which is now a key component of Illumina's sequencing platforms. From 2004-2007 Mr. Corcoran served as Vice President and General Manager of Applied Biosystems DNA sequencing business, a global business with over \$600M dollars in annual sales. While at ABI Mr. Corcoran managed the teams responsible for the commercial development and deployment of SOLiD. Mr. Corcoran holds a B.S. in Computer Science from California State University, Hayward.

Michael Glynn, age 65, joined Pacific Biosciences in August 2011 as our Chief Commercial Officer. From 2007 to 2011, Mr. Glynn served as Regional President, Japan – Asia Pacific and Senior Vice President at Genzyme Corporation. From 2000 to 2007, Mr. Glynn was employed at Boston Scientific, first as Vice President and General Manager, Asia, Middle East and Turkey and most recently as President of its Endovations division. Mr. Glynn earned a B.S. degree from the National University of Ireland and an M.B.A. from Macquarie University in Sydney, Australia.

Michael Phillips, age 61, joined Pacific Biosciences in April 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. degree in Bacteriology from the University of California, Davis.

-22-

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 consists of two Non-Employee Directors: Mr. Ericson and Ms. Siegel, each of whom the Board has determined is independent under the applicable NASDAQ rules. The Compensation Committee has duties and powers as described in its written charter adopted by the Board. A copy of the charter can be found on the Company's website at http://investor.pacificbiosciences.com/governance.cfm.

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 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, Chairman Sue Siegel

Compensation Discussion and Analysis

The following discussion and analysis of compensation arrangements of our named executive officers for 2011 and 2012 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.

Overview

Our executive compensation program is overseen and administered by the Compensation Committee. The Compensation Committee's goal is to ensure that the total compensation paid to our executive officers is fair, reasonable and competitive and remains aligned with creating value for our stockholders. We designed our compensation program to attract talented executives to lead, manage and operate our business and reward and retain those individuals who meet our high expectations over time. Our executive compensation program combines short- and long-term components, cash and equity in amounts and proportions that we believe are most appropriate to incentivize and reward our executive officers for achieving our objectives. Our executive compensation program is also intended to make us competitive in our industry, where there is considerable competition for talented executives.

On June 23, 2011, we held a stockholder advisory vote on the compensation of our named executive officers, commonly referred to as a say-on-pay vote. Our stockholders approved the compensation of our named executive officers, with over 99% of the votes cast in favor of our say-on-pay resolution. As we evaluated our compensation practices throughout fiscal 2011, we were mindful of the strong support our stockholders expressed for our philosophy of linking compensation to performance. As a result, our Compensation Committee decided to retain our general approach to executive compensation. Moreover, in determining how often to hold a stockholder advisory vote on executive compensation, our Board took into account our stockholders' preference for an advisory vote to be held every three years. Specifically, the Board determined that we will hold an advisory stockholder vote on our named executive compensation every three years until considering the results of our next say-on-pay frequency vote.

-23-

Objectives and Principles of Our Executive Compensation

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

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

Our current executive compensation programs consist primarily of salary, incentive bonuses and stock options. We anticipate increasing the flexibility and elements of our compensation structure going forward, while striving to maintain transparency, simplicity and a clear pay-for-performance orientation. As our needs evolve, we expect to continually evaluate our philosophy and compensation programs as circumstances require, and we will review executive compensation annually. We anticipate making new equity awards and adjustments to the components of our executive compensation program in connection with our yearly compensation review, which will be based, in part, upon the market analysis performed by the compensation consultant retained by our Compensation Committee, Radford, an AON Hewitt Consulting Company.

Role of Compensation Consultant

Our Compensation Committee selected and engaged Radford 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, appropriate peer companies, compensation survey data, and compensation trends. 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, however does not determine the amount or form of compensation for our named executive officers.

Role of Executive Officers in Compensation Decisions

For executive officers other than our Chief Executive 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. Specifically, our Chief Executive Officer and Chief Financial Officer recommend base salary increases and equity award levels that are used throughout our compensation plans, and advised our Compensation Committee regarding the 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, and approves the specific compensation for all the executive officers. Our Compensation Committee meets in executive session, without our Chief Executive Officer and Chief Financial Officer, when discussing or making recommendations regarding their compensation. Our Compensation Committee applies a pay-for-performance philosophy when setting compensation for our Chief Executive Officer similar to that used for all of our 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. When setting the structure of compensation for Mr. Martin during 2011 and Dr. Hunkapiller for 2012, our Compensation Committee considered the balance between near-term and long-term performance in structuring their compensation. Neither Mr. Martin nor Dr. Hunkapiller participated in the determination of their

-24-

own compensation, which is under the purview of the Compensation Committee which makes recommendations regarding the Chief Executive Officer's compensation for the consideration and approval of our Board of Directors.

Components of Our Executive Compensation Program

The components of our executive compensation program through 2011 have consisted primarily of base salaries, incentive bonuses, equity awards and broad-based benefits programs. We combine short-term compensation components, namely base salaries and incentive bonuses 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 shareholders, 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 employees and none of our named executive officers participated in a nonqualified deferred compensation plan during the year ended December 31, 2011.

Base Salary

The Compensation Committee determines base salaries for each of our 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 Committee utilized compensation survey data provided by Radford for the technology and life sciences industries for companies of similar size to ours. In consideration of the market data and subjective assessments of each executive officer's position, experience, responsibilities and performance, the Compensation Committee set annual base salaries for our named executive officers at approximately the 50th percentile for 2010 and for 2011 relative to the market data reviewed.

The base salary for Mr. Martin, our former Chief Executive Officer, was set at \$300,000 in 2011, which is below the 25th percentile of the market data. Our Compensation Committee and Board believed Mr. Martin's compensation should be closely aligned to enhancing shareholder value and, to achieve such alignment, a substantial portion of Mr. Martin's compensation should be, and was, structured as a longer-term equity incentive.

For 2012, our Chief Executive, Dr. Hunkapiller, will receive a base salary of \$400,000 or at approximately the 50th percentile of the market data.

Incentive Bonus

Incentive bonuses, structured as a percentage of base salary, are intended to correlate executive compensation with the development of stockholder value through the achievement of important corporate objectives. The achievement of such objectives provides our executive officers the opportunity to earn total cash compensation at approximately the 50th percentile of the market data.

2011 incentive bonuses for our executive officers, other than Messrs. Martin and Glynn, were based on the achievement of corporate operational and financial metrics as well as goals specific to each executive's functional area(s) that directly relate to, and are consistent with, the corporate objectives. Incentive bonuses offered to executives during 2011 afforded the opportunity for executives to earn 30% to 50% of their base salary based on the achievement of certain financial metrics. The bonus potential for each individual officer was then secondarily determined with 60% of each executive's bonus based on the corporate goals and the remaining 40% based on achievement of operating goals specific to each executive. For 2011, our executives achieved 51% to 55% of their individual potential bonus objective resulting in earned bonuses of 15% to 28% of their base compensation. Mr. Martin did not participate in a cash incentive bonus program.

For 2012 Incentive bonuses for all of our executive officers, will be based solely 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 creation of additional value for our stockholders. The 2012 incentive bonuses have a minimum threshold of achievement, below which incentives will not be paid. Full achievement of corporate goals and objectives would result in the potential incentive bonus payment of up to 35% to 75% of an executive's base salary.

Equity Incentives

We believe that equity grants align the interests of our key employees with the development of long-term value for our stockholders. Our equity-based incentives, generally comprised of options to purchase shares of our common stock, are subject to vesting over four or five years that incent our executive officers and key employees to remain in our employ during the vesting period. During 2011, we awarded equity incentives to our executive officers as discussed below.

In determining equity awards for named executive officers, the Compensation Committee and the Board consider market data regarding the equity compensation practices in the technology and life sciences industries, including stock dilution, and the equity compensation for comparable positions among the peer group companies. While the Compensation Committee reviews the realized or unrealized value of prior equity awards, it determines the annual target economic value of equity awards with reference to the market data. The Compensation Committee believes that equity awards effectively create strong incentives to drive future stockholder return.

During October 2010 upon the recommendation of our Compensation Committee, our Board granted Mr. Martin a performance option to purchase up to 150,000 shares of our common stock with an exercise price of \$16.00 per share. The shares underlying the grant were to vest based on our achievement of certain revenue, gross margin and operating income targets in 2011 and 2012 as established by our compensation committee and approved by the Board. Mr. Martin tendered his resignation prior to the finalization of the 2011 financial results and prior to the determination of vesting, therefore none of the options underlying Mr. Martin's performance grant vested.

In connection with the hiring of Mr. Glynn as our Chief Commercial Officer in September 2011, our Board of Directors granted him an option to purchase 300,000 shares of our common stock at an exercise price of \$5.99 per share. Consistent with our new hire grants, this option is scheduled to vest as to twenty five percent of the shares subject to the option after one year, and the remaining shares will vest monthly over the following three years.

During March 2011, in recognition of the ongoing contributions and in connection with the promotion of Mr. Corcoran to Senior Vice President, the Compensation Committee approved an option grant to Mr. Corcoran to purchase 150,000 shares of our common stock at \$14.24 per share. The option granted to Mr. Corcoran will vest over five years, with 20% vesting on the first anniversary and the remainder vesting monthly thereafter.

During June 2011, Mr. Phillips was granted an option to purchase up to 6,000 shares of our common stock at an exercise price of \$11.64 per share in recognition of his contributions to our company's performance. This grant, combined with Mr. Phillip's existing option holdings was intended to provide a long-term retention incentive. The option granted to Mr. Phillips will vest over five years, with 20% vesting on the first anniversary and the remainder vesting monthly thereafter.

Ms. Barnes did not receive an additional equity grant during 2011. In connection with her promotion to Executive Vice President, during December 2010, Ms. Barnes received an option grant to purchase 125,000 shares of our common stock at \$13.72 per share that will vest over five years, with 20% vesting on the first anniversary and the remainder vesting monthly thereafter.

In connection with the appointment of Dr. Hunkapiller as our Chairman, President and Chief Executive Officer during January 2012, our Board of Directors granted him an option to purchase 1,000,000 shares of our common stock at an exercise price of \$3.01 per share. Consistent with our new hire grants, this option is scheduled to vest as to twenty five percent of the shares subject to the option after one year, and the remaining shares will vest monthly over the following three years.

During February of 2012, in consideration of our 2011 commercial accomplishments, to provide ongoing long-term incentives, and to promote the retention of our executives, our Compensation Committee approved additional option grants to our executives with an exercise price of \$4.79 as set forth in the *"Grants of Plan-Based Awards"* section of this proxy statement.

Benefits.

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

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

Equity Plans

As of December 31, 2011, we had three active equity compensation plans, the 2010 Equity Incentive Plan, the 2010 Employee Stock Purchase Plan, or ESPP, and the 2010 Outside Director Equity Incentive Plan, all of which we adopted upon the effectiveness of our initial public offering during October 2010. Prior to the adoption of these plans, we granted options pursuant to the 2004 Equity Incentive Plan through August 2005, and the 2005 Stock Plan through October 2010. As of December 31, 2011 we had options outstanding to purchase 10,521,693 shares of our common stock at prices ranging from \$0.20 per share to \$16.00 per share. Of these shares, 4,364,161 shares were vested with a weighted average exercise price of \$5.85. During 2011, 620,424 shares were issued under the ESPP, and 129,576 shares are available for future purchase. As of December 31, 2011, an aggregate of 1,441,149 shares remained available for future grant under our 2010 Equity Incentive Plan and our 2010 Director Equity Incentive Plan. Each of our plans includes an evergreen provision that increases the number of shares available under the plan on January 1 of each year.

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. 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 409A.

Compensation Risk Assessment

In establishing and reviewing our overall compensation program, the Compensation Committee considers whether the program and its various elements encourage or motivate executives or other employees to take inappropriate risks, or introduce excessive business risk. At the direction of the Compensation Committee, we 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 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 concluded that our employee compensation program does not create risk that is reasonably likely to have a material adverse effect on Pacific Biosciences.

Compensation Committee Interlocks and Insider Participation

During 2011, Dr. Hunkapiller (until October 2011), Mr. Ericson and Ms. Siegel served on our Compensation Committee. 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 Chief Executive Officer and President. In addition, during the last fiscal year, none of our officers served as a member of the board of directors or the compensation committee of any other entity that has one or more executive officers serving on our Board of Directors or Compensation Committee.

-28-

Executive Compensation Tables

2011 and 2010 Summary Compensation Table

The following table provides information regarding the compensation of our principal executive officer and each of our other executive officers, together referred to as our named executive officers, for each of the years they were so designated during 2011 and 2010.

Summary Compensation Table

				Option	
Name and principal position	Year	Salary (\$)	Bonus (\$)	awards (\$) ⁽¹⁾	Total (\$)
Hugh C. Martin	2011	300,000	—	—	300,000
Former President, Chief Executive Officer and Chairman of the Board of Directors	2010	300,000	58,333	3,653,556	4,011,889
Susan Barnes	2011	320,000	78,270	—	398,270
Executive Vice President and Chief Financial Officer	2010	245,385	—	2,442,487	2,687,872
Kevin Corcoran	2011	299,422	34,500	1,220,775	1,554,697
Senior Vice President of Market Development	2010		—	—	
Michael Glynn ⁽²⁾	2011	126,442	100,000	1,000,680	1,227,122
Chief Commercial Officer	2010	—		—	—
Michael Phillips	2011	300,000	54,000	37,652	391,652
Senior Vice President Research and Development	2010	255,417	20,000	383,971	659,388
Stephen Turner, Ph.D	2011	300,000	41,250	125,508	466,758
Chief Technology Officer	2010	275,000	_	233,937	508,937

(1) Amounts shown represent the aggregate grant date fair value of the option awards computed in accordance with FASB Topic ASC 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) Mr. Glynn's employment with us commenced on August 31, 2011. Pursuant to his employment letter agreement described below he received a sign-on bonus of \$100,000 and new-hire option awards which were granted in 2011 and included in the table above.

Grants of Plan-Based Awards

The following table presents information concerning grants of plan-based awards to each of the named executive officers during the fiscal year ended December 31, 2011.

Grants of Plan-Based Awards

		All Other option awards: number of securities underlying	Exercise or base price of option	Grant date fair value of option
Name	Grant date	options (#)	awards (\$)	awards (\$) ⁽¹⁾
Kevin Corcoran	3/15/2011	150,000	\$ 14.24	1,220,775
Michael Glynn	9/15/2011	300,000	\$ 5.99	1,000,680
Michael Phillips	6/15/2011	6,000	\$ 11.64	37,652
Stephen Turner, Ph.D	6/15/2011	20,000	\$ 11.64	125,508

(1) Amounts shown represent the aggregate grant date fair value of the option awards computed in accordance with FASB Topic ASC 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.

-29-

The following table presents information concerning grants of plan-based awards to our current executive officers subsequent to the fiscal year ended December 31, 2011.

Name	Grant date_	All Other option awards: number of securities underlying options (#)	base 0	ercise or e price of ption ards (\$)
Michael Hunkapiller	1/9/2012	1,000,000	\$	3.01
Susan Barnes	2/15/2012	250,000	\$	4.79
Kevin Corcoran	2/15/2012	250,000	\$	4.79
Michael Glynn	2/15/2012	100,000	\$	4.79
Michael Phillips	2/15/2012	150,000	\$	4.79

Outstanding Equity Awards at Fiscal Year-End

The following table presents certain information concerning equity awards held by the named executive officers at the end of the fiscal year ended December 31, 2011.

Outstanding Equity Awards at Fiscal Year-End

		Option Awards	
Name	Number of securities underlying unexercised options (#) exercisable	Option exercise price (\$)	Option expiration date
Hugh C. Martin	52,412(1)	0.70	9/13/2012
	100,134(2)	1.96	9/13/2012
	320,838(2)	3.86	9/13/2012
	75,000 ⁽²⁾	8.50	9/13/2012
	66,667 ⁽³⁾	13.42	9/13/2012
	75,000(4)	16.00	9/13/2012
Susan Barnes	160,109(3)	8.50	2/22/2020
	27,083(2)	13.72	12/15/2020
Kevin Corcoran	112,500(1)	1.96	11/26/2017
	26,250(2)	6.96	9/17/2018
	25,000 ⁽²⁾	8.50	2/17/2020
	3,750(2)	12.74	7/29/2020
Michael Glynn	—	—	—
Michael Phillips	31,663(1)	0.70	9/08/2015
-	33,750 ⁽²⁾	1.96	6/21/2017
	43,751(2)	6.96	9/17/2018
	43,751(2)	8.50	2/17/2020
	1,500(2)	12.74	7/29/2020
Stephen Turner, Ph.D	105,000(1)	0.70	9/8/2015
	67,500 ⁽²⁾	1.96	6/21/2017
	52,500 ⁽²⁾	6.96	9/17/2018
	25 ,000 ⁽²⁾	8.50	2/17/2020
	1,500(2)	12.74	7/29/2020

-30-

- (1) 100% of the shares subject to the option are fully vested and exercisable.
- (2) Stock option vests at the rate of 1/5th of the total number of shares subject to the option after one year and 1/60th per month for the next four years.
- (3) Stock option vests at the rate of 1/4th of the total number of shares subject to the option after one year and 1/48th per month for the next three years.
- (4) Performance option that will vest up to 50% of the performance options based on our financial performance in 2011 and up to 50% of the performance options based on our financial performance in 2012.

Option Exercises and Stock Vested at Fiscal Year-End

The following table presents information regarding the exercise of stock options by named executive officers during 2011. No other stock awards have been granted.

	OPTION AWARDS		STOCK AWARDS	
Name (a)	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Hugh C. Martin	(b) 5,627	<u>(c)</u> 56,720	(d)	<u>(e)</u>
Susan Barnes		_	—	_
Michael Glynn		_	_	_
Michael Phillips				_
Kevin Corcoran		—	—	—

Employment Agreements and Change of Control Arrangements

In August 2010, our Compensation Committee recommended and our Board approved certain change of control provisions for our executive officers. For Mr. Martin, our former Chief Executive Officer, upon the occurrence of involuntary termination within 12 months following a change of control ("double trigger protection"), (i) 100% of any unvested equity would have vested and (ii) he would have received salary continuation and benefits for 12 months. For our Chief Executive Officer, Dr. Hunkapiller, upon the occurrence of involuntary termination within 12 months following a change of control, (i) 100% of any unvested equity will vest and (ii) he will receive salary continuation and benefits for 12 months. For the other executive officers, upon the occurrence of involuntary termination within 12 months following a change of control, (i) 100% of any unvested equity will vest and (ii) he will receive salary continuation and benefits for 12 months. For the other executive officers, upon the occurrence of involuntary termination within 12 months following a change of control, (i) 100% of any unvested equity will vest and (ii) the executive will receive salary continuation and benefits for 6 months.

The following table describes the potential payments and benefits to each of our named executive officers following a termination of employment without cause, due to death or a disability or for good reason on December 31, 2011, based on the severance and change of control provisions described above and based on equity grants outstanding as of December 31, 2011. 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.

Termination of Employment

Compensation and benefits	te	nvoluntary ermination er change of control
Michael Hunkapiller		
Salary	\$	400,000
Equity Acceleration		—
Health Care Benefits		
Total	\$	400,000
Hugh Martin		
Salary	\$	300,000
Equity Acceleration		_
Health Care Benefits		20,398
Total	\$	320,398
Susan Barnes	_	
Salary	\$	160,000
Equity Acceleration		_
Health Care Benefits		10,199
Total	\$	170,199
Kevin Corcoran	_	
Salary	\$	150,000
Equity Acceleration		
Health Care Benefits		7,117
Total	\$	157,117
Michael Glynn		
Salary	\$	187,500
Equity Acceleration		
Health Care Benefits		7,117
Total	\$	194,617
Michael Phillips		
Salary	\$	150,000
Equity Acceleration		3,150
Health Care Benefits		10,199
Total	\$	163,349
Stephen Turner, Ph.D	_	
Salary	\$	150,000
Equity Acceleration		6,299
Health Care Benefits		10,199
Total	\$	166,498
	-	

Dr. Hunkapiller's information is based upon his employment and change in control severance agreements dated January 5, 2012. On January 5, 2012, Mr. Martin resigned from his positions as our President and Chief Executive Officer. Mr. Martin remained as a director on the Board until April 2, 2012. The terms of Mr. Martin's separation include: (i) a lump sum payment equal to 12 months of his base salary, (ii) reimbursement for or continued COBRA coverage for 36 months after his termination date, subject to his continued eligibility, and

-32-

(iii) six months of accelerated vesting with respect to any unvested options outstanding as of his termination date. Mr. Martin also served as a consultant to the Company until April 2, 2011 and in exchange for Mr. Martin's execution and non-revocation of a final separation agreement and release, Mr. Martin received an additional payment of \$90,000.

Equity Compensation Plan Information

The following table presents information about the Company's equity compensation plans as of December 31, 2011 (in thousands, except price data):

Plan category_	Number of securities to be issued upon exercise of outstanding options, warrants and rights	price of	verage exercise outstanding rants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by				
security holders	10,522	\$	6.69	11,973
Equity compensation plans not approved by				
security holders	—			—

-33-

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.

The Audit Committee assists the Board of Directors in overseeing the integrity of the Company's financial statements, compliance with legal requirements, risk management policies, and qualifications, performance and independence of the Company's independent registered public accounting firm, Ernst & Young, LLP ("E&Y"). The Company's management has primary responsibility for the Company's financial statements and for maintaining and monitoring a system of appropriate internal control. The Audit Committee comprised three members throughout 2011, although it currently has four, each of whom is an independent director under the NASDAQ's director independence standards and the independence criteria applicable to audit committee members under the Sarbanes-Oxley Act of 2002 and the SEC's rules.

During 2011 the Audit Committee met 11 times. The Audit Committee discussed with E&Y the overall scope and plans for its audits of the financial statements and management's assessment of internal control over financial reporting. The Audit Committee also met on a regular basis in executive session, including sessions with E&Y, without management present.

The Audit Committee reviewed and discussed the Company's financial statements for the year ended December 31, 2011 and each fiscal quarter with management and E&Y. The meetings included a discussion of the quality and acceptability of the accounting principles applied, the reasonableness of significant accounting judgments and estimates, and the clarity of disclosures in the financial statements.

The Audit Committee discussed with E&Y the matters required under the rules adopted by the Public Company Accounting Oversight Board ("PCAOB"). The Audit Committee received the written disclosures and letter from E&Y required by the PCAOB regarding its communications with the Audit Committee concerning independence, and discussed with E&Y its independence. The Audit Committee also considered whether non-audit services provided by E&Y were compatible with its independence.

The Audit Committee reviewed and discussed the Company's compliance with Section 404 of the Sarbanes-Oxley Act, including the PCAOB's Auditing Standard No. 5 regarding the audit of internal control over financial accounting.

In performing all of these functions, the Audit Committee acts in an oversight capacity. The Audit Committee reviews the Company's quarterly and annual reports on Form 10-Q and Form 10-K prior to filing with the SEC. In its oversight role, the Audit Committee relies on the work and assurances of: the Company's management, which has the primary responsibility for establishing and maintaining adequate internal control over financial reporting, and for preparing the financial statements; and E&Y who is engaged to audit and report on the consolidated financial statements of the Company and the effectiveness of the Company's internal control over financial reporting.

Based on the foregoing review and discussions, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2011 for filing with the SEC.

Members of the Audit Committee

Randy Livingston, Chairman Brook Byers Marshall Mohr⁽¹⁾ David Singer

(1) Mr. Mohr was appointed to the Audit Committee on January 18, 2012.

-34-

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 the Company 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 that no annual Form 5 reports were required to be filed by them, 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 2011.

Stockholder Proposals

Stockholder Proposals for 2013 Annual Meeting

The submission deadline for stockholder proposals to be included in our proxy materials for the 2013 annual meeting of stockholders pursuant to Rule 14a-8 of the Exchange Act is December 28, 2012, 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., 1380 Willow Road, 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 2013 annual meeting of stockholders. Submission of a proposal before the deadline does not guarantee its inclusion in our proxy materials.

Advance Notice Procedure for 2013 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 2013 annual meeting of stockholders, a stockholder notice must be received by our Corporate Secretary at Pacific Biosciences of California, Inc., 1380 Willow Road, Menlo Park, CA 94025, no earlier than December 28, 2012 and no later than January 27, 2013. However, if the 2013 annual meeting of stockholders is advanced by more than 30 days prior to or delayed by more than 60 days after the one-year anniversary of the 2012 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 2013 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 <u>ir@pacificsciences.com</u> or Investor Relations, Pacific Biosciences of California, Inc., 1380 Willow Road, Menlo Park, CA 94025.

-35-

Fiscal Year 2011 Annual Report and SEC Filings

Our financial statements for the fiscal year ended December 31, 2011 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.pacificbiosciences.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., 1380 Willow Road, Menlo Park, CA 94025.

By Order of the Board of Directors

Menlo Park, California April 27, 2012

-36-

YOUR VOTE IS IMPORTANT. PLEASE VOTE TODAY.

We encourage you to take advantage of Internet or telephone voting. Both are available 24 hours a day, 7 days a week.

Internet and telephone voting is available through 11:59 PM Eastern Time the day prior to the shareholder meeting date.

		INTERNET				
		http://www.proxyvoting.	http://www.proxyvoting.com/pacb			
		Use the Internet to vote y Have your proxy card in h you access the web site.				
PACIFIC BIOS	CIENCES	OR				
OF CALIFOR						
		Use any touch-tone telephyour proxy. Have your pro hand when you call.	one to vote			
		If you vote your proxy by Internet or you do NOT need to mail back your p				
		To vote by mail, mark, sign and date and return it in the enclosed postage				
		Your internet or telephone vote a named proxies to vote your share manner as if you marked, signed and proxy card.	s in the same			
16586 THIS PROXY WILL BE VOTED AS DIRECTE			Please mark your votas as			
THE ELECTION OF DIRECTORS AND "FOR"	TIEM 2.		indicated in this example			
1. ELECTION OF CLASS II DIRECTORS The Board recommends a vote FOR the following nominees:	FOR WITHHOLD EXCEPTIONS ALL FOR ALL	The Board recommends a vote FOR the following proposal:	FOR AGAINST ABSTAN			
01 Michael Hunkapiller 02 Randy Livingston 03 Marshall Mohr		 Ratification of the appointment of Ernsl & Young LLP as our independent registered public accounting Irm. 				
(INSTRUCTIONS: To withhold authority to vote for any indi- "Exceptions" box above and write that nominee's name in th	idual nominee, mark the e space provided below.)					
*Exceptions						
L			Mark Hore for Address Change or Commons SEE REVERSE			
NOTE: Please sign as name appears hereon. Joint owners sh	ould each sign. When signing as altorney, exe	cutor, administrator, trustee or guardian, please give full title as such.				
Signature	Signature	D:	ate			

You can now access your Pacific Biosciences of California, Inc. account online.

Access your Pacific Biosciences of California, Inc. account online via Investor ServiceDirect® (ISD).

The transfer agent for Pacific Biosciences of California, Inc., now makes it easy and convenient to get current information on your shareholder account.

- · View account status
- View certificate history
- View payment history for dividends
- Make address changes
- View book-entry information
- · Obtain a duplicate 1099 tax form

Visit us on the web at http://www.bnymellon.com/shareowner/equityaccess For Technical Assistance Call 1-877-978-7778 between 9am-7pm

Monday-Friday Eastern Time

Investor ServiceDirect[®] Available 24 hours per day, 7 days per week TOLL FREE NUMBER: 1-800-370-1163

Choose MLink^{su} for fast, easy and secure 24/7 online access to your future proxy materials, investment plan statements, tax documents and more. Simply log on to Investor ServiceDirect® at <u>www.bnymellon.com/shareowner/equityaccess</u> where step-by-step instructions will prompt you through enrollment.

Important notice regarding the Internet availability of proxy materials for the Annual Meeting of shareholders. The Proxy Statement and the 2011 Annual Report to Stockholders are available at: http://investor.pacificbiosciences.com/annual-proxy.cfm

▼ FOLD AND DETACH HERE ▼

PROXY PACIFIC BIOSCIENCES OF CALIFORNIA, INC. Annual Meeting of Stockholders – June 13, 2012 THIS PROXY IS SOLICITED BY THE BOARD OF DIRECTORS OF THE COMPANY

The undersigned hereby appoints Michael Hunkapiller and Susan K. Barnes, and each of them, with power to act without the other and with power of substitution, as proxies and attorneys-in-fact and hereby authorizes them to represent and vote, as provided on the other side, all the shares of Pacific Biosciences of California, Inc. Common Stock which the undersigned is entitled to vote, and, in their discretion, to vote upon such other business as may properly come before the Annual Meeting of Stockholders of the company to be held June 13, 2012 or at any adjournment or postponement thereof, with all powers which the undersigned would possess if present at the Meeting.

Address Change/Comments (Mark the corresponding box on the reverse side)

> SHAREOWNER SERVICES P.O. BOX 3550 SOUTH HACKENSACK, NJ 07606-0250

(Continued and to be marked, dated and signed, on the other side)

16586