

Registration No. 333-170211  
Registration No. 333-179810  
Registration No. 333-186065  
Registration No. 333-193437  
Registration No. 333-201678  
Registration No. 333-209157  
Registration No. 333-215746  
Registration No. 333-222696  
Registration No. 333-229368  
Registration No. 333-236061

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-170211  
Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-179810  
Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-186065  
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Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-215746  
Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-222696  
Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-229368  
Post-Effective Amendment No. 1 to Form S-8 Registration Statement No. 333-236061

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**Pacific Biosciences of California, Inc.**  
(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**16-1590339**  
(I.R.S. Employer  
Identification No.)

**1305 O'Brien Drive**  
**Menlo Park, CA 94025**  
(Address of Principal Executive Offices) (Zip Code)

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**Pacific Biosciences of California, Inc. 2010 Equity Incentive Plan**  
**Pacific Biosciences of California, Inc. 2010 Employee Stock Purchase Plan**  
**Pacific Biosciences of California, Inc. 2010 Outside Director Equity Incentive Plan**  
**Pacific Biosciences of California, Inc. 2005 Stock Plan**

(Full title of the plans)

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**Michael Hunkapiller**  
**Chief Executive Officer**  
**1305 O'Brien Drive**  
**Menlo Park, CA 94025**  
(Name and address of agent for service)

**(650) 521-8000**  
(Telephone number, including area code, of agent for service)

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*Copies to:*  
**Donna M. Petkanics**  
**Andrew D. Hoffman**  
**Wilson Sonsini Goodrich & Rosati, P.C.**  
**650 Page Mill Road**  
**Palo Alto, CA 94304**  
**(650) 493-9300**

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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#### EXPLANATORY NOTE

Pacific Biosciences of California, Inc. (the "Registrant") has previously registered shares of the Registrant's common stock, par value \$0.001 per share (the "Common Stock") to be issued under the 2010 Equity Incentive Plan (the "2010 Plan"), the 2010 Employee Stock Purchase Plan (the "2010 ESPP"), the 2010 Outside Director Equity Incentive Plan (the "2010 Director Plan") and the 2005 Stock Plan (the "2005 Plan"). In connection with the 2010 Plan, 2010 ESPP, the 2010 Director Plan and the 2005 Plan, the Registrant has previously filed with the Securities and Exchange Commission (the "SEC") a Registration Statement on Form S-8 on October 29, 2010 (File No. 333-170211), a Registration Statement on Form S-8 on March 1, 2012 (File No. 333-179810), a Registration Statement on Form S-8 on January 17, 2013 (File No. 333-186065), a Registration Statement on Form S-8 on January 21, 2014 (File No. 333-193437), a Registration Statement on Form S-8 on January 23, 2015 (File No. 333-201678), a Registration Statement on Form S-8 on January 28, 2016 (File No. 333-209157), a Registration Statement on Form S-8 on January 26, 2017 (File No. 333-215746), a Registration Statement on Form S-8 on January 25, 2018 (File No. 333-222696), a Registration Statement on Form S-8 on January 25, 2019 (File No. 333-229368) and a Registration Statement on Form S-8 on January 24, 2020 (File No. 333-236061) (collectively, the "Registration Statements").

On August 4, 2020, the stockholders of the Registrant approved the 2020 Equity Incentive Plan (the "2020 Plan"). Pursuant to the terms of the 2020 Plan, the maximum number of shares of Common Stock that may be issued under the 2020 Plan shall be the sum of (i) 11,000,000 shares of Common Stock (the "New Shares"), plus (ii) any shares subject to stock options or similar awards granted under the 2010 Plan, the 2010 Director Plan, or the 2005 Stock Plan (collectively, the "Prior Plans") that, on or after the August 4, 2020, expire or otherwise terminate without having been exercised or issued in full and any shares subject to awards granted under the Prior Plans that, on or after the August 4, 2020, are forfeited to or repurchased by

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the Company due to failure to vest (the “Carryover Shares”), with the maximum number of shares to be added to the 2020 Plan pursuant to the foregoing clause (ii) equal to 26,903,587 Shares. No further awards will be granted under the Prior Plans on or after August 4, 2020.

The Registration Statements will cover the issuance of the Carryover Shares once they are available for issuance under the 2020 Plan. The Registration Statements otherwise continue in effect as to the balance of the shares of Common Stock remaining available for issuance upon exercise of outstanding awards and following the exercise of awards previously granted under the Prior Plans and remaining available for issuance under the 2010 Employee Stock Purchase Plan.

Accordingly, pursuant to the undertaking in Item 512(a)(1)(iii) of Regulation S-K that the Registrant disclose a material change in the plan of distribution as it was originally disclosed in the Registration Statements and SEC Compliance and Disclosure Interpretation 126.43, the Registrant is filing this Post-Effective Amendment to the Registration Statements (the “Post-Effective Amendment”) to reflect that, as of August 4, 2020, the Carryover Shares may be issued under the 2020 Plan and to file as an exhibit hereto a copy of the 2020 Plan and a new opinion as to the validity of the shares of Common Stock that were previously issuable pursuant to the Prior Plans. All other items of the Registration Statements are incorporated herein by reference without change.

Contemporaneously with the filing of this Post-Effective Amendment, the Registrant is filing a registration statement on Form S-8 to register the New Shares that have become available for offer or sale pursuant to the 2020 Plan. No additional securities are being registered by this Post-Effective Amendment.

## PART II

### INFORMATION REQUIRED IN REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference.

Pacific Biosciences of California, Inc. (the “Registrant”) hereby incorporates by reference into this Registration Statement the following documents previously filed with the Commission:

(1) The Registrant’s Annual Report on [Form 10-K](#) for its fiscal year ended December 31, 2019, filed with the Commission on February 28, 2020 pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”);

(2) All other reports filed with the Commission pursuant to Sections 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the Registrant’s Annual Report referred to in (1) above (other than the portions of these documents not deemed to be filed); and

(3) The description of the Registrant’s Common Stock contained in the Registrant’s Registration Statement on [Form 8-A](#) (File No. 001-34899) filed with the Commission on October 6, 2010, pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

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**Item 8.****Exhibits.**

<b>Exhibit Number</b>	<b>Description</b>
4.1	<a href="#">Specimen Common Stock Certificate (which is incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended, as declared effective on October 26, 2010)</a>
4.2+	<a href="#">2010 Equity Incentive Plan (which is incorporated herein by reference to Exhibit 10.4 to the Registrant's Form S-1)</a>
4.3+	<a href="#">2010 Equity Incentive Plan forms of agreements (which are incorporated herein by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed on May 2, 2018)</a>
4.4+	<a href="#">2010 Outside Director Equity Incentive Plan (which is incorporated herein by reference to Exhibit 10.6 to the Registrant's Form S-1)</a>
4.5+	<a href="#">2010 Outside Director Equity Incentive Plan forms of agreement (which are incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on May 2, 2018)</a>
4.6+	<a href="#">2005 Stock Plan and forms of option agreements thereunder (which are incorporated herein by reference to Exhibit 10.3 to the Registrant's Form S-1)</a>
4.7+	<a href="#">2010 Employee Stock Purchase Plan and forms of agreement thereunder (which are incorporated herein by reference to Exhibit 10.5 to the Registrant's Form S-1)</a>
4.8+	<a href="#">2020 Equity Incentive Plan and related forms of agreement (which is incorporated by reference to Exhibit 10.1 to the Registrant's Form of 8-K filed on August 5, 2020)</a>
5.1	<a href="#">Opinion of Wilson Sonsini Goodrich &amp; Rosati, Professional Corporation</a>
23.1	<a href="#">Consent of Independent Registered Public Accounting Firm</a>
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (contained in Exhibit 5.1 hereto)
24.1	<a href="#">Power of Attorney (contained on signature page hereto)</a>

+ Indicates management contract or compensatory plan, contract or arrangement.

**Item 9. Undertakings.**

A. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration

statement or any material change to such information in the registration statement.

*Provided, however*, that paragraphs (A)(1)(i) and (A)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

B. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

C. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment to the Registration Statements to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Menlo Park, State of California, on August 6, 2020.

### PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

#### POWER OF ATTORNEY

By: /s/ Eric E. Schaefer  
Eric E. Schaefer

Vice President and Chief Accounting Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Michael Hunkapiller, Susan K. Barnes and Eric E. Schaefer, jointly and severally, as his or her true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-8 of Pacific Biosciences of California, Inc. and any or all amendments (including post-effective amendments) thereto, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or her or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-8 has been signed by the following persons in the capacities and on the dates indicated below:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael Hunkapiller</u> Michael Hunkapiller	Director, Chief Executive Officer and President (Principal Executive Officer)	August 6, 2020
<u>/s/ Susan K. Barnes</u> Susan K. Barnes	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	August 6, 2020
<u>/s/ Eric E. Schaefer</u> Eric E. Schaefer	Vice President and Chief Accounting Officer (Principal Accounting Officer)	August 6, 2020
<u>/s/ Christian Henry</u> Christian Henry	Chairman of the Board of Directors	August 6, 2020
<u>/s/ David Botstein</u> David Botstein	Director	August 6, 2020



<u>/s/ William W. Ericson</u> William W. Ericson	Director	August 6, 2020
<u>/s/ Randall S. Livingston</u> Randall S. Livingston	Director	August 6, 2020
<u>/s/ John F. Milligan</u> John F. Milligan	Director	August 6, 2020
<u>/s/ Marshall L. Mohr</u> Marshall L. Mohr	Director	August 6, 2020
<u>/s/ Kathy Ordoñez</u> Kathy Ordoñez	Director	August 6, 2020
<u>/s/ Lucy Shapiro</u> Lucy Shapiro	Director	August 6, 2020

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Wilson Sonsini Goodrich & Rosati  
Professional Corporation  
650 Page Mill Road  
Palo Alto, CA 94304-1050

August 6, 2020

Pacific Biosciences of California, Inc.  
1305 O'Brien Drive  
Menlo Park, California 94025

**Re: Registration Statement on Form S-8**

Ladies and Gentlemen:

We have examined the Post-Effective Amendment to the Registration Statements on Form S-8 to be filed by you with the Securities and Exchange Commission on or about August 6, 2020 (the "Registration Statement") in connection with the registration under the Securities Act of 1933, as amended, which you are filing with respect to the Prior Plan Shares (as defined below) authorized for issuance under the Prior Plans (as defined below). On August 4, 2020 (the "Effective Date") the stockholders of Pacific Biosciences of California, Inc. approved the Pacific Biosciences of California, Inc. 2020 Equity Incentive Plan (the "2020 Plan"). The total number of shares of common stock of Pacific Biosciences of California, Inc. authorized for issuance under the 2020 Plan includes, in addition to 11,000,000 new shares (registered concurrently on a new registration statement on Form S-8), any shares of common stock subject to stock options or similar awards granted under any of the Company's 2010 Equity Incentive Plan, 2010 Outside Director Equity Incentive Plan, or 2005 Stock Plan (collectively, the "Prior Plans," and any shares issued thereunder the "Prior Plan Shares") that, on or after the Effective Date, expire or otherwise terminate without having been exercised or issued in full and any Shares subject to awards granted under the Prior Plans that, on or after the Effective Date, are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of Shares not to exceed 26,903,587. As your legal counsel, we have examined the proceedings taken and are familiar with the proceedings proposed to be taken by you in connection with the sale and issuance of the Prior Plan Shares under the 2020 Plan.

It is our opinion that, when issued and sold in the manner referred to in the 2020 Plan and pursuant to the standard agreements which accompany any sale under the 2020 Plan, the Prior Plan Shares will be legally and validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to the use of our name wherever it appears in the Registration Statement and any amendment thereto.

Very truly yours,

/s/ Wilson Sonsini Goodrich & Rosati

WILSON SONSINI GOODRICH & ROSATI  
Professional Corporation

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Post-Effective Amendment No. 1 to the Registration Statements (Form S-8 Nos. 333-170211, 333-179810, 333-186065, 333-193437, 333-201678, 333-209157, 333-215746, 333-222696, 333-229368 and 333-236061) pertaining to the Pacific Biosciences of California, Inc. 2010 Equity Incentive Plan, Pacific Biosciences of California, Inc. 2010 Employee Stock Purchase Plan, Pacific Biosciences of California, Inc. 2010 Outside Director Equity Incentive Plan, and Pacific Biosciences of California, Inc. 2005 Stock Plan of our reports dated February 28, 2020, with respect to the consolidated financial statements of Pacific Biosciences of California, Inc. and the effectiveness of internal control over financial reporting of Pacific Biosciences of California, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2019, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California  
August 6, 2020

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