

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Pacific Biosciences of California, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

69404D108

(CUSIP Number)

September 6, 2016

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Larry N. Feinberg	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 300,000
	6	SHARED VOTING POWER 4,500,162
	7	SOLE DISPOSITIVE POWER 300,000
	8	SHARED DISPOSITIVE POWER 4,500,162
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,800,162	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 5.22%*	
12	TYPE OF REPORTING PERSON (See Instructions) IN	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in its Quarterly Report on Form 10-Q filed with the Securities Exchange Commission (the "SEC") on August 4, 2016 (the "Quarterly Report").

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Oracle Partners, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 3,144,738
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 3,144,738
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,144,738	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/> <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 3.42%*	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Oracle Institutional Partners, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 539,100
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 539,100
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 539,100	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/> <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.59%*	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Oracle Ten Fund Master, LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Connecticut	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 660,824
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 660,824
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 660,824	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.72%*	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Oracle Investment Management Employees Retirement Fund	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION Connecticut	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 130,000
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 130,000
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 130,000	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.14%*	
12	TYPE OF REPORTING PERSON (See Instructions) OO	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	The Feinberg Family Foundation	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/> <input type="checkbox"/> (b) <input type="checkbox"/> <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Connecticut	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 25,500
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 25,500
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 25,500	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.03%	
12	TYPE OF REPORTING PERSON (See Instructions) OO	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Oracle Associates, LLC	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)	
	(a) <input type="checkbox"/> <input type="checkbox"/> (b) <input type="checkbox"/> <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 3,683,838
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 3,683,838
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 3,683,838	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) ?	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 4.01%*	
12	TYPE OF REPORTING PERSON (See Instructions) PN	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Oracle Investment Management, Inc.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	5	SOLE VOTING POWER 0
	6	SHARED VOTING POWER 790,824
	7	SOLE DISPOSITIVE POWER 0
	8	SHARED DISPOSITIVE POWER 790,824
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 790,824	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions) <input type="checkbox"/>	
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.86%*	
12	TYPE OF REPORTING PERSON (See Instructions) CO	

* Calculated based on a total of 91,875,385 shares of common stock outstanding as of July 31, 2016, as reported by the Issuer in the Quarterly Report.

Item 1(a). Name of Issuer:

Pacific Biosciences of California, Inc., a Delaware corporation (the "Issuer").

Item 1(b). Address of Issuer's Principal Executive Offices:

1380 Willow Road, Menlo Park, CA 9402528

Item 2(a). Name of Person(s) Filing:

This statement is filed by:

- (i) Oracle Partners, L.P., a Delaware limited partnership ("Partners"), with respect to the shares of the Issuer's common stock, par value \$0.001 per share ("Shares"), directly owned by it;
- (ii) Oracle Institutional Partners, L.P., a Delaware limited partnership ("Institutional Partners"), with respect to the Shares directly owned by it;
- (iii) Oracle Ten Fund Master, LP, a Delaware limited partnership ("Ten Fund" and, together with Partners and Institutional Partners, the "Oracle Partnerships"), with respect to the Shares directly owned by it;
- (iv) Oracle Investment Management, Inc. Employees' Retirement Plan, an employee benefit plan organized in Connecticut (the "Retirement Plan"), with respect to the Shares directly owned by it;
- (v) The Feinberg Family Foundation, a foundation organized in Connecticut (the "Foundation"), with respect to the Shares directly owned by it;
- (vi) Oracle Associates, LLC, a Delaware limited liability company ("Oracle Associates"), which serves as the general partner of the Oracle Partnerships, and may be deemed to indirectly own, by virtue of the foregoing relationship, the Shares directly owned by the Oracle Partnerships;
- (vii) Oracle Investment Management, Inc., a Delaware corporation (the "Investment Manager"), which serves as the investment manager of Ten Fund and the Retirement Plan, and may be deemed to indirectly own the Shares directly owned by each of Ten Fund and the Retirement Plan; and
- (viii) Mr. Larry N. Feinberg ("Mr. Feinberg"), who serves as the managing member of Oracle Associates, as the sole shareholder, director and president of the Investment Manager and as a trustee of the Foundation, and may be deemed to indirectly own, by virtue of the foregoing relationships, the Shares directly owned by the Oracle Partnerships, the Retirement Plan and the Foundation, in addition to the Shares he owns directly.

The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." Any disclosures herein with respect to persons other than the Reporting Persons are made on information and belief after making inquiry to the appropriate party.

Item 2(b). Address of Principal Business Office or, if none, Residence:

The address of the principal business office of the Reporting Persons is 200 Greenwich Avenue, 3rd Floor, Greenwich, Connecticut 06830.

Item 2(c). Citizenship:

Mr. Feinberg is a citizen of the United States of America. See Item 2(a) for the place of organization of the other Reporting Persons.

Item 2(d). Title of Class of Securities:

Common Stock, par value \$0.001

Item 2(e). CUSIP Number:

69404D108

Item 3. If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under Section 15 of the Act.
 - (b) Bank as defined in section 3(a)(6) of the Act.
 - (c) Insurance company as defined in section 3(a)(19) of the Act.
 - (d) Investment company registered under section 8 of the Investment Company Act of 1940.
 - (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
 - (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
 - (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
 - (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
 - (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940.
 - (j) A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J).
 - (k) Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).
- If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please specify the type of institution: ___

Item 4. Ownership:

A. Larry N. Feinberg

- (a) Amount beneficially owned: 4,800,162
- (b) Percent of class: 5.22%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 300,000
 - (ii) Shared power to vote or direct the vote: 4,500,162
 - (iii) Sole power to dispose or direct the disposition: 300,000
 - (iv) Shared power to dispose or direct the disposition: 4,500,162

B. Oracle Partners, L.P.

- (a) Amount beneficially owned: 3,144,738
- (b) Percent of class: 3.42%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 3,144,738
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 3,144,738

C. Oracle Institutional Partners, L.P.

- (a) Amount beneficially owned: 539,100
- (b) Percent of class: 0.59%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 539,100
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 539,100

D. Oracle Ten Fund Master, LP

- (a) Amount beneficially owned: 660,824
- (b) Percent of class: 0.72%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 660,824
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 660,824

E. Oracle Investment Management, Inc. Employees' Retirement Plan

- (a) Amount beneficially owned: 130,000
- (b) Percent of class: 0.14%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 130,000
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 130,000

F. The Feinberg Family Foundation

- (a) Amount beneficially owned: 25,500
- (b) Percent of class: 0.03%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 25,500
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 25,500

G. Oracle Associates, LLC

- (a) Amount beneficially owned: 3,683,838
- (b) Percent of class: 4.01%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 3,683,838
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 3,683,838

H. Oracle Investment Management, Inc.

- (a) Amount beneficially owned: 790,824
- (b) Percent of class: 0.86%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 790,824
 - (iii) Sole power to dispose or direct the disposition: 0
 - (iv) Shared power to dispose or direct the disposition: 790,824

Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the Reporting Person has ceased to be the beneficial owner of more than 5 percent of the class of securities, check the following .

Item 6. Ownership of More than Five Percent on Behalf of Another Person:

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person:

Not applicable.

Item 8. Identification and Classification of Members of the Group:

Not applicable.

Item 9. Notice of Dissolution of Group:

Not applicable.

Item 10. Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: September 15, 2016

ORACLE PARTNERS, L.P.

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Managing Member

ORACLE TEN FUND PARTNERS, LP

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Managing Member

ORACLE INSTITUTIONAL PARTNERS, LP

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Managing Member

ORACLE INVESTMENT MANAGEMENT, INC.
EMPLOYEES' RETIREMENT PLAN

By: /s/ Aileen Wiate
Aileen Wiate, Trustee

THE FEINBERG FAMILY FOUNDATION

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Trustee

ORACLE INVESTMENT MANAGEMENT, INC.

By: /s/ Larry N. Feinberg
Larry N. Feinberg, President

ORACLE ASSOCIATES, LLC

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Manager Member

/s/ Larry N. Feinberg
Larry N. Feinberg, individually

Exhibit Index

99.1 Joint Filing Agreement, dated September 15, 2016, by and among, Larry N. Feinberg, Oracle Partners, L.P., Oracle Ten Fund Partners LP, Oracle Institutional Partners, L.P., Oracle Investment Management, Inc. Employees' Retirement Plan, The Feinberg Family Foundation, Oracle Associates, LLC and Oracle Investment Management, Inc.

SCHEDULE 13G JOINT FILING AGREEMENT

The undersigned hereby agree that this Schedule 13G (as may be amended from time to time, the "Schedule 13G") with respect to the common stock, par value \$0.001 per share, of Pacific Biosciences of California, Inc. is, and any amendment thereto signed by each of the undersigned shall be, filed on behalf of each of the undersigned pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, and that all amendments to the Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the other, except to the extent that it knows or has reason to believe that such information is inaccurate.

Dated: September 15, 2016

ORACLE PARTNERS, L.P.

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Managing Member

ORACLE TEN FUND PARTNERS, LP

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Managing Member

ORACLE INSTITUTIONAL PARTNERS, LP

By: ORACLE ASSOCIATES, LLC, its general partner

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Managing Member

ORACLE INVESTMENT MANAGEMENT, INC.
EMPLOYEES' RETIREMENT PLAN

By: /s/ Aileen Wiate
Aileen Wiate, Trustee

THE FEINBERG FAMILY FOUNDATION

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Trustee

ORACLE INVESTMENT MANAGEMENT, INC.

By: /s/ Larry N. Feinberg
Larry N. Feinberg, President

ORACLE ASSOCIATES, LLC

By: /s/ Larry N. Feinberg
Larry N. Feinberg, Manager Member

/s/ Larry N. Feinberg
Larry N. Feinberg, individually