

SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No. 2)*

Pacific Biosciences of California, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

69404D108

(CUSIP Number)

December 31, 2017

(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 remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

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 ("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).

CUSIP No. 69404D108

13G

1. Names of Reporting Persons
MDV VII, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware, United States of America

5. Sole Voting Power
0 Shares

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

6. Shared Voting Power
5,074,066 Shares of Common Stock (2)

7. Sole Dispositive Power
0 Shares

8. Shared Dispositive Power
5,074,066 Shares of Common Stock (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row 9
4.4% (3)

12. Type of Reporting Person (See Instructions)
PN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

1. Names of Reporting Persons
MDV VII Leaders' Fund, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
Delaware, United States of America

5. Sole Voting Power
0 Shares

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

6. Shared Voting Power
370,333 Shares of Common Stock (2)

7. Sole Dispositive Power
0 Shares

8. Shared Dispositive Power
370,333 Shares of Common Stock (2)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
370,333 Shares of Common Stock (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row 9
0.3% (3)

12. Type of Reporting Person (See Instructions)
PN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. as nominee for MDV VII Leaders' Fund, L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

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1. Names of Reporting Persons

MDV ENF VII(A), L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization

Delaware, United States of America

5. Sole Voting Power

0 Shares

6. Shared Voting Power

101,267 Shares of Common Stock (2)

7. Sole Dispositive Power

0 Shares

8. Shared Dispositive Power

101,267 Shares of Common Stock (2)

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

9. Aggregate Amount Beneficially Owned by Each Reporting Person

101,267 Shares of Common Stock (2)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row 9

0.1% (3)

12. Type of Reporting Person (See Instructions)

PN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. as nominee for MDV ENF VII(A), L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

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1. Names of Reporting Persons

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization

Delaware, United States of America

5. Sole Voting Power
0 Shares6. Shared Voting Power
52,731 Shares of Common Stock (2)7. Sole Dispositive Power
0 Shares8. Shared Dispositive Power
52,731 Shares of Common Stock (2)Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:9. Aggregate Amount Beneficially Owned by Each Reporting Person
52,731 Shares of Common Stock (2)10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) 11. Percent of Class Represented by Amount in Row 9
0.1% (3)12. Type of Reporting Person (See Instructions)
PN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. as nominee for MDV ENF VII(B), L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

1. Names of Reporting Persons
Seventh MDV Partners, L.L.C.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) (b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization

Delaware, United States of America

Number of Shares Beneficially Owned by Each Reporting Person With:	5.	Sole Voting Power 0 Shares
	6.	Shared Voting Power 5,598,397 Shares of Common Stock (2)
	7.	Sole Dispositive Power 0 Shares
	8.	Shared Dispositive Power 5,598,397 Shares of Common Stock (2)
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 5,598,397 Shares of Common Stock (2)	
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="radio"/>	
11.	Percent of Class Represented by Amount in Row 9 4.8% (3)	
12.	Type of Reporting Person (See Instructions) OO	

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. and by MDV VII, L.P. as nominee for MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., and MDV ENF VII(B), L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

1.	Names of Reporting Persons Nancy Schoendorf	
2.	Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a)	<input type="radio"/>
	(b)	<input checked="" type="radio"/> (1)
3.	SEC Use Only	
4.	Citizenship or Place of Organization United States of America	

Number of Shares Beneficially Owned by Each Reporting Person With:	5.	Sole Voting Power 0 Shares
	6.	Shared Voting Power 5,598,397 Shares of Common Stock (2)
	7.	Sole Dispositive Power 0 Shares

8.	Shared Dispositive Power 5,598,397 Shares of Common Stock (2)
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 5,598,397 Shares of Common Stock (2)
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="radio"/>
11.	Percent of Class Represented by Amount in Row 9 4.8% (3)
12.	Type of Reporting Person (See Instructions) IN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. and by MDV VII, L.P. as nominee for MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., and MDV ENF VII(B), L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

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1.	Names of Reporting Persons Jonathan Feiber
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="radio"/> (b) <input checked="" type="radio"/> (1)
3.	SEC Use Only
4.	Citizenship or Place of Organization United States of America
	5. Sole Voting Power 0 Shares
Number of Shares Beneficially Owned by Each Reporting Person With:	6. Shared Voting Power 5,598,397 Shares of Common Stock (2)
	7. Sole Dispositive Power 0 Shares
	8. Shared Dispositive Power 5,598,397 Shares of Common Stock (2)
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 5,598,397 Shares of Common Stock (2)
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) <input type="radio"/>
11.	Percent of Class Represented by Amount in Row 9 4.8% (3)

12. Type of Reporting Person (See Instructions)
IN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Shares directly held by MDV VII, L.P. and by MDV VII, L.P. as nominee for MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., and MDV ENF VII(B), L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.
- (3) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

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1. Names of Reporting Persons
William Ericson

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b) (1)

3. SEC Use Only

4. Citizenship or Place of Organization
United States of America

5. Sole Voting Power
179,166 Shares (2)

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

6. Shared Voting Power
5,598,397 Shares of Common Stock (3)

7. Sole Dispositive Power
179,166 Shares (2)

8. Shared Dispositive Power
5,598,397 Shares of Common Stock (3)

9. Aggregate Amount Beneficially Owned by Each Reporting Person
5,777,563 Shares of Common Stock (2)(3)

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row 9
5.0% (4)

12. Type of Reporting Person (See Instructions)
IN

- (1) This Schedule 13G is filed by MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., MDV ENF VII(B), L.P. (collectively, "MDV"), Seventh MDV Partners, L.L.C. ("Seventh"), William Ericson, Nancy Schoendorf and Jonathan Feiber (collectively, the "Fund Entities"). The Fund Entities expressly disclaim status as a "group" for purposes of this Schedule 13G.
- (2) Includes options issued to William Ericson to purchase 187,500 shares of Common Stock of which 179,166 shares have vested or will become vested in 90 days.
- (3) Shares directly held by MDV VII, L.P. and by MDV VII, L.P. as nominee for MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., and MDV ENF VII(B), L.P. William Ericson, Nancy Schoendorf and Jonathan Feiber are managing members of Seventh, the general partner of MDV. Each

of William Ericson, Nancy Schoendorf, Jonathan Feiber and Seventh may be deemed to share voting and dispositive power over the shares held by MDV.

(4) This percentage is calculated based on 116,249,978 shares of the Issuer's stock outstanding (as of October 31, 2017), as set forth in the Issuer's most recent 10-Q, filed with the Securities and Exchange Commission on November 2, 2017.

Introductory Note: This Statement on Schedule 13G is filed on behalf of 1) MDV VII, L.P., a limited partnership organized under the laws of the State of Delaware; 2) MDV VII Leaders' Fund, L.P., a limited partnership organized under the laws of the State of Delaware; 3) MDV ENF VII(A), L.P., a limited partnership organized under the laws of the State of Delaware; 4) MDV ENF VII(B), L.P. (together with MDV VII, L.P., MDV VII Leaders' Fund, L.P., and MDV ENF VII(A), L.P., "MDV"), a limited partnership organized under the laws of the State of Delaware; 5) Seventh MDV Partners, L.L.C. ("Seventh"), a limited liability company organized under the laws of the State of Delaware and the General Partner of MDV; 6) Nancy Schoendorf, a managing member of Seventh; 7) William Ericson, a managing member of Seventh; and 8) Jonathan Feiber, a managing member of Seventh; in respect of shares of Common Stock of Pacific Biosciences of California, Inc.

Item 1(a).	Name of Issuer: Pacific Biosciences of California, Inc.
Item 1(b).	Address of Issuer's Principal Executive Offices: 1380 Willow Road, Menlo Park, CA 94025
Item 2(a).	Name of Person Filing: MDV VII, L.P. MDV VII Leaders' Fund, L.P. MDV ENF VII(A), L.P. MDV ENF VII(B), L.P. Seventh MDV Partners, L.L.C. Nancy Schoendorf Jonathan Feiber William Ericson
Item 2(b).	Address of Principal Business Office or, if none, Residence: 777 Mariners Island Blvd., Suite 550, San Mateo, CA 94404
Item 2(c).	Citizenship: All entities were organized in Delaware. The individuals are all United States citizens.
Item 2(d).	Title of Class of Securities: Common Stock
Item 2(e).	CUSIP Number: 69404D108
Item 3.	If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a: Not applicable.

Item 4. Ownership

Fund Entities	Shares Held Directly	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (2)
MDV VII, L.P.	5,074,066	0	5,074,066	0	5,074,066	5,074,066	4.4%
MDV VII Leaders' Fund, L.P.	370,333	0	370,333	0	370,333	370,333	0.3%
MDV ENF VII(A), L.P.	101,267	0	101,267	0	101,267	101,267	0.1%
MDV ENF VII(B), L.P.	52,731	0	52,731	0	52,731	52,731	0.1%
Seventh MDV Partners, L.L.C. (1)	0	0	5,598,397	0	5,598,397	5,598,397	4.8%
Nancy Schoendorf (1)	0	0	5,598,397	0	5,598,397	5,598,397	4.8%
Jonathan Feiber (1)	0	0	5,598,397	0	5,598,397	5,598,397	4.8%
William Ericson (1)	0	179,166	5,7598,397	179,166	5,598,397	5,777,563	5.0%

(1) Seventh MDV Partners, L.L.C. serves as the general partner of MDV VII, L.P., MDV VII Leaders' Fund, L.P., MDV ENF VII(A), L.P., and MDV ENF VII(B), L.P. and owns no securities of the Issuer directly. William Ericson, Nancy Schoendorf and Jonathan Feiber serve as managing members of Seventh MDV Partners, L.L.C. and own no securities of the Issuer directly.

