

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No ___)

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(Name of Issuer)

Common Stock, \$0.0001 par value

(Title of Class of Securities)

69404D108

(CUSIP Number)

December 31, 2010

(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 (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).

CUSIP No. 69404D108

SCHEDULE 13G

Page 2 of 10 Pages

1 Names of Reporting Persons

Maverick Capital, Ltd. - 75-2482446

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

3 SEC Use Only

4 Citizenship or Place of Organization

Texas

	5	Sole Voting Power
		3,543,333
Number of Shares Beneficially Owned by Each Reporting Person With	6	Shared Voting Power
		0
	7	Sole Dispositive Power
		3,543,333
	8	Shared Dispositive Power
		0

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,543,333

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

11 Percent of Class Represented in Amount in Row 9
6.7%

12 Type of Reporting Person (See Instructions)
IA

CUSIP No. 69404D108

SCHEDULE 13G

Page 3 of 10 Pages

1 Names of Reporting Persons

Maverick Capital Management, LLC - 75-2686461

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

3 SEC Use Only

4 Citizenship or Place of Organization

Texas

	5	Sole Voting Power
		3,543,333
Number of Shares Beneficially Owned by Each Reporting Person With	6	Shared Voting Power
		0
	7	Sole Dispositive Power
		3,543,333
	8	Shared Dispositive Power
		0

9 Aggregate Amount Beneficially Owned by Each Reporting Person

3,543,333

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

11 Percent of Class Represented in Amount in Row 9
6.7%

12 Type of Reporting Person (See Instructions)
HC

CUSIP No. 69404D108

SCHEDULE 13G

Page 4 of 10 Pages

1 Names of Reporting Persons

Lee S. Ainslie III

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

3 SEC Use Only

4 Citizenship or Place of Organization

United States

	5	Sole Voting Power
		3,543,333
Number of Shares Beneficially Owned by Each Reporting Person With	6	Shared Voting Power
		0
	7	Sole Dispositive Power
		3,543,333
	8	Shared Dispositive Power
		0

9 Aggregate Amount Beneficially Owned by Each Reporting Person
3,543,333

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

11 Percent of Class Represented in Amount in Row 9
6.7%

12 Type of Reporting Person (See Instructions)
HC

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, California 94025

Item 2(a) Name of Person Filing:

This Schedule 13G (the "Schedule 13G") is being filed on behalf of each of the following persons (each, a "Reporting Person"):

- (i) Maverick Capital, Ltd.;
- (ii) Maverick Capital Management, LLC; and
- (iii) Lee S. Ainslie III ("Mr. Ainslie").

The Schedule 13G relates to Shares (as defined herein) held for the accounts of Maverick Capital, Ltd.'s clients.

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

The address of the principal business office of (i) Maverick Capital, Ltd. and Maverick Capital Management, LLC is 300 Crescent Court, 18th Floor, Dallas, Texas 75201, and (ii) Mr. Ainslie is 767 Fifth Avenue, 11th Floor, New York, New York 10153.

Item 2(c) Citizenship:

- (i) Maverick Capital, Ltd. is a Texas limited partnership;
- (ii) Maverick Capital Management, LLC is a Texas limited liability company; and
- (iii) Mr. Ainslie is a citizen of the United States.

Item 2(d) Title of Class of Securities:

Common Stock, \$0.0001 par value (the "Shares").

Item 2(e) CUSIP Number:

69404D108

Item 3. If this statement is filed pursuant to ss.ss.240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).

Page 5 of 10 Pages

- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).

- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

- (e) An investment advisor in accordance with ss.240.13d-1(b)(1)(ii)(E).

- (f) An employee benefit plan or endowment fund in accordance with ss.240.13d-1(b)(1)(ii)(F).

- (g) A parent holding company or control person in accordance with ss.240.13d-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 (15 U.S.C. 80a-3).

(j) A non-U.S. institution in accordance with ss. 240.13d-1(b)(1)(ii)(J);

(k) Group, in accordance with ss. 240.13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with ss.240.13d-1(b)(1)(ii)(J), please specify the type of institution: _____

Item 4 Ownership

Ownership as of December 31, 2010 is incorporated by reference to items (5) - (9) and (11) of the cover page of the Reporting Person.

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 which are the subject of this filing through the investment discretion it exercises over its clients' accounts. Maverick Capital Management, LLC is the General Partner of Maverick Capital, Ltd. Mr. Ainslie is the manager of Maverick Capital Management, LLC and is granted sole investment discretion pursuant to Maverick Capital Management, LLC's Regulations.

Item 5 Ownership of Five Percent or Less of a Class

Not applicable.

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

Not applicable.

Page 6 of 10 Pages

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 Certifications

By signing below each of the Reporting Persons certifies that, to the best of such person's knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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.

Page 7 of 10 Pages

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.

Date: February 14, 2011

MAVERICK CAPITAL, LTD.

By: Maverick Capital Management, LLC,
Its General Partner

By: Lee S. Ainslie III, Manager

By: /s/ John T. McCafferty

John T. McCafferty
Under Power of Attorney dated
February 13, 2003

Date: February 14, 2011

MAVERICK CAPITAL MANAGEMENT, LLC

By: Lee S. Ainslie III, Manager

By: /s/ John T. McCafferty

John T. McCafferty
Under Power of Attorney dated
February 13, 2003

Date: February 14, 2011

LEE S. AINSLIE III

By: /s/ John T. McCafferty

John T. McCafferty
Under Power of Attorney dated
February 13, 2003

Page 8 of 10 Pages

EXHIBIT INDEX

- A. Joint Filing Agreement, dated February 14, 2011, by and among Maverick Capital, Ltd., Maverick Capital Management, LLC, and Lee S. Ainslie III.

Page 9 of 10 Pages

Exhibit A

Joint Filing Agreement

The undersigned hereby agree that the statement on Schedule 13G with

respect to the Common Stock, \$0.0001 par value of Pacific Biosciences of California, Inc., dated as of February 14, 2011, is, and any amendments thereto (including amendments on Schedule 13D) signed by each of the undersigned shall be, filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934.

Date: February 14, 2011

MAVERICK CAPITAL, LTD.

By: Maverick Capital Management, LLC
Its General Partner

By: Lee S. Ainslie III, Manager

By: /s/ John T. McCafferty

John T. McCafferty
Under Power of Attorney dated
February 13, 2003

MAVERICK CAPITAL MANAGEMENT, LLC

By: Lee S. Ainslie III, Manager

By: /s/ John T. McCafferty

John T. McCafferty
Under Power of Attorney dated
February 13, 2003

LEE S. AINSLIE III

By: /s/ John T. McCafferty

John T. McCafferty
Under Power of Attorney dated
February 13, 2003