As filed with the Securities and Exchange Commission on October 18, 2010

Registration No. 333-168858

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 4 TO
FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Pacific Biosciences of California, Inc.

(Exact name of Registrant as specified in its charter)

Delaware	3826	16-1590339
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(I.R.S. Employer Identification Number)*

1380 Willow Road
Menlo Park, CA 94025
(650) 521-8000

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Hugh C. Martin
Chief Executive Officer
1380 Willow Road
Menlo Park, CA 94025
(650) 521-8000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Larry W. Sonsini **Donna M. Petkanics** **Wilson Sonsini Goodrich & Rosati, P.C.** **650 Page Mill Road** **Palo Alto, California 94304** **(650) 493-9300**	**Matthew B. Murphy** **Vice President and General Counsel** **1380 Willow Road** **Menlo Park, CA 94025** **(650) 521-8000**	**Alan F. Denenberg** **Davis Polk & Wardwell LLP** **1600 El Camino Real** **Menlo Park, CA 94025** **(650) 752-2000**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box: ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐ _____

If this Form is a post effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐ _____

If this Form is a post effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐ _____

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

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☒ (Do not check if a smaller reporting company)	Smaller reporting company ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price[1]	Amount of Registration Fee[2]
Common Stock, par value $0.001 par share	$17.00	$230,000,000	$16,399.00

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended. Includes offering price of shares that the underwriters have the option to purchase to cover over-allotments.

(2) The Registrant previously paid this registration fee in connection with the previous filings of this Registration Statement.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 4 to the Registration Statement on Form S-1 (File No. 333-168858) is solely to file Exhibits 3.3, 3.5, 10.7, 10.8 and 10.10. Accordingly, a preliminary prospectus has been omitted.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other expenses of issuance and distribution.

Estimated expenses, other than underwriting discounts and commissions, payable by the Registrant in connection with the sale of the common stock being registered under this registration statement are as follows:

SEC registration fee	$ 16,399
FINRA filing fee	23,500
Listing fee	275,000
Printing and engraving expenses	200,000
Legal fees and expenses	1,500,000
Accounting fees and expenses	950,000
Blue Sky fees and expenses (including legal fees)	25,000
Transfer agent and registrar fees and expenses	30,000
Miscellaneous	480,101
Total	$3,500,000

Item 14. Indemnification of directors and officers.

Upon the closing of this offering, the Registrant's amended and restated certificate of incorporation will contain provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of the Registrant's directors and executive officers for monetary damages for breach of their fiduciary duties as directors or officers. The Registrant's amended and restated certificate of incorporation and bylaws will provide that the Registrant must indemnify its directors and executive officers and may indemnify its employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, executive officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

The Registrant intends to enter into indemnification agreements with its directors and executive officers, in addition to the indemnification provided for in its amended and restated certificate of incorporation and bylaws, and intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Registrant has purchased and intends to maintain insurance on behalf of each and any person who is or was a director or officer of the Registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The Underwriting Agreement, to be attached as Exhibit 1.1, provides for indemnification by the underwriters of the Registrant and its executive officers and directors, and by the Registrant of the underwriters, for certain liabilities, including liabilities arising under the Securities Act.

See also the undertakings set out in response to Item 17 herein.

Item 15. Recent sales of unregistered securities.

During the last three years, we sold the following unregistered securities:

(1) From January 1, 2007 through July 31, 2010, we sold and issued to our employees, consultants or former service providers an aggregate of 60,364 shares of common stock pursuant to option exercises under the 2004 Equity Incentive Plan, as amended, at prices ranging from $0.20 to $0.26 per share for an aggregate purchase price of $14,473.

(2) From January 1, 2007 through July 31, 2010, we sold and issued to our employees, consultants or former service providers an aggregate of 944,451 shares of common stock pursuant to option exercises under the 2005 Stock Plan, as amended, at prices ranging from $0.70 to $12.74 per share for an aggregate purchase price of $2,345,980.

(3) From January 1, 2007 through July 31, 2010, we granted options under our 2005 Stock Plan, as amended, to purchase 9,384,851 shares of common stock to our employees, directors and consultants, having exercise prices ranging from $1.96 to $12.74 per share for an aggregate exercise price of $56,242,373.

(4) Between July 2008 and July 2009, we sold and issued 13,433,395 shares of Series E convertible preferred stock to 63 accredited investors, at $14.00 per share, for a total consideration of $188,067,530.

(5) Between June and July 2010, we sold and issued 7,132,891 shares of Series F convertible preferred stock to 19 accredited investors, at $15.26 per share, for a total consideration of $108,847,917.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering, and the registrant believes that each transaction was exempt from the registration requirements of the Securities Act in reliance on the following exemptions:

- with respect to the transactions described in paragraphs (1), (2) and (3), Rule 701 promulgated under the Securities Act as transactions pursuant to a compensatory benefit plan approved by the registrant's board of directors or Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering; and
- with respect to the transactions described in paragraph (4), Section 4(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder, and with respect to the transactions described in paragraph (5), Section 4(2) of the Securities Act, in each case as transactions by an issuer not involving a public offering. Each recipient of the securities in these transactions represented his or her intention to acquire the securities for investment only and not with a view to, or for resale in connection with, any distribution thereof, and appropriate legends were affixed to the share certificates issued in each such transaction. In each case, the recipient received adequate information about the registrant or had adequate access, through his or her relationship with the registrant, to information about the registrant.

There were no underwriters employed in connection with any of the transactions set forth in Item 15.

Item 16. Exhibits and financial statement schedules.

(a) Exhibits:

Exhibit number	Exhibit title
1.1*	Form of Underwriting Agreement
3.1#	Amended and Restated Certificate of Incorporation of the Registrant
3.2#	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Registrant
3.3	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be effective upon closing of the offering
3.4#	Amended and Restated Bylaws of the Registrant, as currently in effect
3.5	Form of Amended and Restated Bylaws of the Registrant, to be effective upon closing of the offering
4.1#	Specimen Common Stock Certificate of the Registrant
4.2#	Fifth Amended and Restated Investor Rights Agreement, dated June 16, 2010
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
10.1#	Form of Director and Executive Officer Indemnification Agreement
10.2#	2004 Equity Incentive Plan and forms of option agreements thereunder
10.3#	2005 Stock Plan and forms of option agreements thereunder
10.4#	2010 Equity Incentive Plan and forms of option agreements thereunder to be in effect upon the closing of this offering
10.5#	2010 Employee Stock Purchase Plan and forms of agreement thereunder to be in effect upon the closing of this offering
10.6#	2010 Outside Director Equity Incentive Plan and forms of agreement thereunder to be in effect upon the closing of this offering
10.7†	Collaboration Agreement by and between the Registrant and Gen-Probe Incorporated, dated as of June 15, 2010
10.8†	Exclusive License Agreement by and between the Registrant and Cornell Research Foundation, Inc., dated as of February 1, 2004
10.9†#	License Agreement by and between the Registrant and GE Healthcare Bio-Sciences Corp., dated as of September 11, 2006
10.10†	Exclusive License Agreement by and between the Registrant and Indiana University Research and Technology Corporation, dated May 15, 2005
10.11#	Amended and Restated Lease Agreement by and between the Registrant and Menlo Business Park, LLC, dated as of December 17, 2007
10.12#	Lease Agreement by and between the Registrant and Menlo Business Park LLC, dated August 14, 2009
10.13#	Industrial Lease Agreement by and between the Registrant and AMB Property, L.P., dated December 10, 2009
10.14#	Industrial Lease Agreement by and between the Registrant and AMB Property, L.P., dated September 24, 2009
10.15#	First Amendment to the September 24, 2009 Industrial Lease Agreement by and between the Registrant and AMB Property, L.P., dated as of May 19, 2010

Exhibit number	Exhibit title
10.16#	Industrial Lease Agreement by and between the Registrant and AMB Property, L.P., dated February 8, 2010
10.17#	Employment Agreement by and between the registrant and Hugh Martin effective September 16, 2010
10.18#	Change in Control Severance Agreement by and between the registrant and Hugh Martin effective September 16, 2010
10.19#	Letter Relating to Employment Terms by and between the registrant and Susan K. Barnes effective September 15, 2010
10.20#	Change in Control Severance Agreement by and between the registrant and Susan K. Barnes effective September 9, 2010
10.21#	Letter Relating to Employment Terms by and between the registrant and Stephen Turner effective September 15, 2010
10.22#	Change in Control Severance Agreement by and between the registrant and Stephen Turner effective September 9, 2010
10.23#	Letter Relating to Employment Terms by and between the registrant and James Michael Phillips effective September 15, 2010
10.24#	Change in Control Severance Agreement by and between the registrant and James Michael Phillips effective September 9, 2010
21.1#	List of subsidiaries of the Registrant
23.1#	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
23.2*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1)
23.3#	Consent of Scientia Advisors LLC
24.1#	Power of Attorney

* To be filed by amendment.
\# Previously filed.

† Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from this Registration Statement and have been filed separately with the Securities and Exchange Commission.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, 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 of 1933, as amended, and will be governed by the final adjudication of such issue.

We hereby undertake that:

(a) We will provide to the underwriters at the closing as specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) For purposes of determining any liability under the Securities Act of 1933, as amended, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933, as amended, shall be deemed to be part of this registration statement as of the time it was declared effective.

(c) For the purpose of determining any liability under the Securities Act of 1933, as amended, each post-effective amendment that contains a form of prospectus 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.

Signatures

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this amendment to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Menlo Park, State of California, on October 18, 2010.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

By: /S/ SUSAN K. BARNES
Susan K. Barnes
Senior Vice President and Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated below:

Signature	Title	Date
*	Chairman, Chief Executive Officer and President	October 18, 2010
Hugh C. Martin		
/S/ SUSAN K. BARNES	Senior Vice President and	October 18, 2010
Susan K. Barnes	Chief Financial Officer	
*	Vice President and	October 18, 2010
Brian B. Dow	Principal Accounting Officer	
*	Director	October 18, 2010
Brook Byers		
*	Director	October 18, 2010
William W. Ericson		
*	Director	October 18, 2010
Michael Hunkapiller		
*	Director	October 18, 2010
Randall S. Livingston		
*	Director	October 18, 2010
Susan Siegel		
*	Director	October 18, 2010
David B. Singer		

*By: /S/ SUSAN K. BARNES
Susan K. Barnes
Attorney in Fact

Exhibit Index

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\# Previously filed.

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Exhibit 3.3

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

a Delaware corporation

Pacific Biosciences, Inc., a corporation organized and existing under the laws of the State of Delaware (the "**Corporation**"), hereby certifies as follows:

A. The name of the Corporation is Pacific Biosciences of California, Inc. The Corporation's original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on July 14, 2000.

B. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware (the "**DGCL**"), and restates, integrates and further amends the provisions of the Corporation's Twelfth Amended and Restated Certificate of Incorporation, and has been duly approved by the written consent of the stockholders of the corporation in accordance with Section 228 of the DGCL.

C. The text of the Amended and Restated Certificate of Incorporation of this Corporation is hereby amended and restated to read in its entirety as follows:

ARTICLE I

The name of the corporation is Pacific Biosciences of California, Inc.

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is 3500 South DuPont Highway, City of Dover, County of Kent, Delaware 19901. The name of its registered agent at such address is Incorporating Services, Ltd.

ARTICLE III

The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the DGCL.

ARTICLE IV

4.1 Authorized Capital Stock. The total number of shares of all classes of capital stock which the corporation is authorized to issue is 1,050,000,000 shares, consisting of 1,000,000,000 shares of Common Stock, par value $0.001 per share (the "**Common Stock**"), and 50,000,000 shares of Preferred Stock, par value $0.001 per share (the "**Preferred Stock**").

4.2 Increase or Decrease in Authorized Capital Stock. The number of authorized shares of Preferred Stock or Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority in voting power of the stock of the corporation entitled to vote generally in the election of directors, irrespective of the provisions of Section 242(b)(2) of the DGCL (or any successor provision thereto), voting together as a single class, without a separate vote of the holders of the class or classes the number of authorized shares of which are being increased or decreased, unless a vote by any holders of one or more series of Preferred Stock is required by the express terms of any series of Preferred Stock as provided for or fixed pursuant to the provisions of Section 4.4 of this Article IV.

4.3 Common Stock.

(a) The holders of shares of Common Stock shall be entitled to one vote for each such share on each matter properly submitted to the stockholders on which the holders of shares of Common Stock are entitled to vote. Except as otherwise required by law or this certificate of incorporation (this "**Certificate of Incorporation**" which term, as used herein, shall mean the certificate of incorporation of the corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock), and subject to the rights of the holders of Preferred Stock, at any annual or special meeting of the stockholders the holders of shares of Common Stock shall have the right to vote for the election of directors and on all other matters properly submitted to a vote of the stockholders; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation that relates solely to the terms, number of shares, powers, designations, preferences, or relative participating, optional or other special rights (including, without limitation, voting rights), or to qualifications, limitations or restrictions thereon, of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one more other such series, to vote thereon pursuant to this Certificate of Incorporation (including, without limitation, by any certificate of designations relating to any series of Preferred Stock) or pursuant to the DGCL.

(b) Subject to the rights of the holders of Preferred Stock, the holders of shares of Common Stock shall be entitled to receive such dividends and other distributions (payable in cash, property or capital stock of the corporation) when, as and if declared thereon by the Board of Directors from time to time out of any assets or funds of the corporation legally available therefor and shall share equally on a per share basis in such dividends and distributions.

(c) In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the corporation, after payment or provision for payment of the debts and other liabilities of the corporation, and subject to the rights of the holders of Preferred Stock in respect thereof, the holders of shares of Common Stock shall be entitled to receive all the remaining assets of the corporation available for distribution to its stockholders, ratably in proportion to the number of shares of Common Stock held by them.

4.4 Preferred Stock.

(a) The Preferred Stock may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized, subject to limitations prescribed by law, to fix by resolution or resolutions and to set forth in a certification of designations filed pursuant to the DGCL the powers, designations, preferences and relative, participation, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, of any wholly unissued series of Preferred Stock, including without limitation dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of any such series, and the number of shares constituting any such series and the designation thereof, or any of the foregoing.

(b) The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in the Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

ARTICLE V

5.1 General Powers. The business and affairs of the corporation shall be managed by or under the direction of the Board of Directors.

5.2 Number of Directors; Election; Term.

(a) Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, the number of directors that constitutes the entire Board of Directors of the corporation shall be fixed solely by resolution of the Board of Directors.

(b) Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, effective upon the closing date (the "**Effective Date**") of the initial sale of shares of common stock in the corporation's initial public offering pursuant to an effective registration statement filed under the Securities Act of 1933, as amended, the directors of the corporation shall be divided into three classes as nearly equal in size as is practicable, hereby designated Class I, Class II and Class III. The initial assignment of members of the Board of Directors to each such class shall be made by the Board of Directors. The term of office of the initial Class I directors shall expire at the first regularly-scheduled annual meeting of the stockholders following the Effective Date, the term of office of the initial Class II directors shall expire at the second annual meeting of the stockholders following the Effective Date and the term of office of the initial Class III directors shall expire at the third annual meeting of the stockholders following the Effective Date. At each annual meeting of stockholders, commencing with the first regularly-scheduled annual meeting of stockholders following the Effective Date, each of the successors

elected to replace the directors of a Class whose term shall have expired at such annual meeting shall be elected to hold office until the third annual meeting next succeeding his or her election and until his or her respective successor shall have been duly elected and qualified. Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, if the number of directors that constitutes the Board of Directors is changed, any newly created directorships or decrease in directorships shall be so apportioned by the Board of Directors among the classes as to make all classes as nearly equal in number as is practicable, provided that no decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

(c) Notwithstanding the foregoing provisions of this Section 5.1, and subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation, or removal.

(d) Elections of directors need not be by written ballot unless the Bylaws of the corporation shall so provide.

5.3 Removal. Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, a director may be removed from office by the stockholders of the corporation only for cause.

5.4 Vacancies and Newly Created Directorships. Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, and except as otherwise provided in the DGCL, vacancies occurring on the Board of Directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of the Board of Directors, although less than a quorum, or by a sole remaining director, at any meeting of the Board of Directors. A person so elected by the Board of Directors to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been assigned by the Board of Directors and until his or her successor shall be duly elected and qualified.

ARTICLE VI

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the corporation is expressly authorized to adopt, amend or repeal the Bylaws of the corporation.

ARTICLE VII

7.1 No Action by Written Consent of Stockholders. Except as otherwise expressly provided by the terms of any series of Preferred Stock permitting the holders of such series of Preferred Stock to act by written consent, any action required or permitted to be taken by stockholders of the corporation must be effected at a duly called annual or special meeting of the stockholders and may not be effected by written consent in lieu of a meeting.

7.2 Special Meetings. Except as otherwise expressly provided by the terms of any series of Preferred Stock permitting the holders of such series of Preferred Stock to call a special meeting of the holders of such series, special meetings of stockholders of the corporation may be called only by the Board of Directors, the chairperson of the Board of Directors, the chief executive officer or the president (in the absence of a chief executive officer), and the ability of the stockholders to call a special meeting is hereby specifically denied. The Board of Directors may cancel, postpone or reschedule any previously scheduled special meeting at any time, before or after the notice for such meeting has been sent to the stockholders.

7.3 Advance Notice. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the corporation shall be given in the manner provided in the Bylaws of the corporation.

ARTICLE VIII

8.1 Limitation of Personal Liability. To the fullest extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended. Any repeal or amendment of this Section 8.1 by the stockholders of the corporation or by changes in law, or the adoption of any other provision of this Certificate of Incorporation inconsistent with this Section 8.1 will, unless otherwise required by law, be prospective only (except to the extent such amendment or change in law permits the corporation to further limit or eliminate the liability of directors) and shall not adversely affect any right or protection of a director of the corporation existing at the time of such repeal or amendment or adoption of such inconsistent provision with respect to acts or omissions occurring prior to such repeal or amendment or adoption of such inconsistent provision.

8.2 Indemnification. To the fullest extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, the corporation is also authorized to provide indemnification of (and advancement of expenses to) its directors, officers and agents of the corporation (and any other persons to which the DGCL permits the corporation to provide indemnification) through bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise.

ARTICLE IX

The corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation (including any rights, preferences or other designations of Preferred Stock), in the manner now or hereafter prescribed by this Certificate of Incorporation and the DGCL; and all rights, preferences and privileges herein conferred upon stockholders by and pursuant to this Certificate of Incorporation in its present form or as hereafter amended are granted subject to the right reserved in this Article IX.

IN WITNESS WHEREOF, Pacific Biosciences of California, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by a duly authorized officer of the Corporation on this __ day of _____, 20__.

By: _____
Hugh Martin
Chief Executive Officer

Exhibit 3.5

AMENDED AND RESTATED BYLAWS OF PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(initially adopted on August 29, 2000)

(as amended on [*bylaw amendment date*] effective as of the closing of the corporation's initial public offering)

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BYLAWS OF PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

ARTICLE I - CORPORATE OFFICES

1.1 REGISTERED OFFICE

The registered office of Pacific Biosciences of California, Inc. shall be fixed in the corporation's certificate of incorporation, as the same may be amended from time to time.

1.2 OTHER OFFICES

The corporation's board of directors may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II - MEETINGS OF STOCKHOLDERS

2.1 PLACE OF MEETINGS

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the board of directors. The board of directors may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the Delaware General Corporation Law (the "**DGCL**"). In the absence of any such designation or determination, stockholders' meetings shall be held at the corporation's principal executive office.

2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held on such date, at such time, and at such place (if any) within or without the State of Delaware as shall be designated from time to time by the board of directors and stated in the corporation's notice of the meeting. At the annual meeting, directors shall be elected and any other proper business may be transacted.

2.3 SPECIAL MEETING

(i) A special meeting of the stockholders, other than those required by statute, may be called at any time by the board of directors, chairperson of the board of directors, chief executive officer or president (in the absence of a chief executive officer), but a special meeting may not be called by any other person or persons. The board of directors may cancel, postpone or reschedule any previously scheduled special meeting at any time, before or after the notice for such meeting has been sent to the stockholders.

(ii) The notice of a special meeting shall include the purpose for which the meeting is called. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting by or at the direction of the board of directors, chairperson of the board of directors, chief executive officer or president (in the absence of a chief executive officer). Nothing contained in this Section **2.3(ii)** shall be

construed as limiting, fixing or affecting the time when a meeting of stockholders called by action of the board of directors may be held.

2.4 ADVANCE NOTICE PROCEDURES

(i) *Advance Notice of Stockholder Business.* At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be brought: (A) pursuant to the corporation's proxy materials with respect to such meeting, (B) by or at the direction of the board of directors, or (C) by a stockholder of the corporation who (1) is a stockholder of record at the time of the giving of the notice required by this Section 2.4(i), on the record date for the determination of stockholders entitled to notice of the annual meeting and on the record date for the determination of stockholders entitled to vote at the annual meeting and (2) has timely complied in proper written form with the notice procedures set forth in this Section 2.4(i). In addition, for business to be properly brought before an annual meeting by a stockholder, such business must be a proper matter for stockholder action pursuant to these bylaws and applicable law. Except for proposals properly made in accordance with Rule 14a-8 under the Securities and Exchange Act of 1934, as amended, and the rules and regulations thereunder, and included in the notice of meeting given by or at the direction of the board of directors, for the avoidance of doubt, clause (C) above shall be the exclusive means for a stockholder to bring business before an annual meeting of stockholders.

(a) To comply with clause (C) of Section 2.4(i) above, a stockholder's notice must set forth all information required under this Section 2.4(i) and must be timely received by the secretary of the corporation. To be timely, a stockholder's notice must be received by the secretary at the principal executive offices of the corporation not later than the 90th day nor earlier than the 120th day before the one-year anniversary of the date on which the corporation first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the preceding year's annual meeting; *provided*, *however*, that in the event that no annual meeting was held in the previous year or if the date of the annual meeting is advanced by more than 30 days prior to or delayed by more than 60 days after the one-year anniversary of the date of the previous year's annual meeting, then, for notice by the stockholder to be timely, it must be so received by the secretary not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of (i) the 90th day prior to such annual meeting, or (ii) the tenth day following the day on which Public Announcement (as defined below) of the date of such annual meeting is first made. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described in this Section 2.4(i)(a). "**Public Announcement**" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or any successor thereto (the "**1934 Act**").

(b) To be in proper written form, a stockholder's notice to the secretary must set forth as to each matter of business the stockholder intends to bring before the annual meeting: (1) a brief description of the business intended to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (2) the name and address, as they appear on the corporation's books, of the stockholder proposing such business and any Stockholder Associated Person (as defined below), (3) the class and number of shares of the corporation that are held of record or are beneficially owned by the stockholder or any Stockholder Associated Person and any derivative positions held or beneficially held by the stockholder or any

Stockholder Associated Person, (4) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit from share price changes for, or to increase or decrease the voting power of, such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, (5) any material interest of the stockholder or a Stockholder Associated Person in such business, and (6) a statement whether either such stockholder or any Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of at least the percentage of the corporation's voting shares required under applicable law to carry the proposal (such information provided and statements made as required by clauses (1) through (6), a "**Business Solicitation Statement**"). In addition, to be in proper written form, a stockholder's notice to the secretary must be supplemented not later than ten days following the record date for the determination of stockholders entitled to notice of the meeting to disclose the information contained in clauses (3) and (4) above as of the record date. For purposes of this Section 2.4, a "**Stockholder Associated Person**" of any stockholder shall mean (i) any person controlling, directly or indirectly, or acting in concert with, such stockholder, (ii) any beneficial owner of shares of stock of the corporation owned of record or beneficially by such stockholder and on whose behalf the proposal or nomination, as the case may be, is being made, or (iii) any person controlling, controlled by or under common control with such person referred to in the preceding clauses (i) and (ii).

(c) Without exception, no business shall be conducted at any annual meeting except in accordance with the provisions set forth in this Section 2.4(i) and, if applicable, Section 2.4(ii). In addition, business proposed to be brought by a stockholder may not be brought before the annual meeting if such stockholder or a Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Business Solicitation Statement applicable to such business or if the Business Solicitation Statement applicable to such business contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the annual meeting that business was not properly brought before the annual meeting and in accordance with the provisions of this Section 2.4(i), and, if the chairperson should so determine, he or she shall so declare at the annual meeting that any such business not properly brought before the annual meeting shall not be conducted.

(ii) *Advance Notice of Director Nominations at Annual Meetings.* Notwithstanding anything in these bylaws to the contrary, only persons who are nominated in accordance with the procedures set forth in this Section 2.4(ii) shall be eligible for election or re-election as directors at an annual meeting of stockholders. Nominations of persons for election to the board of directors of the corporation shall be made at an annual meeting of stockholders only (A) by or at the direction of the board of directors or (B) by a stockholder of the corporation who (1) was a stockholder of record at the time of the giving of the notice required by this Section 2.4(ii), on the record date for the determination of stockholders entitled to notice of the annual meeting and on the record date for the determination of stockholders entitled to vote at the annual meeting and (2) has complied with the notice procedures set forth in this Section 2.4(ii). In addition to any other applicable requirements, for a nomination to be made by a stockholder, the stockholder must have given timely notice thereof in proper written form to the secretary of the corporation.

(a) To comply with clause (B) of Section 2.4(ii) above, a nomination to be made by a stockholder must set forth all information required under this Section 2.4(ii) and must be received by the secretary

of the corporation at the principal executive offices of the corporation at the time set forth in, and in accordance with, the final three sentences of Section 2.4(i)(a) above.

(b) To be in proper written form, such stockholder's notice to the secretary must set forth:

(1) as to each person (a "**nominee**") whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of the nominee, (B) the principal occupation or employment of the nominee, (C) the class and number of shares of the corporation that are held of record or are beneficially owned by the nominee and any derivative positions held or beneficially held by the nominee, (D) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of the nominee with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit of share price changes for, or to increase or decrease the voting power of the nominee, (E) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, (F) a written statement executed by the nominee acknowledging that as a director of the corporation, the nominee will owe a fiduciary duty under Delaware law with respect to the corporation and its stockholders, and (G) any other information relating to the nominee that would be required to be disclosed about such nominee if proxies were being solicited for the election of the nominee as a director, or that is otherwise required, in each case pursuant to Regulation 14A under the 1934 Act (including without limitation the nominee's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected); and

(2) as to such stockholder giving notice, (A) the information required to be provided pursuant to clauses (2) through (5) of Section 2.4(i)(b) above, and the supplement referenced in the second sentence of Section 2.4(i)(b) above (except that the references to "business" in such clauses shall instead refer to nominations of directors for purposes of this paragraph), and (B) a statement whether either such stockholder or Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of a number of the corporation's voting shares reasonably believed by such stockholder or Stockholder Associated Person to be necessary to elect such nominee(s) (such information provided and statements made as required by clauses (A) and (B) above, a "**Nominee Solicitation Statement**").

(c) At the request of the board of directors, any person nominated by a stockholder for election as a director must furnish to the secretary of the corporation (1) that information required to be set forth in the stockholder's notice of nomination of such person as a director as of a date subsequent to the date on which the notice of such person's nomination was given and (2) such other information as may reasonably be required by the corporation to determine the eligibility of such proposed nominee to serve as an independent director of the corporation or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such nominee; in the absence of the furnishing of such information if requested, such stockholder's nomination shall not be considered in proper form pursuant to this Section 2.4(ii).

(d) Without exception, no person shall be eligible for election or re-election as a director of the corporation at an annual meeting of stockholders unless nominated in accordance with the provisions set forth in this Section 2.4(ii). In addition, a nominee shall not be eligible for election or re-election if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement applicable to such nominee or if the Nominee Solicitation Statement

applicable to such nominee contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the annual meeting that a nomination was not made in accordance with the provisions prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the annual meeting, and the defective nomination shall be disregarded.

(iii) *Advance Notice of Director Nominations for Special Meetings.*

(a) For a special meeting of stockholders at which directors are to be elected pursuant to Section 2.3, nominations of persons for election to the board of directors shall be made only (1) by or at the direction of the board of directors or (2) by any stockholder of the corporation who (A) is a stockholder of record at the time of the giving of the notice required by this Section 2.4(iii), on the record date for the determination of stockholders entitled to notice of the special meeting and on the record date for the determination of stockholders entitled to vote at the special meeting and (B) delivers a timely written notice of the nomination to the secretary of the corporation that includes the information set forth in Sections 2.4(ii)(b) and (ii)(c) above. To be timely, such notice must be received by the secretary at the principal executive offices of the corporation not later than the close of business on the later of the 90th day prior to such special meeting or the tenth day following the day on which Public Announcement is first made of the date of the special meeting and of the nominees proposed by the board of directors to be elected at such meeting. A person shall not be eligible for election or re-election as a director at a special meeting unless the person is nominated (i) by or at the direction of the board of directors or (ii) by a stockholder in accordance with the notice procedures set forth in this Section 2.4(iii). In addition, a nominee shall not be eligible for election or re-election if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement applicable to such nominee or if the Nominee Solicitation Statement applicable to such nominee contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading.

(b) The chairperson of the special meeting shall, if the facts warrant, determine and declare at the meeting that a nomination or business was not made in accordance with the procedures prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the meeting, and the defective nomination or business shall be disregarded.

(iv) *Other Requirements and Rights*. In addition to the foregoing provisions of this Section 2.4, a stockholder must also comply with all applicable requirements of state law and of the 1934 Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.4, including, with respect to business such stockholder intends to bring before the annual meeting that involves a proposal that such stockholder requests to be included in the corporation's proxy statement, the requirements of Rule 14a-8 (or any successor provision) under the 1934 Act. Nothing in this Section 2.4 shall be deemed to affect any right of the corporation to omit a proposal from the corporation's proxy statement pursuant to Rule 14a-8 (or any successor provision) under the 1934 Act.

2.5 NOTICE OF STOCKHOLDERS' MEETINGS

Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting, if such date is

different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Except as otherwise provided in the DGCL, the certificate of incorporation or these bylaws, the written notice of any meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting.

2.6 QUORUM

The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. Where a separate vote by a class or series or classes or series is required, a majority of the outstanding shares of such class or series or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter, except as otherwise provided by law, the certificate of incorporation or these bylaws.

If, however, such quorum is not present or represented at any meeting of the stockholders, then either (i) the chairperson of the meeting, or (ii) the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

2.7 ADJOURNED MEETING; NOTICE

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for stockholders entitled to vote is fixed for the adjourned meeting, the board of directors shall fix a new record date for notice of such adjourned meeting in accordance with Section 213(a) of the DGCL and Section 2.11 of these bylaws, and shall give notice of the adjourned meeting to each stockholder of record entitled to vote at such adjourned meeting as of the record date fixed for notice of such adjourned meeting.

2.8 CONDUCT OF BUSINESS

The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of business.

2.9 VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

Except as otherwise required by law, the certificate of incorporation or these bylaws, in all matters other than the election of directors, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Except as otherwise required by law, the certificate of incorporation or these bylaws, directors shall be elected by a plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Where a separate vote by a class or series or classes or series is required, in all matters other than the election of directors, the affirmative vote of the majority of shares of such class or series or classes or series present in person or represented by proxy at the meeting shall be the act of such class or series or classes or series, except as otherwise provided by law, the certificate of incorporation or these bylaws.

2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Subject to the rights of the holders of the shares of any series of Preferred Stock or any other class of stock or series thereof having a preference over the Common Stock as dividend or upon liquidation, any action required or permitted to be taken by the stockholders of the corporation must be effected at a duly called annual or special meeting of stockholders of the corporation and may not be effected by any consent in writing by such stockholders.

2.11 RECORD DATES

In order that the corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If the board of directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the board of directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination.

If no record date is fixed by the board of directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however*, that the board of directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance with the provisions of Section 213 of the DGCL and this Section 2.11 at the adjourned meeting.

In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may

fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

2.12 PROXIES

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL.

2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; *provided, however,* if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. The corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (i) on a reasonably accessible electronic network, *provided* that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the corporation's principal place of business. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

2.14 INSPECTORS OF ELECTION

A written proxy may be in the form of a telegram, cablegram, or other means of electronic transmission which sets forth or is submitted with information from which it can be determined that the telegram, cablegram, or other means of electronic transmission was authorized by the person.

Before any meeting of stockholders, the board of directors shall appoint an inspector or inspectors of election to act at the meeting or its adjournment. The number of inspectors shall be either one (1) or three (3). If any person appointed as inspector fails to appear or fails or refuses to act, then the chairperson of the meeting may, and upon the request of any stockholder or a stockholder's proxy shall, appoint a person to fill that vacancy.

Such inspectors shall:

(i) determine the number of shares outstanding and the voting power of each, the number of shares represented at the meeting, the existence of a quorum, and the authenticity, validity, and effect of proxies;

(ii) receive votes, ballots or consents;

(iii) hear and determine all challenges and questions in any way arising in connection with the right to vote;

(iv) count and tabulate all votes or consents;

(v) determine when the polls shall close;

(vi) determine the result; and

(vii) do any other acts that may be proper to conduct the election or vote with fairness to all stockholders.

The inspectors of election shall perform their duties impartially, in good faith, to the best of their ability and as expeditiously as is practical. If there are three (3) inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is *prima facie* evidence of the facts stated therein.

ARTICLE III - DIRECTORS

3.1 POWERS

The business and affairs of the corporation shall be managed by or under the direction of the board of directors, except as may be otherwise provided in the DGCL or the certificate of incorporation.

3.2 NUMBER OF DIRECTORS

The board of directors shall consist of one or more members, each of whom shall be a natural person. Unless the certificate of incorporation fixes the number of directors, the number of directors shall be determined from time to time by resolution of the board of directors. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws. The certificate of incorporation or these bylaws may prescribe other qualifications for directors.

3.4 RESIGNATION AND VACANCIES

Any director may resign at any time upon notice given in writing or by electronic transmission to the corporation. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. Unless otherwise provided in the certificate of incorporation or these bylaws, when one or more directors resign from the board of directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective.

Unless otherwise provided in the certificate of incorporation or these bylaws, vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. If the directors are divided into classes, a person so elected by the directors then in office to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

If at any time, by reason of death or resignation or other cause, the corporation should have no directors in office, then any officer or any stockholder or an executor, administrator, trustee or guardian of a stockholder, or other fiduciary entrusted with like responsibility for the person or estate of a stockholder, may call a special meeting of stockholders in accordance with the provisions of the certificate of incorporation or these bylaws, or may apply to the Court of Chancery for a decree summarily ordering an election as provided in Section 211 of the DGCL.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board of directors (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the voting stock at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

The board of directors may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

3.6 REGULAR MEETINGS

Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be determined by the board of directors.

3.7 SPECIAL MEETINGS; NOTICE

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairperson of the board of directors, the chief executive officer, the president, the secretary or a majority of the authorized number of directors.

Notice of the time and place of special meetings shall be:

(i) delivered personally by hand, by courier or by telephone;

(ii) sent by United States first-class mail, postage prepaid;

(iii) sent by facsimile; or

(iv) sent by electronic mail,

directed to each director at that director's address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the corporation's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the corporation's principal executive office) nor the purpose of the meeting.

3.8 QUORUM; VOTING

At all meetings of the board of directors, a majority of the total authorized number of directors shall constitute a quorum for the transaction of business. If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present. A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

The vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the board of directors, except as may be otherwise specifically provided by statute, the certificate of incorporation or these bylaws.

If the certificate of incorporation provides that one or more directors shall have more or less than one vote per director on any matter, every reference in these bylaws to a majority or other proportion of the directors shall refer to a majority or other proportion of the votes of the directors.

3.9 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the board of directors, or of any committee thereof, may be taken without a meeting if all members of the board of directors or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board of directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

3.10 FEES AND COMPENSATION OF DIRECTORS

Unless otherwise restricted by the certificate of incorporation or these bylaws, the board of directors shall have the authority to fix the compensation of directors.

3.11 REMOVAL OF DIRECTORS

Any director may be removed from office by the stockholders of the corporation only for cause.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE IV - COMMITTEES

4.1 COMMITTEES OF DIRECTORS

The board of directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors or in these bylaws, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the corporation.

4.2 COMMITTEE MINUTES

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

4.3 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

(i) Section 3.5 (place of meetings and meetings by telephone);

(ii) Section 3.6 (regular meetings);

(iii) Section 3.7 (special meetings and notice);

(iv) Section 3.8 (quorum; voting);

(v) Section 7.5 (waiver of notice); and

(vi) Section 3.9 (action without a meeting)

with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members. *However*:

(i) the time of regular meetings of committees may be determined either by resolution of the board of directors or by resolution of the committee;

(ii) special meetings of committees may also be called by resolution of the committee or the board of directors; and

(iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the government of any committee not inconsistent with the provisions of these bylaws.

Any provision in the certificate of incorporation providing that one or more directors shall have more or less than one vote per director on any matter shall apply to voting in any committee or subcommittee, unless otherwise provided in the certificate of incorporation or these bylaws.

4.4 SUBCOMMITTEES

Unless otherwise provided in the certificate of incorporation, these bylaws or the resolutions of the board of directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

ARTICLE V - OFFICERS

5.1 OFFICERS

The officers of the corporation shall be a president and a secretary. The corporation may also have, at the discretion of the board of directors, a chairperson of the board of directors, a vice chairperson of the board of

directors, a chief executive officer, a chief financial officer or treasurer, one or more vice presidents, one or more assistant vice presidents, one or more assistant treasurers, one or more assistant secretaries, and any such other officers as may be appointed in accordance with the provisions of these bylaws. Any number of offices may be held by the same person.

5.2 APPOINTMENT OF OFFICERS

The board of directors shall appoint the officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws, subject to the rights, if any, of an officer under any contract of employment.

5.3 SUBORDINATE OFFICERS

The board of directors may appoint, or empower the chief executive officer or, in the absence of a chief executive officer, the president, to appoint, such other officers and agents as the business of the corporation may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the board of directors at any regular or special meeting of the board of directors or, except in the case of an officer chosen by the board of directors, by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

5.5 VACANCIES IN OFFICES

Any vacancy occurring in any office of the corporation shall be filled by the board of directors or as provided in Section 5.3.

5.6 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

The chairperson of the board of directors, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other person authorized by the board of directors or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

5.7 AUTHORITY AND DUTIES OF OFFICERS

All officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors or the stockholders and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the board of directors.

ARTICLE VI - STOCK

6.1 STOCK CERTIFICATES; PARTLY PAID SHARES

The shares of the corporation shall be represented by certificates, provided that the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the corporation by the chairperson of the board of directors or vice-chairperson of the board of directors, or the president or a vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. The corporation shall not have power to issue a certificate in bearer form.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly-paid shares, or upon the books and records of the corporation in the case of uncertificated partly-paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully-paid shares, the corporation shall declare a dividend upon partly-paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

6.2 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; *provided, however*, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to this section 6.2 or Sections 156, 202(a) or

218(a) of the DGCL or with respect to this section 6.2 a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly provided by law, the rights and obligations of the holders of uncertificated stock and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

6.3 LOST CERTIFICATES

Except as provided in this Section 6.3, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

6.4 DIVIDENDS

The board of directors, subject to any restrictions contained in the certificate of incorporation or applicable law, may declare and pay dividends upon the shares of the corporation's capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock, subject to the provisions of the certificate of incorporation.

The board of directors may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

6.5 TRANSFER OF STOCK

Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by an attorney duly authorized, and, if such stock is certificated, upon the surrender of a certificate or certificates for a like number of shares, properly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer.

6.6 STOCK TRANSFER AGREEMENTS

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

6.7 REGISTERED STOCKHOLDERS

The corporation:

(i) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner;

(ii) shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares; and

(iii) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII - MANNER OF GIVING NOTICE AND WAIVER

7.1 NOTICE OF STOCKHOLDERS' MEETINGS

Notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the corporation's records. An affidavit of the secretary or an assistant secretary of the corporation or of the transfer agent or other agent of the corporation that the notice has been given shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

7.2 NOTICE BY ELECTRONIC TRANSMISSION

Without limiting the manner by which notice otherwise may be given effectively to stockholders pursuant to the DGCL, the certificate of incorporation or these bylaws, any notice to stockholders given by the corporation under any provision of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if:

(i) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent; and

(ii) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice.

However, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Any notice given pursuant to the preceding paragraph shall be deemed given:

(i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice;

(ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice;

(iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and

(iv) if by any other form of electronic transmission, when directed to the stockholder.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be *prima facie* evidence of the facts stated therein.

An "**electronic transmission**" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

7.3 NOTICE TO STOCKHOLDERS SHARING AN ADDRESS

Except as otherwise prohibited under the DGCL, without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation under the provisions of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any stockholder who fails to object in writing to the corporation, within 60 days of having been given written notice by the corporation of its intention to send the single notice, shall be deemed to have consented to receiving such single written notice.

7.4 NOTICE TO PERSON WITH WHOM COMMUNICATION IS UNLAWFUL

Whenever notice is required to be given, under the DGCL, the certificate of incorporation or these bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

7.5 WAIVER OF NOTICE

Whenever notice is required to be given under any provision of the DGCL, the certificate of incorporation or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the

business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

ARTICLE VIII - INDEMNIFICATION

8.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN THIRD PARTY PROCEEDINGS

Subject to the other provisions of this Article VIII, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**") (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director or officer of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

8.2 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN ACTIONS BY OR IN THE RIGHT OF THE CORPORATION

Subject to the other provisions of this Article VIII, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

8.3 SUCCESSFUL DEFENSE

To the extent that a present or former director or officer of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described in Section 8.1 or Section 8.2, or in

defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

8.4 INDEMNIFICATION OF OTHERS

Subject to the other provisions of this Article VIII, the corporation shall have power to indemnify its employees and agents to the extent not prohibited by the DGCL or other applicable law. The board of directors shall have the power to delegate to such person or persons the determination of whether employees or agents shall be indemnified.

8.5 ADVANCED PAYMENT OF EXPENSES

Expenses (including attorneys' fees) incurred by an officer or director of the corporation in defending any Proceeding shall be paid by the corporation in advance of the final disposition of such Proceeding upon receipt of a written request therefor (together with documentation reasonably evidencing such expenses) and an undertaking by or on behalf of the person to repay such amounts if it shall ultimately be determined that the person is not entitled to be indemnified under this Article VIII or the DGCL. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems appropriate. The right to advancement of expenses shall not apply to any claim for which indemnity is excluded pursuant to these bylaws, but shall apply to any Proceeding referenced in Section 8.6(ii) or 8.6(iii) prior to a determination that the person is not entitled to be indemnified by the corporation.

8.6 LIMITATION ON INDEMNIFICATION

Subject to the requirements in Section 8.3 and the DGCL, the corporation shall not be obligated to indemnify any person pursuant to this Article VIII in connection with any Proceeding (or any part of any Proceeding):

(i) for which payment has actually been made to or on behalf of such person under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(ii) for an accounting or disgorgement of profits pursuant to Section 16(b) of the 1934 Act, or similar provisions of federal, state or local statutory law or common law, if such person is held liable therefor (including pursuant to any settlement arrangements);

(iii) for any reimbursement of the corporation by such person of any bonus or other incentive-based or equity-based compensation or of any profits realized by such person from the sale of securities of the corporation, as required in each case under the 1934 Act (including any such reimbursements that arise from an accounting restatement of the corporation pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "**Sarbanes-Oxley Act**"), or the payment to the corporation of profits arising from the purchase and sale by such person of securities in violation of Section 306 of the Sarbanes-Oxley Act), if such person is held liable therefor (including pursuant to any settlement arrangements);

(iv) initiated by such person, including any Proceeding (or any part of any Proceeding) initiated by such person against the corporation or its directors, officers, employees, agents or other indemnitees,

unless (a) the board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (b) the corporation provides the indemnification, in its sole discretion, pursuant to the powers vested in the corporation under applicable law, (c) otherwise required to be made under Section 8.7 or (d) otherwise required by applicable law; or

(v) if prohibited by applicable law.

8.7 DETERMINATION; CLAIM

If a claim for indemnification or advancement of expenses under this Article VIII is not paid in full within 90 days after receipt by the corporation of the written request therefor, the claimant shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of expenses. The corporation shall indemnify such person against any and all expenses that are incurred by such person in connection with any action for indemnification or advancement of expenses from the corporation under this Article VIII, to the extent such person is successful in such action, and to the extent not prohibited by law. In any such suit, the corporation shall, to the fullest extent not prohibited by law, have the burden of proving that the claimant is not entitled to the requested indemnification or advancement of expenses.

8.8 NON-EXCLUSIVITY OF RIGHTS

The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VIII shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the certificate of incorporation or any statute, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advancement of expenses, to the fullest extent not prohibited by the DGCL or other applicable law.

8.9 INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under the provisions of the DGCL.

8.10 SURVIVAL

The rights to indemnification and advancement of expenses conferred by this Article VIII shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

8.11 EFFECT OF REPEAL OR MODIFICATION

Any amendment, alteration or repeal of this Article VIII shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to such amendment, alteration or repeal.

8.12 CERTAIN DEFINITIONS

For purposes of this Article VIII, references to the "**corporation**" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VIII with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this Article VIII, references to "**other enterprises**" shall include employee benefit plans; references to "**fines**" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "**serving at the request of the corporation**" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "**not opposed to the best interests of the corporation**" as referred to in this Article VIII.

ARTICLE IX - GENERAL MATTERS

9.1 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS

Except as otherwise provided by law, the certificate of incorporation or these bylaws, the board of directors may authorize any officer or officers, or agent or agents, to enter into any contract or execute any document or instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

9.2 FISCAL YEAR

The fiscal year of the corporation shall be fixed by resolution of the board of directors and may be changed by the board of directors.

9.3 SEAL

The corporation may adopt a corporate seal, which shall be adopted and which may be altered by the board of directors. The corporation may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

9.4 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the

singular number includes the plural, the plural number includes the singular, and the term "**person**" includes both a corporation and a natural person.

ARTICLE X - AMENDMENTS

These bylaws may be adopted, amended or repealed by the stockholders entitled to vote. However, the corporation may, in its certificate of incorporation, confer the power to adopt, amend or repeal bylaws upon the directors. The fact that such power has been so conferred upon the directors shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

A bylaw amendment adopted by stockholders which specifies the votes that shall be necessary for the election of directors shall not be further amended or repealed by the board of directors.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

CERTIFICATE OF AMENDMENT OF BYLAWS

The undersigned hereby certifies that he or she is the duly elected, qualified, and acting Secretary or Assistant Secretary of Pacific Biosciences of California, Inc., a Delaware corporation and that the foregoing bylaws, comprising [_____] pages, were amended and restated on [*date of amendment*] by the corporation's board of directors.

IN WITNESS WHEREOF, the undersigned has hereunto set his or her hand this __ day of _____, ___.

Secretary

Exhibit 10.7

Confidential Treatment Requested by
Pacific Biosciences of California, Inc.

COLLABORATION AGREEMENT
between
PACIFIC BIOSCIENCES OF CALIFORNIA, INC.
and
GEN-PROBE INCORPORATED
Dated as of June 15, 2010

COLLABORATION AGREEMENT

THIS COLLABORATION AGREEMENT (the "Agreement") is entered into between Pacific Biosciences of California, Inc., a Delaware corporation ("PacBio"), having a place of business at 1505 Adams Drive, Menlo Park, California 94025 and Gen-Probe Incorporated, a Delaware corporation ("Gen-Probe"), having a place of business at 10210 Genetic Center Drive, San Diego, California 92121. PacBio and Gen-Probe may each sometimes be referred to herein as a "party" and collectively as the "parties."

RECITALS

WHEREAS, the parties each recognize the potential mutual benefit in cooperating in the potential development of instrumentation and related products for the Diagnostics (as defined herein) market (the "Collaboration").

WHEREAS, PacBio owns or has proprietary rights and expertise in Sample Preparation Systems (as defined herein) and Third Generation Sequencing Systems (as defined herein) and associated technologies.

WHEREAS, Gen-Probe owns or has proprietary rights and expertise in the areas of Diagnostics workflow, systems integration, and Sample Preparation Systems, and expertise in the areas of clinical product development and regulatory clearances.

WHEREAS, the parties desire to collaborate toward the joint development of Products (each as defined herein) on the terms and subject to the conditions of this Agreement.

WHEREAS, the parties intend to enter subsequently into one or more Preferred Partnership Agreements (as defined herein), if warranted, to collaborate toward the further development, regulatory clearance and commercialization of Products in the Field, including Products developed under the terms of this Agreement.

WHEREAS, in connection herewith, the parties are also entering into a stock purchase agreement (the "Stock Purchase Agreement"), pursuant to which Gen-Probe shall purchase shares of PacBio's Series F preferred stock for an aggregate purchase price equal to $50 million.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants set forth below, the parties hereby agree as follows:

ARTICLE 1
DEFINITIONS

For purposes of this Agreement, the terms defined in this Article 1 shall have the respective meanings set forth below:

1.1 "Action" shall have the meaning set forth in Section 7.10.

1.2 “Affiliate” shall mean, with respect to any Person, any other Person which directly or indirectly controls, is controlled by, or is under common control with, such Person. A Person shall be regarded as in control of another Person if it owns, or directly or indirectly controls, more than fifty percent (50%) of the voting stock or other ownership interest of the other Person (or such lesser percentage as is the maximum percentage permitted under applicable law for foreign ownership where control is exercised by contract or otherwise), or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other Person by any means whatsoever (provided, however, that in the case of an entity organized under Section 501(c)(3) of the Internal Revenue Code, the direct or indirect power of a party to direct or cause the direction of the management and policies of the entity shall not in and of itself cause the entity to be deemed an Affiliate for purposes of this Agreement).

1.3 “Agreement” shall have the meaning set forth in the Preamble hereto. 1.4 “Change of Control” shall mean, with respect to a party, any of the following: (a) the sale or disposition of all or substantially all of the assets of such party or its direct or indirect parent corporation to a Third Party, (b) the acquisition by a Third Party which constitutes one person, as such term is used in Section 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), together with any such person’s “affiliates” or “associates,” as such terms are defined in the Exchange Act, other than an employee benefit plan (or related trust) sponsored or maintained by such party or any of its Affiliates, of more than 50% of the outstanding shares of voting capital stock of such party or its direct or indirect parent corporation, or (c) the merger or consolidation of such party or its direct or indirect parent corporation with or into another corporation, other than, in the case of this clause (c), an acquisition or a merger or consolidation of such party or its direct or indirect parent corporation in which holders of shares of the voting capital stock of such party or its direct or indirect parent corporation, as the case may be, immediately prior to the acquisition, merger or consolidation will have at least fifty percent (50%) of the ownership of voting capital stock of the acquiring Third Party or the surviving corporation in such merger or consolidation, as the case may be, immediately after the merger or consolidation.

1.5 “Collaboration” shall have the meaning set forth in the recitals.

1.6 “Commercially Available” shall mean, with respect to a product and a party, that such product is made available by such party or its Affiliate to a Third Party through (i) commercial sale or transfer of such product (including pursuant to an OEM supply arrangement) or (ii) commercial sale of a service utilizing such product.

1.7 “Commercially Reasonable Efforts” shall mean the application of efforts and available resources, not materially inconsistent with the exercise of prudent scientific and business judgment. “Commercially Reasonable Efforts” shall be deemed to have occurred if a reasonably prudent business person would have exerted similar efforts after taking into account, among other factors, in no particular order, and with no particular relative weighting: the industry; the relative market timing, potential, and size, and the stage in the development or life of, the relevant product(s) and/or services, and the dependencies and other interrelationships there between; the size and stage in the development or life of the entity; the current and projected future availability of sufficient capital and other resources, and the terms on which such resources are or will be available; and/or any other factor(s) actually considered and/or that a reasonably prudent business person would consider under similar

circumstances. Subject to and without limiting the foregoing, "Commercially Reasonable Efforts" shall require the applicable party to: (i) promptly assign responsibilities for activities for which it is responsible to specific employee(s) who are held accountable for the progress, monitoring and completion of such activities, (ii) set and consistently seek to achieve meaningful objectives for carrying out such activities, and (iii) make and implement decisions and allocate available resources necessary or appropriate to advance progress with respect to and complete such activities.

1.8 "Confidential Information" shall mean, with respect to a party, all information, whether in written, oral or visual presentation form, of any kind whatsoever (including compilations, data, formulae, models, patent disclosures, procedures, processes, projections, protocols, results of experimentation and testing, specifications, strategies, and techniques), and all tangible and intangible embodiments thereof of any kind whatsoever (including apparatus, compositions, documents, drawings, machinery, patent applications, records, reports), which is (i) not generally known, (ii) disclosed by such party to the other party pursuant to and in accordance with the terms of Article 6 of this Agreement and (iii) is identified as confidential, or is otherwise treated by the Disclosing Party as confidential or which the other party has a reasonable basis to believe is confidential at the time of disclosure.

Notwithstanding the foregoing, Confidential Information of a party shall not include information which the other party can establish by written documentation (a) to have been publicly known prior to disclosure of such information by the Disclosing Party to the other party, (b) to have become publicly known, without fault on the part of the other party, subsequent to disclosure of such information by the Disclosing Party to the other party, (c) to have been received by the other party at any time from a source, other than the disclosing party, rightfully having possession of and the right to disclose such information, (d) to have been otherwise known by the other party prior to disclosure of such information by the Disclosing Party to the other party or (e) to have been independently developed by employees or agents of the other party without access to or use of such information disclosed by the Disclosing Party to the other party.

1.9 "Confidentiality Agreement" shall mean the Confidentiality Agreement, dated as of February 12, 2010, between Gen-Probe and PacBio.

1.10 "Development Plans" shall have the meaning set forth in Section 2.1.2.

1.11 "Diagnostics" shall mean the in vitro testing of human specimens (including processed human specimens) for the purpose of medical care of the human from whom the specimen was taken and/or medical care of a human who is the potential recipient of tissue from the human from whom the specimen was taken. For the avoidance of doubt, "medical care" shall include, by way of example and not of limitation, diagnosis, prognosis, treatment, prevention, or monitoring the progress of any and all possible human disease (including infectious, genetic, traumatic, metabolic, degenerative, and neoplastic disease) as well as compatibility of donor and recipient with respect to tissue. At Gen-Probe's sole option, exercisable upon written notice to PacBio, "Diagnostics" shall also mean the in vitro testing of human specimens for the purpose of medical care of a human who is the potential recipient of human blood, plasma or other blood products from the human from whom the specimen was taken. For the avoidance of doubt, such medical care shall include, by way of example and not of limitation, diagnosis of possible disease prior to transplant or transfusion, as well as compatibility of donor and recipient with respect to human blood, plasma, and other blood products.

1.12 “Disclosing Party” shall have the meaning set forth in Section 6.1

1.13 “DNA” shall mean any and all forms of deoxyribonucleic acid, including without limitation methylated and other modified deoxyribonucleic acid sequences and complementary deoxyribonucleic acid synthesized from ribonucleic acid.

1.14 “Effective Date” shall mean June 15, 2010.

1.15 “Essential Ancillaries” shall mean the reagents and other consumables (including chips) that are necessary for the effective use of V2 […***…] or Sample Preparation […***…], in each case to the extent Commercially Available, respectively, from PacBio or Gen-Probe.

1.16 “Field” shall mean the field of nucleic acid sequencing products and services expressly marketed for Diagnostics use, including the parties’ own internal research and development of Products that are intended to be expressly marketed for Diagnostics use. For the avoidance of doubt, solely for purposes of determining whether Gen-Probe and its Affiliates have complied with the exclusivity obligations set forth in Section 4.1, “nucleic acid sequencing” shall not include methods utilizing multiplexed beads (e.g., […***…]) or capillary electrophoresis, as such methods are incorporated in a product offered by Gen-Probe or its Affiliates as of the Effective Date.

1.17 “Front End Sample Preparation” shall mean the isolation, extraction and/or purification of nucleic acid from tissue and bodily fluids obtained directly or indirectly from a human for sequencing, but excluding steps that are integral and specific to the sequencing process itself.

1.18 “Gen-Probe” shall have the meaning set forth in the Preamble hereto.

1.19 “Gen-Probe Copyrights” shall mean all rights under the copyright laws of any jurisdiction in the world and similar laws granting rights for written expression, together with all rights commonly referred to as “moral rights,” to the extent that Gen-Probe has the right to grant licenses, immunities or other rights thereunder as of the Effective Date or thereafter.

1.20 “Gen-Probe Derivative IP” shall have the meaning set forth in Section 7.5.1.

1.21 “Gen-Probe Intellectual Property Rights” shall mean, collectively, the Gen-Probe Copyrights, Gen-Probe Know-How and Gen-Probe Patent Rights.

1.22 “Gen-Probe Inventions” shall have the meaning set forth in Section 7.1.

1.23 “Gen-Probe Know-How” shall mean information, expertise or data developed by or for Gen-Probe (including formulae, procedures, protocols, techniques, data and results of experimentation and testing) to the extent that Gen-Probe has the right, under the laws of any jurisdiction in the world, to grant licenses, immunities or other rights thereunder as of the Effective Date or thereafter.

1.24 “Gen-Probe Patent Rights” shall mean patents and patent applications in any jurisdiction of the world as to which Gen-Probe has an ownership or other licensable interest (other than a license from PacBio pursuant to this Agreement) as of the Effective Date or thereafter, including with respect to any Gen-Probe Invention.

1.25 “Initial Development Plan” shall have the meaning set forth in Section 2.1.1.

1.26 “JAMS” shall have the meaning set forth in Section 9.3.

1.27 “Joint Copyrights” shall have the meaning set forth in Section 7.3.1.

1.28 “Joint Intellectual Property” shall have the meaning set forth in Section 7.6.

1.29 “Joint Inventions” shall have the meaning set forth in Section 7.1.

1.30 “Joint Know-How” shall have the meaning set forth in Section 7.4.

1.31 “Licensed GP IP” shall have the meaning set forth in Section 2.4.1.

1.32 “Licensed PacBio IP” shall have the meaning set forth in Section 2.4.2.

1.33 “PacBio” shall have the meaning set forth in the preamble hereto.

1.34 “PacBio Copyrights” shall mean all rights under the copyright laws of any jurisdiction in the world and similar laws granting rights for written expression, together with all rights commonly referred to as “moral rights,” to the extent that PacBio has the right to grant licenses, immunities or other rights thereunder as of the Effective Date or thereafter.

1.35 “PacBio Derivative IP” shall have the meaning set forth in Section 7.5.1.

1.36 “PacBio Intellectual Property Rights” shall mean, collectively, the PacBio Copyrights, PacBio Know-How and PacBio Patent Rights.

1.37 “PacBio Inventions” shall have the meaning set forth in Section 7.1.

1.38 “PacBio Know-How” shall mean information, expertise or data developed by or for PacBio (including formulae, procedures, protocols, techniques, data and results of experimentation and testing) which relates to the Products to the extent that PacBio has the right, under the laws of any jurisdiction in the world, to grant licenses, immunities or other rights thereunder as of the Effective Date or thereafter.

1.39 “PacBio Patent Rights” shall mean patents and patent applications in any jurisdiction of the world claiming technology as to which PacBio has an ownership or other licensable interest (other than a license from Gen-Probe pursuant to this Agreement) as of the Effective Date or thereafter, including with respect to any PacBio Invention.

1.40 “Person” shall mean an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, pool, syndicate, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein, and including Gen-Probe and PacBio.

1.41 “Preferred Access Products” shall mean the products supplied by the parties pursuant to Section 2.2.

1.42 “Preferred Partnership Agreements” shall have the meaning set forth in Section 2.5.

1.43 “Product Development Plans” shall have the meaning set forth in Section 2.1.2.

1.44 “Products” shall mean one or more integrated system products integrating nucleic acid sequencing and Front End Sample Preparation, in each case for use in the Field.

1.45 “Proof of Concept” shall mean, with respect to any product, the demonstration of the reasonable technical and commercial efficacy and feasibility of such product for its intended application.

1.46 “Receiving Party” shall have the meaning set forth in Section 6.1.

1.47 “Sample Preparation” shall mean the isolation, extraction and/or purification of nucleic acid from tissue and bodily fluids obtained directly or indirectly from a human for sequencing.

1.48 “Sample Preparation […***…]” shall mean, individually and collectively, the major […***…] of Sample Preparation System instruments.

1.49 “Sample Preparation Systems” shall mean the reagents, methods, instruments and associated consumables that are used for Sample Preparation, including those that are used for Front End Sample Preparation.

1.50 “Steering Committee” shall mean the committee comprising representatives of Gen-Probe and PacBio as described in Section 3.1 below.

1.51 “Stock Purchase Agreement” shall have the meaning set forth in the recitals.

1.52 “Term” shall mean the period set forth in Section 8.1.

1.53 “Third Generation Sequencing Systems” shall mean the reagents, methods, instruments and associated consumables (including chips) that are used for single molecule sequencing of nucleic acid, as developed by or on behalf of PacBio including without limitation Single Molecule Real Time (SMRT(TM)) sequencing, the current PacBio RS system and the contemplated PacBio […***…] “V2” SMRT DNA sequencing platforms. Gen-Probe acknowledges that, as of the Effective Date, PacBio’s Third Generation Sequencing Systems are designed to sequence DNA (and not RNA).

1.54 “Third Party” shall mean any Person other than Gen-Probe and PacBio and their respective Affiliates.

1.55 “V2 […***…]” shall mean the primary […***…] contained, or intended to be contained, in the V2 System.

1.56 “V2 Proof of Concept” shall have the meaning set forth on Exhibit C

1.57 “V2 […***…]” shall mean, individually and collectively, the V2 […***…] and other major sequencing […***…] contained, or intended to be contained, in the V2 System.

1.58 “V2 System” shall mean the reagents, methods and instruments that are used for single molecule sequencing of nucleic acids, as developed by or on behalf of PacBio, in the contemplated “V2” SMRT DNA sequencing platform.

ARTICLE 2
PRODUCT DEVELOPMENT

2.1 Development Plans.

2.1.1 The initial program for the development of the Products is set forth in Exhibit A (the “Initial Development Plan”).

2.1.2 It is anticipated that progress made under the Initial Development Plan may necessitate changes to the Initial Development Plan or, for any Products identified as warranting further development activities, the adoption of additional development plans (the “Product Development Plans,” and, together with the Initial Development Plan, the “Development Plans”). Product Development Plans may be adopted and the Development Plans may be amended from time to time by the Steering Committee in accordance with the provisions of Article 3. Such actions must be in writing to be effective hereunder. The Development Plans may include, without limitation: work schedules of activities that specify the development phases; time schedules for completion of such phases; deliverables; key assumptions; itemized budgets by development phase, including agreed costs; test methods; the timing of reimbursement payments, if any, tied to the completion of milestones; scale-up activities; product specifications; the final activity that completes the Development Plans; and the respective responsibilities of the parties.

2.1.3 Each party shall designate a contact, which may be a member of the Steering Committee, at their respective offices to receive and transmit communications concerning the Development Plans.

2.1.4 Gen-Probe and PacBio shall conduct their respective development obligations under the Development Plans diligently and in accordance with the Development Plans and in compliance with applicable laws, regulations and standards for good development practices. Gen-Probe and PacBio each shall allocate sufficient personnel, equipment, facilities and other resources to the Development Plans to carry out their respective obligations and use Commercially Reasonable Efforts to accomplish the objectives thereof.

2.1.5 Unless the Steering Committee determines otherwise, each party shall bear its own expenses incurred in performing its obligations under this Agreement.

2.2 Preferred Access Products.

2.2.1 PacBio shall provide to Gen-Probe access to prototype versions of PacBio’s contemplated Third Generation Sequencing System product families, through one or more collaborative research projects to be performed using such prototype systems. Such collaborative research projects shall be of nature and scope, and on such terms and conditions, as are mutually agreed by the parties; provided that […***…].

***Confidential Treatment Requested

2.2.2 If, during the Term, PacBio initiates a beta testing program for any Third Generation Sequencing System (whether stand-alone or incorporated into a Product), Gen-Probe shall be permitted to serve as a beta test site for such system, subject to the then-current terms and conditions for such beta test sites that have been established by PacBio for such Third Generation Sequencing System, consistently applied, and subject to Gen-Probe's continued fulfillment of its obligations as a beta test site in accordance with such terms and conditions.

2.2.3 During the Term and thereafter, Gen-Probe shall be entitled to purchase from PacBio, on terms (including warranty terms) that are commercially reasonable for both parties […***…], any Third Generation Sequencing System (whether stand-alone or incorporated into a Product) then Commercially Available from PacBio to its customers generally; provided that such entitlement shall survive a Change of Control of PacBio to the extent any such Third Generation Sequencing System was, immediately prior to such Change in Control: (i) Commercially Available from PacBio to its customers generally or (ii) (a) in active development by PacBio following a successful Proof of Concept and (b) then intended by PacBio to be Commercially Available to its customers generally in the future (provided, however, that PacBio shall not be obligated to provide Gen-Probe such access earlier than when such Third Generation Sequencing System is Commercially Available to PacBio's customers generally).

2.2.4 During the Term and thereafter, PacBio shall be entitled to purchase from Gen-Probe, on terms (including warranty terms) that are commercially reasonable for both parties […***…], any Sample Preparation System (whether stand-alone or incorporated into a Product) then Commercially Available from Gen-Probe to its customers generally; provided that such entitlement shall survive a Change of Control of Gen-Probe to the extent any such Sample Preparation System was, immediately prior to such Change in Control:

(i) Commercially Available from Gen-Probe to its customers generally or (ii) (a) in active development by Gen-Probe following a successful Proof of Concept and

(b) then intended by Gen-Probe to be Commercially Available to its customers generally in the future (provided, however, that Gen-Probe shall not be obligated to provide PacBio such access earlier than when such Sample Preparation System is Commercially Available to Gen-Probe's customers generally).

2.2.5 In addition to, and not in derogation of, Section 2.2.3, during the Term and thereafter, Gen-Probe shall be entitled to purchase from PacBio, on terms (including warranty terms) that are commercially reasonable for both parties […***…], any V2 […***…] (whether stand-alone or embodied in a system) and any Essential Ancillaries therefor, in each case, then Commercially Available from PacBio; provided that such entitlement to purchase shall survive a Change of Control of PacBio (i) with respect to the V2 […***…] (and any Essential Ancillaries therefor), following a successful V2 Proof of Concept and (ii) with respect to any other V2 […***…] (and any Essential Ancillaries therefor), to the extent any such V2 […***…] was, immediately prior to such Change in Control: (a) part of a V2 System

Commercially Available from PacBio or (b) part of a V2 System in active development by PacBio in its Collaboration with Gen-Probe hereunder following a successful Proof of Concept of such V2 […***…] or V2 System; provided, further that any purchase pursuant to this Section 2.2.5 shall be for the sole purpose of Gen-Probe incorporating such V2 […***…] into a Product (regardless of whether such Product was developed under the Collaboration) to be sold in the Field, and in no circumstances for the stand-alone resale of such V2 […***…]. Upon written request in accordance with Section 10.2 by PacBio to Gen-Probe after expiration or termination of this Agreement or any such Change in Control, Gen-Probe shall, within ninety (90) days of receipt of such request, provide to PacBio a good faith, commercially reasonable estimate of the likely quantities and delivery dates for any V2 […***…] (and any Essential Ancillaries therefor) which Gen-Probe contemplates purchasing pursuant to this Section 2.2.5 over the course of the following […***…] calendar quarters. Gen-Probe shall continue to provide a rolling […***…] calendar quarter estimate, on a quarterly basis, so long as Gen-Probe desires to purchase any V2 […***…] (and any Essential Ancillaries therefor) pursuant to this Section 2.2.5.

2.2.6 In addition to, and not in derogation of, Section 2.2.4, during the Term and thereafter, PacBio shall be entitled to purchase from Gen-Probe, on terms (including warranty terms) that are commercially reasonable for both parties […***…], any Sample Preparation […***…] (whether stand-alone or embodied in a system) that is intended to be a part of any Product contemplated by the Collaboration and any Essential Ancillaries therefor, in each case, then Commercially Available from Gen-Probe; provided that such entitlement to purchase shall survive a Change of Control of Gen-Probe with respect to any such Sample Preparation […***…] (and any Essential Ancillaries therefor), to the extent any such Sample Preparation […***…] was, immediately prior to such Change in Control, an intended part of a Product in active development by Gen-Probe following a successful Proof of Concept of such Sample Preparation […***…] or Product; provided, further that any purchase pursuant to this Section 2.2.6 shall be for the sole purpose of PacBio incorporating a Sample Preparation […***…] into a Product (regardless of whether such Product was developed under the Collaboration) to be sold in the Field, and in no circumstances for the stand-alone resale of such Sample Preparation […***…]. Upon written request in accordance with Section 10.2 by Gen-Probe to PacBio after expiration or termination of this Agreement or any such Change in Control, PacBio shall, within ninety (90) days of receipt of such request, provide to Gen-Probe a good faith, commercially reasonable estimate of the likely quantities and delivery dates for any Sample Preparation […***…] (and any Essential Ancillaries therefor) which PacBio contemplates purchasing pursuant to this Section 2.2.6 over the course of the following […***…] calendar quarters. PacBio shall continue to provide a rolling […***…] calendar quarter estimate, on a quarterly basis, so long as PacBio desires to purchase any Sample Preparation […***…] (and any Essential Ancillaries therefor) pursuant to this Section 2.2.6.

2.2.7 The rights and obligations of the parties under this Section 2.2 shall apply equally to the Affiliates of the parties and the provisions of this Section 2.2 shall be interpreted mutatis mutandis with respect to the Affiliates of the parties, it being understood that each party may elect to perform any or all of its obligations under this Section 2.2 exclusively through one or more of its Affiliates (e.g., sale of products outside the U.S. via a non-U.S. Affiliate). Each party shall cause its Affiliates, to the extent applicable, to comply with the provisions of this Section 2.2 as if they were party to this Agreement.

2.3 Access to Information.

2.3.1 Gen-Probe shall provide PacBio access to relevant Diagnostics market research data that Gen-Probe has generated, or will generate during the Term, including, without limitation, the […***…].

2.3.2 PacBio shall provide Gen-Probe access to relevant Diagnostics market research data that PacBio has generated, or will generate during the Term.

2.3.3 Diagnostics market research data provided by one party to another under this Section 2.3 shall be considered Confidential Information pursuant to Article 6 of this Agreement. Without limiting the foregoing, neither party shall reference or disclose Third Party study data (including, without limitation, the […***…]) without the prior written consent of such Third Party.

2.4 Limited License Grants for Development Plans.

2.4.1 License Grant by Gen-Probe. Gen-Probe hereby grants to PacBio a limited, royalty-free, non-exclusive license, for the duration of the Term, to all of the Gen-Probe Intellectual Property Rights reasonably required for PacBio to perform its obligations under the Development Plans (the "Licensed GP IP") and solely for such purposes. PacBio shall not have the right to grant sublicenses under such license, without the express prior written consent of Gen-Probe.

2.4.2 License Grant by PacBio. PacBio hereby grants to Gen-Probe a limited, royalty-free, non-exclusive license, for the duration of the Term, to all of the PacBio Intellectual Property Rights reasonably required for Gen-Probe to perform its obligations under the Development Plans (the "Licensed PacBio IP") and solely for such purposes. Gen-Probe shall not have the right to grant sublicenses under such license, without the express prior written consent of PacBio.

2.5 Subsequent Agreements. During the Term, the parties shall negotiate in good faith one or more definitive agreements that shall set forth the economic and other terms and obligations of the parties in furtherance of the continued development, commercialization and regulatory clearance of the Products (the "Preferred Partnership Agreements"). Such Preferred Partnership Agreements shall take into account the technological, commercial, regulatory and reimbursement findings developed by the parties pursuant to this Agreement. Except as otherwise provided in this Agreement, no party or its Affiliate shall take any steps, during the Term, to commercialize in the Field any Product developed under the Collaboration or pursue any regulatory clearances in the Field in respect of such Product prior to the execution of a Preferred Partnership Agreement in respect of such Product.

2.6 Acknowledgements. Notwithstanding the parties' intentions and obligations, Gen-Probe and PacBio each: (i) expressly disclaims any representation or warranty that any development activities taken pursuant to this Agreement will be successfully completed and (ii) expressly acknowledges the possibility that any or all development or commercialization activities may be unsuccessful despite the use of Commercially Reasonable Efforts. Both parties shall plan accordingly.

ARTICLE 3
GOVERNANCE

3.1 Steering Committee.

3.1.1 The development of Products under the Development Plans shall be coordinated and supervised by the Steering Committee, provided that a Development Plan, and any modification of a Development Plan, shall not be considered to have been approved unless the budget for a Development Plan or a modified Development Plan shall have been approved in writing by the Chief Financial Officer of each party. The Steering Committee's duties shall include (i) determining the priorities of the Collaboration with respect to research activities, which Products to develop and other development matters, (ii) maintaining the Development Plans, including schedules of work and deliverable commitments by each party, (iii) maintaining an accounting of the expenses borne by each party, (iv) facilitating open communication between the parties on matters relating to the development findings and commercialization of Products in the Field, and (v) engaging experts as necessary to identify the market, regulatory and reimbursement requirements for integrating Sample Preparation Systems with Third Generation Sequencing Systems. The Steering Committee shall have the power and authority to appoint joint project teams to oversee and administer activities under this Agreement and shall set the roles and responsibilities for any such project teams.

3.1.2 The Steering Committee shall be comprised of three (3) named representatives of Gen-Probe and three (3) named representatives of PacBio. PacBio and Gen-Probe shall each appoint its respective representatives to the Steering Committee and each party may, from time to time and in its sole discretion, substitute one or more of its representatives by giving notice to the other party of such change. The initial members of the Steering Committee are set forth on Exhibit B. Each party shall bear its own costs for its representatives' participation on the Steering Committee.

3.2 Meetings. The Steering Committee shall convene not less than once each calendar quarter during the Term. All meetings shall be set at times and places convenient to the members of the Steering Committee as determined by the chair of the Steering Committee. Each party shall bear its own travel costs in connection with travel to any meetings of the Steering Committee.

3.3 Committee Actions. A party's representatives on the Steering Committee shall collectively have one vote as to all matters. All Steering Committee actions may only be taken by unanimous vote of the parties. Any approval, determination or other action agreed to by both parties' representatives shall be the approval, determination or other action of the Steering Committee. Except as may be otherwise specifically set forth in this Agreement, any matters as to which the Steering Committee cannot reach a unanimous vote shall be presented to the respective executives of the parties for consideration, in accordance with Article 9.

3.4 Reports. Within thirty (30) days following each Steering Committee meeting, the chairperson shall prepare and provide to each party a reasonably detailed written summary report that shall describe any approval, determination or other action by the Steering Committee.

3.5 Committee Procedures. Meetings of the Steering Committee shall be coordinated and chaired by a representative of one of the parties. The position of chair shall rotate between the parties each nine (9) months. PacBio shall have the right to appoint a representative to serve as the chair of the Steering Committee for the first nine (9) months of the Term.

3.6 Steering Committee Action Prior to End of Development Plans.

3.6.1 In the event that either party reasonably concludes prior to the end of a Development Plan that (i) the development schedule or development budget for a Product will materially exceed the schedule or budget set forth in such Development Plan, (ii) development will not be able to be conducted or be successfully concluded materially consistently with such Development Plan, or (iii) based on anticipated market demand or for any other reason that the commercialization of such Product in the Field would not likely be successful, such party shall promptly notify the Steering Committee, which shall discuss all relevant circumstances and considerations and determine whether any changes are needed to such Development Plan and, if so, make a decision on whether the development work should continue with respect to such Product and whether to modify or terminate such Development Plan.

3.6.2 In the event a Development Plan is terminated under this Section 3.6, the termination notice shall be effective on the date it is received. Such termination shall not in any way relieve either party of obligations already incurred under the Development Plans prior to termination, including obligations, if any, to reimburse the other party for any expense determined to be reimbursable by the Steering Committee.

3.7 Reports and Records. Once each calendar quarter prior to the Steering Committee meeting, each party shall prepare a written summary report describing the work performed to date by such party under all active Development Plans and provide such report to the other party. If agreed by the parties, the foregoing reports may be oral reports given at the Steering Committee meeting. Each party shall maintain complete and accurate records that fully and properly reflect all work done and results achieved by it in the performance of the Development Plans (including all data in the form required under all applicable laws and regulations).

3.8 Inspection of Records. To the extent reasonably required for the performance of a Development Plan, Gen-Probe and PacBio each shall have the right, during normal business hours and upon reasonable notice, to inspect and copy records of the other party created in the course of performing such Development Plan, to the extent such records are directly related to, and within the scope of, the Collaboration. The parties shall develop reasonable procedures for requesting and delivering copies of such records to each other. Each party shall maintain such records and the information of the other party contained therein as Confidential Information hereunder.

3.9 Subcontracts. Upon approval of the Steering Committee, which shall not be unreasonably withheld by either party, each party may subcontract portions of any Development Plan hereunder in the normal course of its business; provided, however, that unless the other party gives its prior written consent, subcontracting with a Third Party shall not involve the transfer or license (including any sublicense) of the other party's intellectual property rights and/or Confidential Information. If the other party consents to a subcontractor's access to Confidential Information of the other party, the subcontractor shall be required to enter into an agreement including confidentiality terms that are at least as restrictive as the confidentiality terms of Article 6 herein along with provisions for the assignment of inventions or intellectual property rights arising from the subcontracted work. The subcontracting party shall supervise the work of any subcontractor to ensure, in part, that the subcontractor's work is in compliance in all material respects with all requirements of the Development Plans and all applicable laws and regulations. For purposes of this Section 3.9, subcontractors requiring approval of the Steering Committee shall not include subcontractors that provide services on-site of either party in the ordinary course of such party's business; provided, however, that such excluded subcontractors shall otherwise be subject to the requirements of this Section 3.9 to the extent they work on any portion of any Development Plan or have access to the Confidential Information of the other party.

3.10 Withdrawal. Notwithstanding anything to the contrary in this Agreement, either party may, upon thirty (30) days written notice to the other party, withdraw from participation in the Steering Committee, in which case, the Steering Committee shall be dissolved and the parties shall administer the Agreement without such committee, and shall make such amendments to the Agreement as may be necessary or advisable in connection therewith. All decisions in this Agreement that prior to such notice required the agreement of the Steering Committee, shall following such notice be subject to the mutual agreement of the parties.

ARTICLE 4
EXCLUSIVITY

4.1 Exclusivity. During the Term, neither party, and neither party's Affiliates, shall (i) jointly develop Products in the Field with any Third Party or (ii) directly or indirectly grant to a Third Party an express license or an express immunity from suit with respect to any technology used or useful in the Collaboration that would permit such Third Party to develop Products in the Field using such technology either on its own, jointly with such party or with any other Third Party; provided that a party shall not be precluded from joint development with or out-licensing to a Third Party in respect of a particular Product if: (a) the parties, jointly and in good faith, determine that one or both parties do not have sufficient capabilities required for the development of a particular Product in the Field, (b) either party requests that the Collaboration include the development of a particular Product in the Field and proposes fair terms with respect to allocation of development costs, and the other party expressly disclaims any interest in such development, or (c) such a license is granted in good faith in connection with the […***…]. Subject to the foregoing restrictions and the other party's intellectual property rights in a Product, each party shall be permitted to develop, promote, market and sell such Product.

ARTICLE 5
REPRESENTATIONS AND WARRANTIES

5.1 Representations and Warranties. Each of Gen-Probe and PacBio hereby represents and warrants as of the Effective Date (except as specifically otherwise indicated below) as follows:

5.1.1 Corporate Existence and Power. Such party (a) is a corporation duly organized, validly existing and in good standing under the laws of the state in which it is incorporated; (b) has the corporate power and authority and the legal right to own and operate its property and assets, to lease the property and assets it operates under lease, and to carry on its business as it is now being conducted; and (c) to its knowledge, is in compliance with all requirements of applicable law, except to the extent that any noncompliance would not have a material adverse effect on the properties, business, financial or other condition of such party and would not materially adversely affect such party's ability to perform its obligations under this Agreement.

5.1.2 Authorization and Enforcement of Obligations. Such party (a) has the corporate power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder and (b) has taken all necessary corporate action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid and binding obligation, enforceable against such party in accordance with its terms.

5.1.3 Consents. All necessary consents, approvals and authorizations of all governmental authorities and other Persons required to be obtained by such party in connection with the execution of this Agreement have been obtained on or before the Effective Date.

5.1.4 No Conflict. To its knowledge, the execution and delivery of this Agreement and the performance of such party's obligations hereunder (a) do not conflict with or violate any requirement of applicable laws or regulations, and (b) do not conflict with, or constitute a default under, any material contractual obligation of such party.

5.1.5 No Notice of Infringement. As of the Effective Date, except as otherwise disclosed in writing to the other party, neither Gen-Probe nor PacBio has received any written notice from a Third Party alleging that any technology of such party expected to be utilized in any Product (each as and to the extent defined as of the Effective Date) to be developed pursuant to this Agreement would infringe the issued patents of such Third Party.

5.2 DISCLAIMER OF WARRANTIES. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION MADE, OR WARRANTY GIVEN, BY GEN-PROBE OR PACBIO THAT ANY PATENT WILL ISSUE BASED UPON ANY PENDING PATENT APPLICATION WITHIN THE GEN-PROBE PATENT RIGHTS OR THE PACBIO PATENT RIGHTS, THAT ANY PATENT WITHIN THE GEN-PROBE PATENT RIGHTS OR THE PACBIO PATENT RIGHTS WHICH ISSUES WILL BE VALID, OR THAT THE USE OF ANY LICENSE GRANTED HEREUNDER, OR THAT THE USE OF ANY GEN-PROBE PATENT RIGHTS OR PACBIO PATENT RIGHTS WILL NOT INFRINGE THE PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY OTHER PERSON. FURTHERMORE, EACH OF GEN-PROBE

AND PACBIO DOES NOT MAKE, AND EXPRESSLY DISCLAIMS, ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE GEN-PROBE INTELLECTUAL PROPERTY RIGHTS AND THE PACBIO INTELLECTUAL PROPERTY RIGHTS, RESPECTIVELY, OR TO THE PRODUCTS, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

ARTICLE 6
CONFIDENTIALITY

6.1 Confidential Information. For the period commencing on the Effective Date and ending seven (7) years following the expiration or earlier termination hereof, a party and its Affiliates and their respective directors, officers, employees and consultants (the "Receiving Parties") shall maintain in confidence the Confidential Information of the other party and its Affiliates, and shall not disclose to Third Parties the Confidential Information of the other party or its Affiliates (the "Disclosing Parties") except to Affiliates of the Receiving Parties and their respective directors, officers, employees and consultants involved in the performance of obligations under this Agreement. To the extent that disclosure to any Third Party is authorized by this Agreement, prior to disclosure, the Receiving Party shall obtain written agreement of such Third Party to hold in confidence and not disclose, use or grant the use of the Confidential Information of the other party except as expressly permitted under this Agreement. The parties agree that the term of the non-disclosure and non-use obligations of a Third Party shall be co-extensive with the confidentiality obligations of the parties hereunder. A Receiving Party shall notify the applicable Disclosing Party promptly upon discovery of any unauthorized use or disclosure of the Disclosing Party's Confidential Information. Upon the expiration or earlier termination of this Agreement, each Receiving Party shall return to the applicable Disclosing Party all tangible items regarding the Confidential Information of the Disclosing Party and all copies thereof; provided, however, that a Receiving Party shall have the right to retain one (1) copy for its legal files for the sole purpose of determining its obligations hereunder. Each party shall cause its Affiliates, to the extent applicable, to comply with the provisions of this Section 6.1 as if they were party to this Agreement.

6.2 Terms of this Agreement. For the period commencing on the Effective Date and ending on the expiration or earlier termination hereof, without the prior express written consent of the other party, which shall not be unreasonably withheld or delayed, neither party nor its Affiliates shall (a) disclose any financial terms or conditions of this Agreement to any Third Party, except as reasonably required in connection with such party's activities hereunder and under appropriate confidentiality restrictions; or (b) originate any initial disclosure to any Third Party of the existence or terms of this Agreement; or (c) originate any initial publicity, news release or any other public announcement (written or oral) relating to this Agreement or the existence of an arrangement among the parties. Notwithstanding the foregoing, the parties shall be allowed to issue mutually agreed upon individual or joint press releases disclosing the general nature of the Collaboration. Either party shall thereafter be free to disclose any information contained in the public disclosure approved pursuant to this Section 6.2 or which is made without confidentiality restrictions pursuant to Section 6.3.

6.3 Permitted Disclosures. The confidentiality obligations under this Article 6 shall not apply to the extent that a party is required to disclose information by applicable law, regulation or order of a governmental agency or a court of competent jurisdiction; provided that such party shall provide written notice thereof to the other party and sufficient opportunity to contest any such disclosure or to request confidential treatment thereof.

ARTICLE 7
DEVELOPED INTELLECTUAL PROPERTY; INTELLECTUAL PROPERTY RIGHTS; ENFORCEMENT

7.1 Ownership of Inventions. Except as set forth in this Article 7, the entire worldwide right, title and interest in all patentable discoveries, inventions and technology, made or developed in the course of the Collaboration, and in any patents or patent applications therein, (a) solely by employees of Gen-Probe or others acting on behalf of Gen-Probe (the "Gen-Probe Inventions") shall, as between Gen-Probe and PacBio, be owned solely by Gen-Probe, (b) solely by employees of PacBio or others acting on behalf of PacBio (the "PacBio Inventions") shall, as between PacBio and Gen-Probe, be owned solely by PacBio, and (c) jointly by employees of Gen-Probe or others acting on behalf of Gen-Probe and employees of PacBio or others acting on behalf of PacBio (the "Joint Inventions") shall, as between Gen-Probe and PacBio, be owned jointly by Gen-Probe and PacBio. Any dispute as to which party owns any such patentable discoveries, inventions, technology, patents or patent applications shall be resolved pursuant to Article 9. Each party hereby assigns any such right, title and interest that it may have to the other party to effect the foregoing allocation of ownership rights and, for such purpose, it shall execute such documents, including assignment agreements and take such steps as reasonably requested by the other party.

7.2 Patent Applications and Payment of Related Expenses.

7.2.1 PacBio shall be responsible for and shall control, at its sole discretion and expense, the preparation, filing, prosecution, maintenance and enforcement of all PacBio Patent Rights that are the subject of this Agreement. Gen-Probe shall be responsible for and shall control, at its sole expense, the preparation, filing, prosecution, maintenance and enforcement of all Gen-Probe Patent Rights that are the subject of this Agreement.

7.2.2 The Steering Committee shall establish a strategy for, including the appointment of a party to lead, the preparation, filing, prosecution and maintenance of patent applications and patents for Joint Inventions. Unless otherwise agreed, the parties shall share equally in the costs, fees and expenses associated with the preparation, filing and prosecution of any patent application claiming a Joint Invention and for the maintenance of such Joint Inventions. In the event Gen-Probe or PacBio fails or elects not to pay its share of any of the foregoing costs, fees or expenses, it shall assign its entire interest in such Joint Inventions to the other party. Unless otherwise agreed, patent applications claiming Joint Inventions shall be prepared and prosecuted promptly by mutually acceptable outside counsel. In the preparation and prosecution of patent applications claiming Joint Inventions, each party shall be solely responsible for communicating its interests to the outside counsel, and no employee of any party shall in any way act as the attorney, agent, or representative of any other party, or otherwise in any way be responsible for representing or protecting the interests of any other party. All decisions of the outside counsel shall be final and binding. To the extent not inconsistent with this Agreement,

neither party may assert any claims against the other party for any act or omission in the preparation, filing, prosecution, issuance, maintenance, licensing, enforcement or defense of patent applications or patents issuing therefrom claiming Joint Inventions.

7.2.3 The parties shall cooperate with one another to the extent necessary in connection with the filing of patent applications for their respective inventions and for Joint Inventions. Within a reasonable period of time after a party files any patent application during or after the Term claiming a Joint Invention conceived during and as a result of the performance of this Agreement, the party filing such an application shall provide the other party with a copy of the application and shall identify with reasonable specificity any Confidential Information of such other party that may be included therein. The party receiving the copy of the application shall then have one (1) month to review the application and notify the filing party as to whether any of the receiving party's Confidential Information is disclosed. If the patent application contains any such Confidential Information or if the filing party shall be required to disclose any Confidential Information pursuant to filing such application, then the filing party shall withdraw such application (without retaining a residual right to claim priority) before any publication, unless the filing party is given the permission of the other party, which permission shall only be withheld if disclosure of such Confidential Information has a adverse impact upon the interests of the party having the right to prevent the disclosure of such Confidential Information.

7.3 Copyrights.

7.3.1 Ownership. Except as set forth in this Article 7, the entire worldwide right, title and interest in all copyrightable works created in the course of the Collaboration (a) solely by employees of Gen-Probe or others acting on behalf of Gen-Probe shall be owned solely by Gen-Probe, (b) solely by employees of PacBio or others acting on behalf of PacBio shall be owned solely by PacBio, and (c) jointly by employees of Gen-Probe or others acting on behalf of Gen-Probe and employees of PacBio or others acting on behalf of PacBio (the "Joint Copyrights") shall be owned jointly by Gen-Probe and PacBio.

7.3.2 Copyright Protection. In order to protect against infringement of a party's copyrights or of Joint Copyrights, the parties shall cooperate to apply an appropriate copyright mark to all materials identified by each of the parties as copyrightable materials that are created in the course of the Collaboration. Each party shall cooperate with the other party, take such actions and execute such documents, as reasonably requested by the other party and at the other party's expense, to assist the other party in the protection of the other party's copyrights. Each party hereby covenants to take no action or make no omission which would constitute an infringement of the other party's claim of copyright protection with respect to such items. Any dispute as to which party owns a copyright shall be resolved pursuant to Article 9. Each party hereby assigns any such right, title and interest that it may have to the other party to effect the foregoing allocation of ownership rights and, for such purpose, it shall execute such documents, including assignment agreements and take such steps as reasonably requested by the other party.

7.4 Know-How. Except as set forth in this Article 7, the entire worldwide right, title and interest in any know-how, trade secrets, information, expertise or data (including formulae, procedures, protocols, techniques, data and results of experimentation and testing) not otherwise addressed in Sections 7.1 or 7.3.1 and developed or created in the course of the Collaboration (a) solely by

employees of Gen-Probe or others acting on behalf of Gen-Probe shall be owned solely by Gen-Probe, (b) solely by employees of PacBio or others acting on behalf of PacBio shall be owned solely by PacBio, and (c) jointly by employees of Gen-Probe or others acting on behalf of Gen-Probe and employees of PacBio or others acting on behalf of PacBio (the "Joint Know-How") shall be owned jointly by Gen-Probe and PacBio. Any dispute as to which party owns any such know-how, trade secrets, information, expertise or data (including formulae, procedures, protocols, techniques, data and results of experimentation and testing) shall be resolved pursuant to Article 9. Each party hereby assigns any such right, title and interest that it may have to the other party to effect the foregoing allocation of ownership rights and, for such purpose, it shall execute such documents, including assignment rights and take such steps as reasonably requested by the other party.

7.5 Derivative Intellectual Property.

7.5.1 Notwithstanding Sections 7.1, 7.3, 7.4 and 7.6, the entire worldwide right, title and interest in any discoveries, inventions, technology, know-how, trade secrets, information, expertise or data (including formulae, procedures, protocols, techniques, data, results of experimentation and testing), and copyrightable works developed or created in the course of the Collaboration that are based on, or constitute improvements, enhancements or modifications of, (a) the Licensed GP IP (the "Gen-Probe Derivative IP") shall be owned solely by Gen-Probe, and (b) the Licensed PacBio IP (the "PacBio Derivative IP") shall be owned solely by PacBio; provided that any discoveries, inventions, technology, know-how, trade secrets, information, expertise or data (including formulae, procedures, protocols, techniques, data, results of experimentation and testing), and copyrightable works developed or created in the course of the Collaboration that use, are based on or incorporate any of, or constitute improvements, enhancements or modifications of both the Licensed GP IP and the Licensed PacBio IP shall be deemed Joint Intellectual Property, and as applicable, Joint Inventions, Joint Copyrights, or Joint Know-How.

7.5.2 Each party shall assign any right, title and interest that it may have to the other party to effect the allocation of ownership rights set forth in Section 7.5.1 and shall cooperate with the other party, execute such documents, including assignment agreements, and take such steps, as reasonably requested by the other party and at the other party's expense, to assist the other party in the protection of the other party's rights pursuant to Section 7.5.1.

7.6 Rights over Joint Intellectual Property. Each party shall own an equal undivided interest in all Joint Inventions, Joint Copyrights and Joint Know-How (including Diagnostic market requirements developed during the course of performing the Collaboration, to the extent not otherwise included in the foregoing) (collectively, the "Joint Intellectual Property") and shall have the right, subject to the provisions of this Agreement, to use, pledge, license, assign or otherwise transfer, its rights in any such Joint Intellectual Property hereunder without the permission, consent of, or compensation or accounting to, the other party, except to the extent that such use or application of Joint Intellectual Property would require a license from the other party (e.g., under a claim other than that which claims the Joint Intellectual Property).

7.7 No Other Technology Rights. Except as otherwise expressly provided in this Agreement, under no circumstances shall a party, as a result of this Agreement, obtain any ownership interest or other right in any discovery, invention or other technology, data or information (or any patent, copyright, trademark, or other intellectual property rights therein) of the other party, including

items transferred by the other party to such party at any time pursuant to this Agreement. There are no implied licenses or rights granted by this Agreement and no implied licenses or rights, and no licenses or rights by estoppel, shall be created by the parties' course of performance hereunder. Except as expressly provided in this Agreement, neither party shall be under any obligation to grant to the other party any rights in any patent, copyright, trademark, or other intellectual property.

7.8 Third Party Technology. The Steering Committee shall discuss Third Party intellectual property rights that may be necessary for the Products. Any such discussions shall, to the extent advisable, take place with legal counsel present in order to preserve legal privileges available to the parties. The Steering Committee shall consider the costs of acquiring rights in such Third Party intellectual property rights in connection with such Products, allocate the costs as appropriate, and agree upon methods for implementing such cost allocations. The Steering Committee shall also consider which party shall take the lead in initiating contact with and negotiating with the Third Party. The parties recognize that if the Steering Committee cannot agree on such cost allocation, neither party shall be under any obligation to separately acquire such rights for use pursuant to this Agreement.

7.9 Enforcement. In the event that either party learns of any Third Party infringement of the Joint Intellectual Property, such party shall promptly provide written notice to the other party, including any evidence of infringement in the possession of the disclosing party.

7.9.1 Except as set forth in this Section 7.9.1, PacBio and Gen-Probe shall jointly defend and enforce any rights in any Joint Intellectual Property so that the legal fees, costs and expenses of both parties and any damage awards are shared equally, and with any damages payable to a Third Party or any recoveries from a Third Party resulting from the enforcement or defense of such rights being shared equally. To the extent necessary, the parties shall appoint a party to lead the defense and enforcement of such rights. The parties shall cooperate fully with one another in legal matters relating to Joint Intellectual Property, including, but not limited to, providing testimony and executing documents. Both parties have the right, but not the obligation, to participate in any action or proceeding with respect to Joint Intellectual Property by counsel of its own choice. Absent further agreement of the parties, and subject to Section 7.9.2, each party may elect not to participate in any enforcement action or proceeding and may elect not to pay its shares of the legal fees, costs and expenses incurred in connection with such action or proceeding. Neither party shall settle any enforcement action or proceeding without the other party's prior written consent if the proposed settlement will impact the other party's rights under the Joint Intellectual Property (e.g., by admitting invalidity). In any event, if both parties are participating in an enforcement action or proceeding, then neither party shall settle such action or proceeding without the other party's prior written consent.

7.9.2 Subject to 7.9.1, any recovery or other relief for infringement of Joint Intellectual Property shall first be allocated to reimburse the reasonable and actual expenses incurred in the enforcement process in a manner that results in equal net expenses to PacBio and to Gen-Probe. Any remainder shall be shared equally by PacBio and Gen-Probe if they both participated (i.e., such that the legal fees, costs and expenses of both parties and any damage awards are shared equally) in the enforcement process. If only one party participated in the enforcement process, the participating party shall be solely entitled to the relief obtained in the enforcement action or proceeding.

7.10 Third Party Infringement. In the event that any Third Party makes a written claim or demand, or brings an action, suit or proceeding (collectively, an "Action"), against either party, alleging infringement, unauthorized use or misappropriation of such Third Party's patents, copyrights, technology, other intellectual property rights or confidential information, and an adverse result from such Action is reasonably likely to have a material impact on the development of any Products in the Field in the good faith determination of such party, such party shall promptly notify the other party in writing, and provide copies of all materials or papers received by or served on such party from or by such Third Party. For the avoidance of doubt, the parties' respective obligations to each other with respect to any Third Party Actions arising out of, in connection with or relating to either party's sale or use of any Product or Preferred Access Product shall be as set forth in the Preferred Partnership Agreement for such Product or the supply agreement for such Preferred Access Product, respectively.

7.10.1 If an Action relates primarily to the Gen-Probe Intellectual Property Rights, Gen-Probe shall be primarily responsible for responding to the Action, including controlling any litigation and, unless otherwise agreed by the parties, paying the fees, costs and expenses relating thereto or in settlement thereof.

7.10.2 If an Action relates primarily to the PacBio Intellectual Property Rights, PacBio shall be primarily responsible for responding to the Action, including controlling any litigation and, unless otherwise agreed by the parties, paying any fees, costs and expenses relating thereto or in settlement thereof.

7.10.3 The principles of Section 7.9.1 shall apply with respect to any Action that reasonably relates to any Joint Intellectual Property.

7.11 Nothing herein shall require a party to acquire Third Party intellectual property, and the parties acknowledge that a Third Party claim of infringement is subject to Section 7.8 as to the prospective use of the Third Party technology. In the event that any Third Party intellectual property rights are judicially determined to preclude the manufacture, use or sale of any Product in the Field and the parties are unable to obtain prospective rights to such Third Party intellectual property rights on commercially reasonable terms, either party shall have the right to terminate development activities with respect to such Product. The termination of development activities by either party under this Section 7.11 shall mean that the Product shall cease to be an object of development efforts for all purposes under this Agreement and each party shall be permitted to develop, promote, market and sell such Product, subject to the other party's intellectual property rights in such Product, notwithstanding any provision of this Agreement to the contrary (including without regard to the exclusivity provisions of Article 4).

ARTICLE 8
TERM AND TERMINATION

8.1 Expiration. Unless terminated earlier pursuant to Section 8.2 below, this Agreement shall expire on the earlier of: (i) six (6) months after delivery by PacBio to Gen-Probe of a summary report establishing successful V2 Proof of Concept and (ii) thirty (30) months after the Effective Date, provided that in no event shall the Agreement expire prior to eighteen (18) months after the Effective Date (the "Term"). Upon the further written agreement by the parties effected prior to the expiration of the then-applicable Term, PacBio and Gen-Probe may renew this Agreement and extend the original Term.

8.2 Termination.

8.2.1 Breach. Each party may terminate this Agreement after the material breach of this Agreement by the other party, unless the breaching party has cured such breach within sixty (60) days after notice thereof from the non-breaching party. Any dispute with respect to the right of a party to terminate all or a portion of this Agreement shall be subject to resolution pursuant to Article 9.

8.2.2 Voluntary Bankruptcy. Each party may terminate this Agreement if the other party shall (a) seek the liquidation, dissolution, or winding up of itself (other than a liquidation of a solvent company for organizational purposes) or the readjustment of all or substantially all of its debts, (b) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all or substantially all of its assets, (c) make a general assignment for the benefit of its creditors, (d) commence a voluntary case under the Bankruptcy Code, (e) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up or readjustment of debts, or (f) adopt any resolution of its Board of Directors or stockholders for the purpose of effecting any of the foregoing.

8.2.3 Involuntary Bankruptcy. Each party may terminate this Agreement if a proceeding or case shall be commenced without the application or consent of the other party and such proceeding or case shall continue undismissed, or an order, judgment or decree approving or ordering any of the following shall be entered and continue unstayed in effect, for a period of ninety (90) days from and after the date service of process is effected upon the other party, seeking (a) its liquidation, reorganization, dissolution or winding up, or the readjustment of all or substantially all of its debts, (b) the appointment of a trustee, receiver, custodian, liquidator or the like of itself or of all or substantially all of its assets, or (c) similar relief under any law relating to bankruptcy, insolvency, reorganization, winding up or readjustment of debts.

8.2.4 Acquisition by a Competitor. Each party may terminate this Agreement if the other party undergoes a Change of Control whereby (a) the other party is acquired by, merged with or reorganized or consolidated into a competitor of the terminating party (or an Affiliate of such competitor), or (b) the terminating party's competitor (or its Affiliate) becomes an Affiliate of the other party. For purposes hereof, (a) PacBio's "competitors" shall include Life Technologies, Illumina, and F. Hoffman-La Roche, their respective assigns and successors in interest, and any other entity that competes with PacBio in the DNA sequencing field as of the date of the Change of Control, and (b) Gen-Probe's "competitors" shall include

[…***…], their respective assigns and successors in interest, and any other entity that competes with Gen-Probe in the molecular Diagnostics field as of the date of the Change of Control.

8.3 Effect of Expiration and Termination. Except to the extent otherwise provided in this Agreement, upon expiration or termination of this Agreement, all rights and licenses granted hereunder shall terminate. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. The provisions of this Section 8.3, the provisions of Sections 2.2 (excluding Sections 2.2.1 and 2.2.2), 5.2 and 8.2.1 and Articles 6, 7, 9 and 10 shall survive the expiration or termination of this Agreement, provided, however, that in the case of a termination prior to expiration of this Agreement, Sections 2.2.3, 2.2.4, 2.2.5 and 2.2.6 shall survive such termination solely in respect of the right of the party entitled to declare a termination to purchase Preferred Access Products of the other party.

ARTICLE 9
DISPUTE RESOLUTION AND GOVERNING LAW

9.1 Order. Disputes arising between the parties relating to the making or performance of this Agreement (including ownership of intellectual property rights, breach of confidentiality, inventorship, etc.) shall be resolved in the following order: (i) by good faith negotiation between executives of PacBio and Gen-Probe who have authority to fully and finally resolve the dispute; (ii) if necessary, by non-binding mediation at a location acceptable to the parties using a neutral mediator having experience with the industry (with the costs therefore shared equally); or (iii) as a last resort only, by arbitration of inventorship disputes as provided in Section 9.2, or by arbitration of any other disputes in accordance with Section 9.3. All negotiations pursuant to this clause shall be treated as Confidential Information in accordance with the provisions of Article 6 of this Agreement, and shall also be treated as compromise and settlement negotiations for purposes of Rule 408 of the Federal Rules of Evidence and comparable state rules of evidence.

9.2 Inventorship Disputes. If the parties are unable to resolve any dispute regarding inventorship by negotiation or mediation under Section 9.1, they shall submit such dispute to binding arbitration under the C.P.R. Institute for Dispute Resolution Rules for Non-Administered Arbitration of Patent and Trade Secret Disputes. The arbitrator shall be an independent patent attorney residing in the United States and registered to practice before the United States Patent and Trademark Office. The parties shall request that the arbitrator resolve the inventorship dispute in accordance with the laws of the United States within three (3) months of his or her appointment. The parties shall supply to the arbitrator documentary evidence of inventorship together with a written statement of their position not to exceed twenty (20) pages in length within twenty (20) days of the appointment of the arbitrator. Unless the parties agree to rely on affidavits, the arbitrator shall set a hearing at which each party shall have up to eight (8) hours to present witnesses and to cross examine the witnesses of the other party. If there is a hearing, each party shall provide a statement summarizing the testimony of each witness it may have testify to the other party and the arbitrator at least fifteen (15) days in advance of the hearing. The parties shall request that the arbitrator's award be in writing not to exceed twenty (20) pages in length and shall include reasoning in support of the award. The resolution of the arbitrator shall be final and binding on the parties, without right of appeal.

9.3 Arbitration Procedure. Except as provided for in Section 9.2, any controversy or claim relating to, arising out of, or in any way connected to any provision of this Agreement shall be finally resolved by final and binding arbitration in accordance with this Section by a single arbitrator who is a former state or federal judge, to be conducted in San Francisco, California if initiated by Gen-Probe, or in San Diego, California if initiated by PacBio, or in such other location as mutually agreed by the parties. Unless the parties agree otherwise, the arbitration shall be conducted by the Judicial Arbitration and Mediation Services, Inc. ("JAMS"), or by any similar arbitration provider who can provide a former judge to conduct such arbitration if JAMS is no longer in existence. JAMS may order a change of venue upon a showing of good cause by respondent. The decision of the arbitrator shall be final, nonappealable and binding upon the parties, and it may be entered in any court of competent jurisdiction. The arbitrator shall be bound by all rules relating to the admissibility of evidence, including without limitation, all relevant privileges and the attorney work product doctrine. Discovery shall be permitted in accordance with the rules and procedures of the forum state unless otherwise agreed to by the parties or ordered by the arbitrator on the basis of strict necessity adequately demonstrated by the party requesting an extension of time. The arbitrator shall have the power to grant equitable relief where applicable under the law. The arbitrator shall issue a written opinion setting forth his or her decision and the reasons therefor within thirty (30) days after the arbitration proceeding is concluded. The obligation of the parties to submit any dispute arising under or related to this Agreement to arbitration as provided in this Article 9 shall survive the expiration or earlier termination of this Agreement.

9.4 Confidentiality. The existence of and any facts or documents related to any proceedings under Sections 9.1, 9.2, and 9.3 shall be treated as Confidential Information in accordance with the provisions of Article 6 of this Agreement. Any mediator or arbitrator shall be bound by an agreement containing confidentiality provisions at least as restrictive as those contained in Article 6 of this Agreement.

9.5 Equitable Considerations. Nothing in this Article 9 shall preclude any party from taking whatever actions are necessary to prevent immediate, irreparable harm to its interests.

9.6 Damages. The parties each agree to waive any right to receive punitive, indirect, incidental, special or consequential damages (including, but not limited to, loss of profits, revenue, or business) relating in any way to this Agreement; provided, however, that the foregoing waiver shall not apply to any breach of a party's obligations of confidentiality under Article 6.

9.7 Applicable Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law principles thereof. The parties agree that the State of California has a substantial relationship to this transaction and each party agrees that the courts of California shall have exclusive jurisdiction over them and agree to submit to the jurisdiction of such courts. Accordingly, any and all litigation, including without limitation litigation relating to this Agreement, shall be brought exclusively in the State of California in the state or federal court having subject matter jurisdiction.

ARTICLE 10
MISCELLANEOUS

10.1 Limitation of Liability.

10.1.1 LIMITATION OF LIABILITY. UNDER NO CIRCUMSTANCES EXCEPT FOR A BREACH OF A PARTY'S OBLIGATIONS OF CONFIDENTIALITY UNDER ARTICLE 6 SHALL A PARTY BE LIABLE FOR PUNITIVE, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, REVENUE, OR BUSINESS) IN ANY WAY RELATED TO THIS AGREEMENT, OR THE TERMINATION OF THIS AGREEMENT, OR ARISING OUT OF OR ALLEGED TO HAVE ARISEN OUT OF (i) BREACH OF THIS AGREEMENT, (ii) THE FAILURE BY EITHER PARTY TO DEVELOP ANY PRODUCTS OR PROCESSES IN ACCORDANCE WITH ANY DEVELOPMENT PLAN, (iii) THE FAILURE BY EITHER PARTY TO DEVOTE THE RESOURCES SPECIFIED IN ANY DEVELOPMENT PLAN, (iv) THE FAILURE BY EITHER PARTY TO COMPLY WITH THE TERMS OF A DEVELOPMENT PLAN, OR (v) ANY EVENT RELATED TO THE CONDUCT OF ANY DEVELOPMENT PLAN. This limitation applies regardless of whether such damages are sought based on breach of contract, negligence, or any other legal theory.

10.2 Notices. Any consent, notice or report required or permitted to be given or made under this Agreement by one party to the other shall be in writing, addressed to such other party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor, and shall be effective: (i) if sent by registered or certified mail in the United States return receipt requested, upon receipt; (ii) if sent by nationally recognized overnight air courier (such as DHL or Federal Express), two (2) business days after mailing; (iii) if sent by facsimile transmission, with a copy mailed on the same day in the manner provided in clauses (i) or (ii) of this Section 10.2, when transmitted and receipt is confirmed by telephone or e-mail; and (iv) if otherwise actually personally delivered, when delivered.

If to Gen-Probe: Gen-Probe Incorporated

10210 Genetic Center Drive
San Diego, California 92121
Attention: President and CEO

With a copy to:

Gen-Probe Incorporated
10210 Genetic Center Drive
San Diego, California 92121
Attention: General Counsel

and

Debevoise & Plimpton LLP
919 Third Avenue
New York, NY 10022
Attention: Andrew L. Bab

If to PacBio: Pacific Biosciences of California, Inc.

1505 Adams Drive
Menlo Park, CA 94025
Attention: CEO

With a copy to:

Pacific Biosciences of California, Inc.
1505 Adams Drive
Menlo Park, CA 94025
Attention: General Counsel

10.3 Force Majeure. In the event that a party is prevented or delayed from fulfilling or performing any of its obligations under this Agreement (other than an obligation to pay money) due to the occurrence of causes beyond the reasonable control of such party, including fires, floods, embargoes, wars, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party, then such party's performance shall be excused, and the time for performance shall be extended, for the period of inability or delay due to such occurrence; provided, however, that such party shall have used its Commercially Reasonable Efforts to avoid such inability or delay, and such party shall have given prompt written notice to the other party of such occurrence.

10.4 Assignment.

10.4.1 This Agreement may not be directly or indirectly assigned or otherwise transferred, nor, except as expressly provided hereunder, may any right or obligations hereunder be assigned or transferred by a party (whether voluntarily, by operation of law or otherwise) without the consent of the other party which shall not be unreasonably withheld: provided, however, that, except as otherwise provided in Section 10.5 below, either party may, without such consent, assign or transfer this Agreement and its rights and obligations hereunder in connection with the transfer or sale of all or substantially all of its assets related to this Agreement or in the event of its merger, consolidation, other change in control or similar transaction. Any permitted assignee or transferee shall assume all obligations of its assignor or transferor under this Agreement. Any purported assignment or transfer in violation of this Section shall be void.

10.4.2 Assignment by a party of its rights and obligations under this Agreement shall not relieve that party of its obligations under Articles 6 and 7 hereof.

10.5 Change in Control. Each of the parties shall notify the other party as promptly as possible after any effected Change of Control. The party receiving the notice of Change of Control may require the party subject to the Change of Control to provide adequate assurance of performance of the Agreement.

10.6 Severability. Each party hereby acknowledges that it does not intend to violate any public policy, statutory or common laws, rules, regulations, treaty or decision of any government agency or executive body thereof of any country or community or association of countries. Should one or more provisions of this Agreement be or become invalid, the parties shall substitute, by mutual consent, valid provisions for such invalid provisions, which valid provisions in their economic effect are sufficiently similar to the invalid provisions that it can be reasonably assumed that the parties would have entered into this Agreement with such provisions. In case such provisions cannot be agreed upon, the invalidity of one or several provisions of this Agreement shall not affect the validity of this Agreement as a whole, unless the invalid provisions are of such essential importance to this Agreement that it is to be reasonably assumed that the parties would not have entered into this Agreement without the invalid provisions.

10.7 Entire Agreement. This Agreement contains the entire understanding of the parties with respect to the subject matter hereof from and after the Effective Date. All express or implied agreements and understandings, either oral or written heretofore made which are directly related to the subject matter of this Agreement are superceded by this Agreement, except to the extent of rights and obligations pursuant to the Confidentiality Agreement which had accrued as of the Effective Date. The parties acknowledge that they are also party to the Stock Purchase Agreement and that the provisions of that agreement, or differences between that agreement and this Agreement, shall not influence the interpretation of this Agreement. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by PacBio and Gen-Probe.

10.8 Independent Contractors. It is expressly agreed that Gen-Probe and PacBio shall be independent contractors and that the relationship between the parties shall not constitute a partnership, joint venture or agency. Neither Gen-Probe nor PacBio shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other, without the prior consent of the party to do so.

10.9 No Solicitation. Each party agrees that for a period beginning on the Effective Date and ending on the close of business on the date two years following the termination or expiration of this Agreement, neither party nor any of its Affiliates shall solicit to employ any officer of the other party or any employee of the other party that is involved in the performance of this Agreement (which shall include research and development employees and members of the Steering Committee), without obtaining the prior written consent of the other party (it being understood that any newspaper or public solicitation not directed specifically to such Person shall not be deemed to be a solicitation for purposes of this provision); provided that this Section 10.9 shall not prohibit a party or such party's Affiliates from discussing employment opportunities with, or hiring, any officer or employee of the other party involved in the performance of this Agreement who initiates such discussions with such party or such party's Affiliates.

10.10 Waiver. The waiver by a party of any right hereunder or the failure to perform or of a breach by the other party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other party whether of a similar nature or otherwise.

10.11 Drafting Party; Interpretation. The provisions of this Agreement, and the documents and instruments referred to in the Agreement, have been prepared, examined, negotiated and revised by each party and their respective lawyers, and no implication shall be drawn and no provision shall be construed against any party by virtue of the purported identity of the drafter of this Agreement, or any portion of this Agreement. The headings contained in this Agreement are for convenience of reference only, shall not be deemed a part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement. As used in this Agreement, the words "include" and "including," and variations of thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed by the words "without limitation." The parties acknowledge that they have been represented by counsel and have had the opportunity to conduct due diligence.

10.12 Third Parties. None of the provisions of this Agreement shall be for the benefit of or enforceable by any Third Party.

10.13 Affiliates. The rights and obligations of each party shall apply to its Affiliates, provided that each party shall be fully responsible for the performance by its Affiliates of such party's obligations under this Agreement.

10.14 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

By /s/ Hugh Martin
Hugh Martin, PhD.
Chairman and Chief Executive Officer

GEN-PROBE INCORPORATED

By /s/ Eric Tardif
Eric Tardif
Senior Vice President, Corporate Strategy

EXHIBIT LIST

A — Initial Development Plan

B — Initial Appointees to Steering Committee

C — V2 Proof of Concept Criteria

EXHIBIT A
INITIAL DEVELOPMENT PLAN

The parties shall undertake the following activities:

*making available, through the Steering Committee, all data, expertise, technology and know-how reasonably necessary for each party to perform its respective obligations under the Collaboration;

*defining a potential pilot study regarding the evaluation of Gen-Probe's Front-End Sample Preparation technologies combined with PacBio's sequencing Sample Preparation technologies across multiple sample sources, with the goals of streamlining and optimizing Sample Preparation methodologies within the context of current market, regulatory and reimbursement requirements and developing the Products for the Diagnostics market;

*identifying, through the Steering Committee, regulatory and reimbursement requirements for an integrated Sample Preparation and Third Generation Sequencing System;

*identifying the other expected requirements of the Products, including workflow, cost, performance and other requirements, in each case based in part on customer and key opinion leader input; and

*identifying and planning strategies for ensuring clinical adoption of the Products.

EXHIBIT B
INITIAL APPOINTEES TO STEERING COMMITTEE

Gen-Probe Incorporated

1. […***…]

2. […***…]

3. […***…]

Pacific Biosciences, Inc.

1. […***…]

2. […***…]

3. […***…]

***Confidential Treatment Requested

EXHIBIT C
V2 PROOF OF CONCEPT CRITERIA

"V2 Proof of Concept" shall mean PacBio's initial demonstration, currently targeted to be completed in […***…], that the V2 System is […***…], including […***…] and satisfaction of the milestones set forth below:

1. Completion of […***…], including:

a. Successful completion of […***…].

b. Completion of […***…].

c. Completion of the preliminary […***…], which shall outline the future development pathway and identify any significant remaining technical challenges and the proposed resolution of such challenges.

d. Successful completion of tests on […***…] and […***…], demonstrating preliminary feasibility. Such feasibility tests should address at least the following risk items: […***…].

2. Successful completion of the preliminary cost analysis of the […***…] and its manufacture, according to the then-current design of the […***…] and V2 System, demonstrating reasonable technical and commercial efficacy and feasibility of such product for its intended application.

3. Successful completion of the intellectual property portfolio strategy and plan, including […***…].

4. Completion of risk analysis identifying technical and commercial risks and severity, together with a mitigation plan.

5. Completion of feasibility for the V2 System as a whole, including top level architecture.

***Confidential Treatment Requested

Exhibit 10.8

Confidential Treatment Requested by
Pacific Biosciences of California, Inc.

EXCLUSIVE LICENSE AGREEMENT

THIS AGREEMENT is effective as of February 1, 2004 ("Effective Date") between Nanofluidics, Inc. ("LICENSEE"), a corporation of the State of Delaware, that has a principal place of business at 31 Dutch Mill Road, Ithaca, New York 14850, and Cornell Research Foundation, Inc. ("FOUNDATION"), a non-profit corporation of the State of New York, having an office at 20 Thornwood Drive, Suite 105, Ithaca, NY 14850. FOUNDATION and LICENSEE (individually "Party" and collectively, "Parties") hereby agree as follows:

ARTICLE 1: INTRODUCTION

1.1 FOUNDATION is a wholly owned subsidiary of Cornell and holds the ownership interests of patents, trademarks, copyrights, and proprietary materials made by Cornell's employees and administers licenses in a manner consistent with the policies of Cornell.

1.2 The Technology outlined in FOUNDATION dockets: […***…] have been invented by employees of Cornell University ("Cornell"), assigned to FOUNDATION, and FOUNDATION has filed for patent protection on such inventions related to Technology

1.3 LICENSEE desires to obtain the right to develop and to commercialize the Technology.

1.4 The work leading to the Technology was supported in part by an agency of the United States Government, and FOUNDATION is obligated to comply with United States OMB Circular A-124 and 37 CFR Part 401. This license is subject to the applicable terms of United States Government regulations concerning Government funded inventions.

1.5 The Parties agree to the terms and conditions hereinbelow in order to develop the Technology for commercial purposes, and utilize them in the public interest.

ARTICLE 2: DEFINITIONS

2.1 "Affiliate" shall mean (1) any corporation or other noncorporate entity owning directly, or indirectly controlling, […***…] of the stock normally entitled to vote for election of directors of LICENSEE; (2) any corporation owned or controlled by LICENSEE through ownership of […***…] of the stock entitled to elect directors or any other entity actually controlled by LICENSEE, (3) any corporate or noncorporate entity under common control with LICENSEE.

*** Confidential Treatment Requested

2.2 "Applications" shall mean United States Patent Application entitled […***…] serial number […***…] filed […***…], […***…] serial number […***…] filed […***…], […***…] filed […***…] and […***…] serial number […***…] filed […***…] and any other United States patent applications that may be filed on Technology, and any continuations, continuations-in-part, divisions of these applications, and any foreign patent applications that correspond to United States patent applications.

2.3 "Patents" shall mean United States Patent Number […***…] issued […***…], United States Patent Number […***…] issued […***…], United States Patent Number […***…] issued […***…], United States Patent Number […***…] issued […***…], any corresponding foreign patent applications, and any patent that issues on Applications, including any reissues and reexaminations.

2.4 "Exclusive" shall mean that during the term of this Agreement FOUNDATION will not grant commercial rights to Technology to any other party.

2.5 "Field-of-Use" shall mean […***…].

2.6 "Licensed Territory" shall mean all territories in the world where there are pending Applications or unexpired Patents that have not been declared invalid in an unappealed decision by a court having jurisdiction

2.7 "License Year" shall mean each twelve-month period beginning on January 1 and ending on December 31. However, the first License Year (alternatively, License Year 1) shall commence on the Effective Date and end on December 31 of the same calendar year.

2.8 "Products" shall mean any product or service which is covered by claims in Applications or Patents or which are made by a process which is covered by claims in Applications or Patents and any services which is covered by claims in Applications or Patents.

2.9 "Net Sales" shall mean the gross amount received for sales and other dispositions of Products by LICENSEE, and Sublicensees, to an independent third party on an arm's length basis less (i) all trade, quantity, and cash discounts actually allowed on Products, including discounts or rebates to governmental or managed care organizations; (ii) all credits and allowances actually granted on Products on account of rejection, returns, billing errors, and retroactive price reductions, (iii) charges for freight, insurance and other transport costs related to the delivery of the product; (iv) duties actually paid on Products; and (v) excise, sale and use taxes, and equivalent taxes or charges actually paid on Products.

2.10 "Sublicense" shall mean a rights-granting contract with an independent third party other than an Affiliate in which LICENSEE conveys rights granted to LICENSEE in 4.1 and 4.2 of this Agreement.

2.11 "Sublicensees" shall mean any entity granted a Sublicense by LICENSEE, and acceptable to FOUNDATION, under this Agreement.

2.12 "Technology" shall mean the novel methods, compositions and devices contained in the following FOUNDATION Dockets […***…] which are described in United States Patent Number […***…] issued […***…], United States Patent Number […***…] issued […***…], United States Patent Application Number […***…] filed […***…], United States Patent Application Number […***…] filed […***…], United States Patent Application Number […***…] filed […***…], United States Provisional Patent Application Number […***…] filed […***…], and United States Provisional Patent Application Number […***…] filed […***…] and any other United States patent applications that may be filed on the listed FOUNDATION Dockets, and any other patent applications, continuations, continuations-in-part, divisions of these applications related thereto, and any foreign patent applications that correspond to United States patent applications. FOUNDATION shall use reasonable efforts to assist LICENSEE in accord with any LICENSEE funded sponsored research undertaken at Cornell and separately contracted with Cornell's Office of Sponsored Programs

2.13 "Valid Claim" shall mean a claim in an issued, unexpired patent or in a pending patent application within the Applications and Patents that (a) has not been finally cancelled, withdrawn, abandoned or rejected by any administrative agency or other body of competent jurisdiction, (b) has not been revoked, held invalid, or declared unpatentable or unenforceable in a decision of a court or other body of competent jurisdiction that is unappealable or unappealed within the time allowed for appeal, (c) has not been rendered unenforceable through disclaimer or otherwise, and (d) is not lost through an interference proceeding.

ARTICLE 3: APPLICATIONS AND PATENTS

3.1 FOUNDATION shall hold title to all Applications and Patents.

3.2 FOUNDATION agrees to use reasonable efforts to file and prosecute Applications and maintain Patents. At any time during the term of this Agreement, LICENSEE may elect in writing to be released from its license in any of the Patents or Applications, in which event LICENSEE shall thereafter have no obligation to reimburse FOUNDATION for any future expenses relating to such Patents or Applications, and FOUNDATION shall have the option at its sole discretion and expense to file, prosecute, maintain and license to a third party such Patents or Applications.

3.3 […***…] for preparation, filing, prosecution and maintenance of Applications and Patents except for those Applications and

Patents for which it has waived its rights, in writing, as described in Section 3.2. Such reimbursable expenses […***…]. Such expenses shall be paid to FOUNDATION by LICENSEE within thirty (30) days of receipt of an invoice therefore unless FOUNDATION has otherwise agreed, in writing. LICENSEE shall […***…] by LICENSEE for reimbursable expenses under this agreement.

3.4 FOUNDATION shall have final authority over selection of patent attorneys and all decisions concerning filing and prosecution of Applications and maintenance of Patents. However, FOUNDATION shall keep LICENSEE informed of its filing, prosecution and maintenance activities, such information to include without limitation copies of all documents related to the filing, prosecution and maintenance of Applications and Patents, and shall give LICENSEE the option to actively participate, including the right to co-counsel, in making major decisions concerning such activities.

ARTICLE 4: LICENSE GRANT AND COMMERCIAL EFFORTS

4.1 Subject to the terms and conditions of this Agreement and to the rights of and obligations to the United States Government as set forth in United States Office of Management & Budget Circular A-124 or 37 CFR Part 401 et seq., FOUNDATION hereby grants and LICENSEE hereby accepts an EXCLUSIVE right to make, use, sell, offer for sale, lease, import, export or otherwise dispose of Products under Applications and Patents in Field-of-Use in Licensed Territory for the term of this Agreement as specified in Section 7.1.

(i) The right of LICENSEE to make Products includes the right to have Products made by contract with third parties within the Licensed Territory. Such contractual arrangements with third parties shall be subject to and conditioned upon appropriate supervision and quality assurance and control of the third party by LICENSEE and the third party shall be bound in writing to respect all rights of FOUNDATION.

4.2 LICENSEE shall also have the right to grant Sublicenses under this Agreement, […***…]. LICENSEE agrees to provide FOUNDATION a copy of any Sublicense granted pursuant to this Article 4. Sublicenses under this Agreement will be considered to be Confidential Information as specified in Section 8.2. Any such Sublicense shall contain provisions that are consistent with all the provisions of this Agreement which are protective of and beneficial to FOUNDATION. FOUNDATION shall have the right to require that said Sublicense be terminated in the event that a Sublicense materially breaches the above provision. LICENSEE shall be responsible to FOUNDATION for the […***…]. LICENSEE shall […***…] of any up-front Sublicense fees, or other up-front consideration, not including (i) payments made in consideration of the LICENSEE'S issuance of equity, or debt securities of the LICENSEE and (ii) payments made to LICENSEE in consideration of or as support for research and development activities. LICENSEE'S obligation to pay FOUNDATION'S share of Sublicense consideration described above shall be considered incurred as of the date on which such Sublicense consideration is received by LICENSEE.

4.3 FOUNDATION and Cornell retain an irrevocable, nonexclusive, and nontransferable right to practice for their own educational and research purposes, the inventions claimed in Applications and Patents and such purposes shall include limited, non-commercial collaboration with other non-profit research institutes as long as it does not adversely affect or compete with the business of LICENSEE as determined by an objective third party acceptable to both parties.

4.4 Nothing in this Agreement shall be construed to give LICENSEE rights in any inventions currently owned or developed in the future by FOUNDATION or Cornell other than those explicitly specified in this Agreement. Nothing in this Agreement shall be construed to give FOUNDATION rights in inventions currently owned or developed in the future by LICENSEE other than those explicitly specified in this Agreement.

4.5 The rights granted by this Agreement are to LICENSEE alone and not to any third parties or to any subsidiary or Affiliate of LICENSEE. However, LICENSEE may transfer this Agreement by way of sale of LICENSEE, through merger, sale of assets and/or sale of stock. LICENSEE shall provide written notice to FOUNDATION of any such transfer.

4.6 LICENSEE shall use reasonable commercial efforts, consistent with sound and reasonable business practices and judgment, to affect commercialization of Products as soon as practicable and to maximize sales thereof. […***…]

(i) In the event that the FOUNDATION identifies any other markets for DNA sequencing in Licensed Territory and/or other Products and/or geographical area markets as significant, LICENSEE shall agree in writing to evaluate the potential for commercialization therein itself or through appropriate Sublicense in a timely manner. If LICENSEE elects not to pursue said commercialization in said market(s) or in FOUNDATION's sole judgment LICENSEE has failed to evaluate such commercialization, then LICENSEE agrees to Sublicense with reasonable commercial terms to a Sublicensee for said market(s) or terminate this LICENSEE'S rights under this Agreement only for said significant Products and/or geographical area markets

(ii) FOUNDATION may terminate this Agreement if LICENSEE has not […***…] after the end of the […***…].

4.7 Beginning with the first (1st) License Year, within sixty (60) days after the start of each License Year and until LICENSEE markets Products, LICENSEE shall make a written annual report to FOUNDATION covering the preceding License Year, regarding the progress of LICENSEE toward commercial use of Products. Such report shall include, at a minimum, information sufficient to enable FOUNDATION to satisfy reporting requirements of the United States Government and for FOUNDATION to ascertain progress by LICENSEE toward meeting the reasonable commercial efforts of this Article 4. LICENSEE shall provide these reports with the royalty report specified in Article 5. Such report will be considered to be Confidential Information as specified in Section 8.2.

*** Confidential Treatment Requested

4.8 LICENSEE shall not use, nor shall LICENSEE permit Sublicensee to use, the names, trademarks and indicia of FOUNDATION or of Cornell, nor the names of any employee, student or faculty member of FOUNDATION nor of Cornell without prior written approval from FOUNDATION, which will not be unreasonably withheld.

4.9 LICENSEE shall alone have the obligation to ensure that Products it makes, uses, sells, offers for sale, leases, imports, exports, or otherwise disposes of are not defective, that Products satisfy all applicable government regulations and that export of Products satisfies government export requirements.

ARTICLE 5: PAYMENTS, ROYALTIES, REPORTS AND RECORDS

5.1 As consideration for entering into this Agreement, […***…], in the event that LICENSEE […***…] related series of transactions with total proceeds to LICENSEE of at least […***…] (a "Major Financing") and following such Major Financing, FOUNDATION'S "Equity Ownership" of LICENSEE, which includes the shares of LICENSEE'S non-voting Common Stock then held by FOUNDATION (or any shares of LICENSEE'S voting common stock issued upon conversion thereof), is less than […***…] of LICENSEE'S outstanding capital stock (including all outstanding common stock, preferred stock, options or warrants to purchase common or preferred stock, and any options reserved for issuance under any equity incentive plan, hereinafter referred to as "on a fully diluted basis"); then

(a) LICENSEE shall issue to the FOUNDATION, pursuant to a common stock purchase agreement in the form attached hereto as Exhibit B, that number of shares of common stock equal to the number of shares necessary to increase FOUNDATION'S Equity Ownership to […***…] of LICENSEE'S outstanding capital stock, following such Major Financing, on a fully diluted basis. If the Major Financing exceeds […***…], LICENSEE will not issue any shares of common stock to provide an adjustment to FOUNDATION'S Equity Ownership for the amount of the Major Financing in excess of […***…]; and

(b) LICENSEE shall grant to FOUNDATION the same registration and information rights granted to the investors in the Major Financing.

(c) LICENSEE will use its commercially reasonable efforts to cause the common stock issued pursuant to Section 5.1(a) hereof to not be subject to any lock-up periods that may be required in connection with the LICENSEE'S initial public offering.

A Major Financing shall only include the first financing of LICENSEE that meets the […***…] proceeds threshold.

5.2 FOUNDATION hereby consent to any conversion of the non-voting Common Stock held by it to voting Common Stock in connection with the Major Financing.

5.3 FOUNDATION hereby agrees that all previous provisions of, rights granted and covenants made regarding the issuance of the LICENSEE'S capital stock are hereby waived, released and superseded in their entirety by the provisions of this Section 5 and shall have no further force or effect.

*** Confidential Treatment Requested

5.4 For the license granted hereunder, commencing on the date of the first commercial sale of Product, LICENSEE shall pay or cause to be paid to FOUNDATION a royalty of […***…] on Net Sales of Products on a country by country basis […***…]. In the event that Products incorporate at least one claim described in third party […***…] (each such third-party […***…] being defined as a "Non-Foundation Right") the royalty shall be (i) the amount of Net Sales for the Products incorporating Non-Foundation Rights, (ii) multiplied by […***…], and (iii) […***…]. Such stacking shall become effective on LICENSEE providing reasonable evidence to FOUNDATION that additional Applications or Patents are applicable to the Product. In the event of a disagreement as to the inclusion of any […***…], the Parties agree that an independent neutral party shall be consulted to determine the appropriateness of inclusion of the […***…] such royalty calculation.

5.5 Beginning with the […***…] License Year and in each License Year thereafter, LICENSEE shall pay FOUNDATION a minimum annual royalty for that License Year. Payment shall be due within thirty (30) days of the first day of the License Year and […***…] and the royalty reports required under Section 5.7 should reflect […***…]. None of the minimum annual royalties are refundable or applicable to a succeeding License Year. Such minimum annual royalty payments shall be made according to the following schedule and […***…]:

License Year	Payment Due Date	Min. Royalty Payment
[…***…]	[…***…]	[…***…]
[…***…]	[…***…]	[…***…]
[…***…]	[…***…]	[…***…]
[…***…]	[…***…]	[…***…]

5.6 Royalties shall be payable only once with respect to the same unit of Products.

5.7 LICENSEE shall provide FOUNDATION with semi-annual written reports, due June 30th and December 31st of each License Year, of all sales, leases or other dispositions of Products by LICENSEE and Sublicensees. In order to minimize LICENSEE time spent on royalty reports, a brief one-page Royalty Report Form is provided in Exhibit A that will satisfy FOUNDATION'S reporting requirements. The report shall be made within thirty (30) days of the end of each semiannual period. FOUNDATION agrees to keep the information in these reports confidential, except as may be necessary to maintain an action against LICENSEE for breach of this Agreement. Royalty payments for sales, leases, and other dispositions of the Products invoiced during a semi-annual period shall accompany the Royalty Report Form for that particular semi-annual period. The Royalty Report Form shall be submitted regardless of whether or not royalties are owed. Payments shall be made in United States dollars, Conversion from foreign currencies,

if any, shall be based upon the conversion rate published in The Wall Street Journal on the last day of the particular semi-annual accounting period (or on the last business day on which The Wall Street Journal is published during said semi-annual period) for which royalties are due. Royalty checks shall be made payable to Cornell Research Foundation and mailed to the address specified in section 13.4.

5.8 LICENSEE shall keep and maintain, and LICENSEE shall require that Sublicensees keep and maintain, any and all records necessary to certify compliance of LICENSEE with the terms of this agreement, including but not limited to accounting general ledgers, Sublicense and distributor agreements, price lists, catalogs, marketing materials, audited financial statements, income tax returns, sales tax returns, inventory records, and shipping documents of Products. Such records shall be open to inspection at reasonable times by a certified public accountant chosen by FOUNDATION and acceptable to LICENSEE, which shall not unreasonably withhold such acceptance. Such inspection shall be made at FOUNDATION'S expense. However, if the results of any audit reveal additional royalties owed to FOUNDATION that differ by more the […***…] percent) from those royalties already paid, LICENSEE shall also reimburse FOUNDATION for the costs of the audit. FOUNDATION agrees to hold such records confidential, except as may be necessary to maintain an action against LICENSEE for breach of this Agreement. The records required by this paragraph shall be maintained and available for inspection for a period of six (6) years following the calendar quarter to which they pertain. This paragraph shall survive termination of this Agreement.

5.9 LICENSEE shall reimburse FOUNDATION for the expenses specified in Section 3.3 within thirty (30) days of written invoice from FOUNDATION. Such invoice shall specify the date the expense was incurred, the purpose of the expense (including, as applicable, a summary of patent attorney services giving rise to the expense), and the Applications or Patents to which the expense relates,

5.10 Payments due under Sections 5.1 and 5.5 shall be considered late if not received by the dates specified in Sections 5.1 and 5.5 respectively, whether invoiced or not. Payments due under Section 5.9, and any other payments due under this Agreement, other than the payments due under Sections 5.1 and 5.5 and royalty payments, shall be considered late if not received within sixty (60) days of the date of invoice. Royalty payments due under Section 5.7 of this Agreement and payment of FOUNDATION'S share of Sublicense consideration shall become late if not paid within sixty (60) days after the end of the semi-annual in which the payment obligation was incurred. Late payments […***…].

5.11 LICENSEE agrees to make a written report to FOUNDATION within ninety (90) days after the expiration of this Agreement pursuant to Section 7.1. LICENSEE shall continue to make reports pursuant to the provisions of this Section 5.7 concerning royalties payable in accordance with Section 5.4 in connection with the sale of Products after expiration of the license, until such time as all such Products produced under the license have been sold or destroyed. Concurrent with the submittal of each post-termination report, LICENSEE shall pay FOUNDATION all applicable royalties.

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ARTICLE 6: INFRINGEMENT

6.1 In the event that either party determines that a third party is making, using, selling, offering for sale, or importing a product that may infringe Patents, it will promptly notify the other party in writing. LICENSEE may elect, with the prior written consent of FOUNDATION, to bring suit against such alleged infringer. Such election must be made within thirty (30) days of receipt of said written consent from FOUNDATION. All recoveries in such suit shall belong to LICENSEE except that LICENSEE may elect to grant FOUNDATION the right to elect to pay up to fifty percent (50%) of the litigation costs and receive a percentage of any recovery equal to the percentage of litigation costs paid. If such suit involves claims of infringement of Non-Foundation Rights, FOUNDATION'S right of election to pay litigation costs and corresponding rights in recovery shall be limited to 50% multiplied by the fraction expressed in section 5.4 (iii). FOUNDATION must make such election within thirty (30) days of its receipt of notice that LICENSEE has elected to bring suit. FOUNDATION shall also have the right to choose to be represented by separate counsel in any such suit at its own expense. Such expense for separate counsel shall not be considered as part of "litigation costs" for purposes of determining FOUNDATION'S share of any recovery in accordance with the sentence above. If LICENSEE elects not to bring a suit against the alleged infringer, it shall promptly notify FOUNDATION of that fact and FOUNDATION shall have the right to commence such actions at its own cost and expense, in which case any recoveries shall belong to FOUNDATION. In such suits by FOUNDATION, LICENSEE shall have rights of participation and recovery that are the same as FOUNDATION rights as provided above when LICENSEE elects to sue, except in this case the fraction expressed in section 5.4 (iii) shall not be applied.

6.2 Regardless of which party controls a suit brought against an infringer, both parties shall participate in any settlement discussions and each will be a signatory to any settlement agreement.

ARTICLE 7: TERM AND TERMINATION

7.1 This Agreement shall commence on Effective Date, and shall continue as a Field-of-Use Exclusive license until the last of all Patents has either expired or been invalidated in an unappealed decision by a court having jurisdiction so long as LICENSEE'S covenants under the Agreement are being performed and the LICENSEE is in good standing, and provided this Agreement is not earlier terminated as provided for herein.

7.2 FOUNDATION may terminate this Agreement if LICENSEE:

(i) is in default in payment of license fees, royalties or cost reimbursements or in providing reports;

(ii) is in material breach of any provision of this Agreement;

(iii) provides any false report;

(iv) if LICENSEE does not […***…] prior to […***…];

(v) has not […***…] after the end of the […***…] ;

*** Confidential Treatment Requested

(vi) if LICENSEE fails to provide written notice to FOUNDATION for the transfer of this Agreement upon the sale of LICENSEE in accordance to Section 4.5 or for a Sublicense of this Agreement in accordance with Section 4.2

and LICENSEE fails to remedy any such default, breach, or false report within sixty (60) days after receiving written notice thereof by FOUNDATION.

7.3 LICENSEE may terminate the license granted hereunder at any time upon sixty (60) days notice to FOUNDATION. FOUNDATION agrees that any expenses initiated by FOUNDATION during the sixty (60) day termination period will not be LICENSEE'S financial obligation although all other obligations under this Agreement shall continue to accrue during the sixty (60) day notice period, including the obligation to make any payments due under this Agreement.

7.4 Upon termination of this Agreement for any reason, including the end of term as specified above, all rights and obligations under this Agreement shall terminate, except those that have accrued prior to termination and except as specified in this Agreement.

ARTICLE 8: PUBLICATION AND CONFIDENTIALITY

8.1 It is the policy of FOUNDATION and Cornell to promote and safeguard free and open inquiry by faculty, students and others. To further this policy, FOUNDATION and Cornell shall retain the right to publish information described in Applications and Patents.

8.2 Both parties agree to keep any information identified as confidential by the disclosing party confidential using methods at least as stringent as each party uses to protect its own confidential information, except as may be necessary to maintain an action against LICENSEE for breach of this Agreement or to audit LICENSEE as specified under Section 5.8. "Confidential Information" shall include the progress report required under Section 4.7 and any other information marked confidential or accompanied by correspondence indicating such information is confidential exchanged between the parties hereto. The confidentiality and use obligations set forth above apply to all or any part of the Confidential Information disclosed hereunder except to the extent that:

(a) LICENSEE or FOUNDATION can show by written record that it possessed the information prior to its receipt from the other party;

(b) The information was already available to the public or became so through no fault of the LICENSEE or FOUNDATION;

(c) The information is subsequently disclosed to LICENSEE or FOUNDATION by a third party that has the right to disclose it free of any obligations of confidentiality; or

(d) Five years have elapsed from the expiration of this Agreement.

ARTICLE 9: ARBITRATION AND JUDICIAL REMEDIES

9.1 If a controversy arises under or related to this Agreement, and any disputed claim by either party against the other under this Agreement excluding any dispute relating to patent validity or infringement arising under this Agreement, the parties shall endeavor to resolve such controversy or dispute by mutual, good faith conciliation and mediation and, failing that, may mutually agree to settle the controversy or dispute by arbitration in accordance with the Licensing Agreement Arbitration Rules of the American Arbitration Association.

(i) Upon request by either party, arbitration will be by a third party arbitrator mutually agreed upon in writing by LICENSEE and FOUNDATION within thirty (30) days of such arbitration request. If the parties fail to mutually agree upon said third party arbitrator within the allotted thirty days, then the arbitration will be by a panel of three arbitrators comprising one arbitrator selected by each party within a further thirty (30) day period and a third arbitrator selected by the preceding two arbitrators. If one party fails to select an arbitrator within the allotted thirty day period, then said arbitration panel will consist solely of the arbitrator chosen by the other party.

(ii) The parties shall be entitled to discovery in like manner as if the arbitration were a civil suit in the New York Superior Court. The Arbitrator may limit the scope, time and/or issues involved in discovery.

(iii) Any arbitration shall be held at Ithaca, NY, unless the parties hereto mutually agree in writing to another venue.

9.2 FOUNDATION reserves the right and power to proceed with direct judicial remedies against LICENSEE without conciliation, mediation or arbitration for breach of the royalty payment and sales reporting provisions of this Agreement after giving written notice of such breach to LICENSEE followed by an opportunity period of thirty (30) days in which to cure such breach. In collecting overdue royalty payments and securing compliance with reporting obligations, FOUNDATION may use all judicial remedies available.

ARTICLE 10: INDEMNIFICATION

10.1 LICENSEE agrees to indemnify and hold harmless FOUNDATION and Cornell and their respective trustees, officers, employees, students, and agents against any and all claims for death, illness, personal injury, property damage, damages, expenses, losses and improper business practices arising out of (i) the manufacture, use, sale, or other disposition of Patents or Products by LICENSEE, Sublicensee, or their customers, (ii) a third party's use of a Products purchased, leased, or otherwise acquired from LICENSEE or Sublicensee, (iii) a third party's manufacture or provision of a Products at the request of LICENSEE or Sublicensee.

10.2 FOUNDATION shall not be liable for any indirect, special, consequential, or other damages whatsoever, whether grounded in tort (including negligence), strict liability, contract or otherwise. FOUNDATION shall not have any responsibilities or liabilities whatsoever with respect to Products.

10.3 LICENSEE and Sublicensee shall at all times comply, through insurance or self-insurance, with all statutory workers' compensation and employers' liability requirements covering any and all employees with respect to activities performed under this Agreement.

10.4 LICENSEE agrees to obtain and maintain insurance against liability, damage, destruction and loss comparable to that which is maintained by companies in similar businesses at similar stages in their growth.

10.5 The provisions of this article shall survive termination of this Agreement.

ARTICLE 11: WARRANTIES AND LIMITATIONS

11.1 FOUNDATION and LICENSEE each represent and warrant that they have the right to enter into this Agreement. FOUNDATION warrants that it has the right to convey to LICENSEE the rights granted under this Agreement.

11.2 FOUNDATION warrants that is the owner of Applications and Patents.

11.3 FOUNDATION makes no representation or warranty that Applications will result in issued Patents.

11.4 FOUNDATION makes no representations or warranties concerning the validity or scope of Patents.

11.5 FOUNDATION does not warrant that Products made, used, sold, leased, imported, exported or otherwise disposed of under the license of this Agreement is or will be free from infringement of patents of third parties.

11.6 Nothing herein shall be construed as granting by implication, estoppel, or otherwise any licenses or rights under patents or other rights of FOUNDATION or Cornell or other persons other than Patents, regardless of whether such patents or other rights are dominant or subordinate to any Patents.

11.7 FOUNDATION is under no obligation to furnish any technology or information other than that described and claimed in Applications and Patents.

11.8 Nothing herein shall be construed to grant LICENSEE rights under any applications or patents other than Applications and Patents.

11.9 FOUNDATION does not make any representations, extend any warranties of any kind, express or implied, or assume any responsibility whatever concerning the manufacture, use, or sale, lease or other disposition by LICENSEE or its vendees or transferees of Products.

11.10 Except as expressly set forth in this Agreement, FOUNDATION MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF PRODUCTS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER RIGHTS OR ANY OTHER EXPRESS OR IMPLIED WARRANTIES.

ARTICLE 12: MARKING

12.1 Prior to the issuance of patents on the Applications, LICENSEE shall mark, and agrees to require that Sublicensees shall mark, Products (or their containers or labels) made, sold, leased, imported, exported or otherwise disposed of by it under the license granted in this Agreement with the words "Patent Pending," and following the issuance of one or more Patents, with the numbers of Patents.

ARTICLE 13: MISCELLANEOUS PROVISIONS

13.1 Terms in this Agreement which appear capitalized, other than the names of the parties and article headings, have the meanings given in Article 2 and retain those meanings whether used in the singular or plural.

13.2 This Agreement shall be binding upon and be to the benefit of the Parties hereto and their heirs, successors and assignees. However, neither Party shall assign this Agreement, in whole or in part, without the written consent of the other.

13.3 All issues and questions concerning the construction, validity and interpretation of this Agreement and the Schedules and Exhibits hereto shall be governed by, and construed in accordance with, the laws of the State of New York without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of New York or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of New York. In furtherance of the foregoing, the internal law of the State of New York shall control the interpretation and construction of this Agreement (and all Schedules and Exhibits hereto), even though under that jurisdiction's choice of law or conflict of law analysis, the substantive law of such other jurisdiction would ordinarily apply. The parties hereto hereby irrevocably and unconditionally submit to the exclusive jurisdiction of any State court sitting in Tompkins County, State of New York or Federal court sitting in Syracuse, New York over any suit, action or proceeding arising out of or relating to this Agreement and agree that no such suit, action or proceeding shall be brought in any other court, forum or jurisdiction. The parties hereto hereby irrevocably and unconditionally waive any objection to the laying of venue of any such suit, action or proceeding brought in any such court and any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.

13.4 All notices required or permitted hereunder shall be in writing and be served on the parties at the addresses set forth below. Any such notices shall be either (a) sent by a nationally recognized overnight courier, in which case notice shall be deemed delivered when delivery is made according to the records of such courier, (b) sent by facsimile, in which case notice shall be deemed delivered upon receipt of confirmation of transmission of such facsimile notice, or (c) sent by personal delivery, in which case notice shall be deemed delivered upon receipt. Any notice by facsimile or personal delivery and delivered after 5:00 p.m., Eastern Daylight Time, shall be deemed received on the next Business Day. A party's address may be changed by written notice to the other parties; provided, however, that no notice of a change of address shall be affected until actual receipt of such notice.

In the case of FOUNDATION:

President
Cornell Research Foundation, Inc.
20 Thornwood Drive, Suite 105
Ithaca, NY 14850

In the case of LICENSEE:
President
Nanofluidics, Inc.
31 Dutch Mill Road
Ithaca, NY 14850

13.5 No term or provision of this Agreement shall be waived and no breach excused unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. No waiver of a breach shall be deemed to be a waiver of a different or subsequent breach.

13.6 This Agreement may not be modified, changed or terminated orally. No change, modification, addition or amendment shall be valid unless in writing and signed by the parties hereto.

13.7 In the event any provision of this Agreement is determined to be invalid or unenforceable, the remaining provisions shall remain in full force and effect.

13.8 This Agreement constitutes and contains the entire agreement of the parties respecting its subject matter and supersedes any and all prior negotiations, correspondence, understandings and agreements, whether written or oral, between the parties respecting its subject matter.

IN WITNESS of this Agreement, FOUNDATION and LICENSEE have caused this Agreement to be executed by their duly authorized officers on the dates indicated.

Cornell Research Foundation, Inc.		**Nanofluidics, Inc.**	
By:	/s/ Richard S. Cahoon Richard S. Cahoon	By:	/s/ Stephen W. Turner Stephen W. Turner
Title:	Senior Vice President	Title:	President
Date:	March 2, 2004	Date:	March 2, 2004

EXHIBIT A - ROYALTY REPORT

Report royalty payment information to the Cornell Research Foundation, Inc (CRF) using the report format or facsimile attached to these instructions. This minimal information must be provided in order to correctly record royalty related events required by your license agreement with CRF.

Use a separate report to record royalty information for each license agreement. For each licensee agreement, report royalty sales by CRF docket number, which identifies the technology. List each contributing technology if more than one technology is used to produce a royalty generating process/product. This level of detail permits evaluation of the use of each technology under license with your company.

Submit this information along with appropriate payment to:

Cornell Research Foundation, Inc.
ATTN: Finance and Accounting
20 Thornwood Drive, Suite 105
Ithaca, NY 14850
(607) 257-1081
www.crf.cornell.edu

For your convenience, payments may be made by FEDWIRE or ACH to:

[…***…]

Account: […***…], ABA: […***…]

*** Confidential Treatment Requested

ROYALTY REPORT – [licensee NAME]

LICENSEE NAME: _____ CRF LICENSE NUMBER: _____

REPORTING PERIOD: _____

Individual to contact concerning this information:

Name: _____ Phone # or email ID: _____

For each product/item subject to a royalty payment provision, provide the following information as applicable.

PRODUCT/ITEM: _____

CRF Docket Number	Country	Number of Units/Products Sold	Gross Sales By Country	Net Sales By Country	Royalty Rate	Less Minimum Royalty Payment Made	Net Royalty Payment Made
						Total Payment	

Exhibit 10.10

Confidential Treatment Requested by Pacific Biosciences of California, Inc.

IURTC Tech No. […*…]**

EXCLUSIVE LICENSE AGREEMENT

Between

INDIANA UNIVERSITY RESEARCH AND TECHNOLOGY CORPORATION
Licensor

And

NANOFLUIDICS, INC.
Licensee

*** Confidential Treatment Requested

Introduction: This Exclusive License Agreement ("Agreement") is made and entered into on the Effective Date by and between the Indiana University Research and Technology Corporation, a nonprofit corporation organized under the laws of the state of Indiana, having its principal offices at 351 West 10th Street, Indianapolis, Indiana 46202 (hereinafter "IURTC"), and Nanofluidics, Inc., a corporation organized under the laws of the State of Delaware, having its address at 1505 Adams Drive, Menlo Park, CA 94025 (hereinafter "Nanofluidics").

1 **Background:** Through a Memorandum of Agreement between Indiana University (IU) and the Advanced Research and Technology Institute (ARTI), the predecessor corporation to IURTC, dated January 1, 1997, IU assigns its intellectual property to IURTC and IURTC is responsible for managing the intellectual property through its Office of Technology Transfer. IURTC is the owner of certain Intellectual Property that is the subject of this Agreement and has the right to grant licenses. IURTC wishes to allow the Intellectual Property to be used to further scientific research and for new product development and other applications in the public interest and is willing to grant a license for such uses. Nanofluidics represents to IURTC that it has the necessary product development, manufacturing and marketing capabilities to commercialize products based on such Intellectual Property. Nanofluidics desires to obtain a license to use these properties and information for its own commercial research and development endeavors upon the terms and conditions set forth in this Agreement. In consideration of these premises and the mutual promises contained herein, the Parties further agree as follows.

2 **Definitions:** For the purposes of this Agreement, the following words and phrases will have the meanings assigned to them below.

2.1 Calendar Half: Each six-month period, or portion thereof, beginning on January 1 or July 1.

2.2 Calendar Year: Each twelve month period, or portion thereof, beginning on January 1.

2.3 Confidential Information: All terms of this agreement and any information provided by a Party to the other Party pursuant to this Agreement, which is identified as "Confidential Information" at the time provided.

2.4 Development Plan: Nanofluidics' good faith, bona fide plan for the development, manufacture, promotion, importation, sale and/or marketing of Licensed Products.

2.5 Diagnostic: A Licensed Product which is intended to diagnose or ascertain clinical condition(s) of a patient, wherein information is to be reported to a patient and/or his/her caregiver for use in a therapeutic decision.

2.6 Effective Date: May 15, 2005.

2.7 Field: [...***...]

2.8 First Commercial Sale: The earliest date on which Nanofluidics or any of its Sublicensees executes a Sale (including equivalent cash value for trades or other non-cash payments). The transfer of Licensed Products by Nanofluidics or its Sublicensees strictly for their own laboratory research and development purposes, beta-testing and/or clinical testing does not constitute a First Commercial Sale for the purposes of this Agreement, provided that Nanofluidics or its Sublicensees receive no payment or other compensation or value for such Licensed Product in excess of the fully burdened (i.e., direct and indirect) costs of producing and transporting such materials.

2.9 Intellectual Property: Any and all rights under the Patent Rights.

2.10 Licensed Product: Any product made, made for, used, sold or imported by Nanofluidics or any Sublicensees that: (a) in the absence of this Agreement would infringe at least one Valid Claim, or (b) uses a process covered by a Valid Claim.

2.11 Nanofluidics: Nanofluidics, Inc. and its affiliates which are exercising the rights granted in Article 3. For the purpose of this definition, affiliate is any person or entity that, directly or indirectly, owns or controls a Party or that is controlled by or under common control with a Party. Control(s) or controlled by means (a) direct or indirect ownership of at least 50% of the outstanding voting securities of a corporation, (b) the right to receive at least 50% of the earnings of the person, corporation, or other entity in question, or (c) the right to control the business decisions of the person, corporation, or other entity in question.

2.12 Net Sales: The total of all value, compensation, and payments received for Sales of Licensed Products, it being understood that Net Sales will include only Sales of [...***...], less the following:

2.12.1 Trade, quantity and cash discounts on Licensed Products actually provided to third parties.

2.12.2 Credits, allowances or refunds, not to exceed the original invoice amount, for actual claims, damaged goods, rejections or returns of Licensed Products.

2.12.3 Excise, sale, use, value added or other taxes, other than income taxes, paid by Nanofluidics or its Sublicensees due to the Sale of Licensed Products.

2.12.4 Freight, transport packaging, or insurance charges associated with transportation.

2.13 Party: IURTC or Nanofluidics. Collectively, IURTC and Nanofluidics are referred to as the “Parties.”

2.14 Patent Rights: Any and all rights in and to United States Patent No. [...***...], as well as all patents or applications claiming priority thereto or common priority with United States Patent No. [...***...], including all divisions, continuations, continuations-in-part, reissues, reexaminations, and any foreign counterparts to the foregoing patents or applications.

2.15 Sale: Any transaction in which a Licensed Product is exchanged or transferred for value. A Sale of a Licensed Product will be deemed to have been made at the time Nanofluidics (or anyone acting on behalf of or for the benefit of Nanofluidics) first invoices, ships, or receives value for a Licensed Product.

2.16 Sublicensee: A person or entity to whom Nanofluidics has granted a sublicense pursuant to and in accordance with Article 3 of this Agreement.

2.17 Sublicensing Revenue: All payments received by Nanofluidics from its Sublicensees specifically attributable to the licensing of Intellectual Property, including upfront cash payments, minimum royalties and royalties on Net Sales on the account of the importation, manufacture, sale, or use of Licensed Products in the Territory during the Term of this Agreement.

2.18 Term: Commencing on the Effective Date and continuing until the expiration of the last to expire patents included in the Patent Rights unless earlier terminated in accordance with this Agreement.

2.19 Territory: Anywhere in the world, except those countries to which export of technology or goods is prohibited by applicable U.S. export control laws or regulations.

2.20 Valid Claim: A claim of an issued and unexpired patent included in the Patent Rights that has not been disclaimed, or has not been held invalid or unenforceable by a court or other governmental agency of competent jurisdiction in a decision or order that is not subject to appeal.

3 **License Grant:** Subject to the terms and conditions set forth in this Agreement, IURTC hereby grants to Nanofluidics and Nanofluidics hereby accepts, the following license during the Term in the Territory:

3.1 An exclusive, fee- and royalty-bearing license, including the right to enforce the Patent Rights and the right to grant sublicenses as set forth herein, under the Intellectual Property, to make, have made, sell, offer for sale, have sold, use, import and have imported Licensed Products in the Field.

3.2 Nanofluidics may grant sublicenses under this Agreement only in strict compliance with the following terms and conditions:

3.2.1 Only Nanofluidics is permitted to grant sublicenses. Any sublicense granted by Nanofluidics under this Agreement shall provide that Sublicensees:

3.2.1.1 Indemnify and hold harmless IURTC Indemnitees (as defined in Article 11) to the same extent and under terms no less favorable to IURTC Indemnitees as Nanofluidics' obligations under Article 11 of this Agreement.

3.2.1.2 Maintain insurance for IURTC's benefit to the same extent and under terms no less favorable to IURTC as Nanofluidics' obligations under Article 12 of this Agreement.

3.2.1.3 Maintain books and records and allow audits for IURTC's benefit to the same extent and under terms no less favorable to IURTC as Nanofluidics' obligations under Section 6.4 of this Agreement.

3.2.1.4 Use commercially reasonable efforts to comply with those parts of Nanofluidics' Development Plan referred to in Article 4 of this Agreement which are relevant to the activities of the Sublicensee.

3.2.1.5 Will pay directly to IURTC the Sublicensing Revenue then due or thereafter due to Nanofluidics upon receipt of notice from IURTC and only after Nanofluidics enters bankruptcy or receivership, voluntarily or involuntarily. IURTC will remit to Nanofluidics any amounts received that exceed the sum actually owed by Nanofluidics to IURTC.

3.2.1.6 Will become direct licensees of IURTC under the rights originally sublicensed to them by Nanofluidics if this Agreement is terminated prior to expiration, provided that (i) the Sublicensee did not cause the termination of this Agreement and (ii) the Sublicensee agrees to reasonably comply with the relevant terms of this Agreement and to fulfill all the responsibilities of Nanofluidics hereunder including reasonable obligations to continue with product development. In no event, however, shall a person or entity who becomes a direct licensee pursuant to this provision have any right to grant sublicenses under this Agreement. Sublicensing agreements will remain in effect if this Agreement is terminated prior to expiration.

3.2.2 Within thirty (30) days of the effective date of any sublicense, Nanofluidics shall provide IURTC a complete copy of the sublicense and all exhibits thereto. If the original sublicense is written in a language other than English, the copy of the sublicense and all exhibits thereto shall be accompanied by a complete translation written in English. Nanofluidics represents and warrants that such translation will be a true and accurate translation of the sublicense agreement and its exhibits.

3.2.3 Nanofluidics will be primarily liable to IURTC for all of Nanofluidics' obligations contained in this Agreement. Any act or omission by a Sublicensee that would be a breach of this Agreement if not unreasonably imputed to Nanofluidics will be deemed to be a breach by Nanofluidics of this Agreement.

3.2.4 If IURTC becomes aware of the breach, IURTC will provide Nanofluidics reasonable advance notice of such act or omission by a Sublicensee, and afford Nanofluidics the opportunity to cure the breach within ninety (90) days after Nanofluidics receives the notice from IURTC.

3.3 The license "to have made" granted in Articles 3.1 and 3.2 means that the Nanofluidics may contract with one or more third parties to manufacture Licensed Products for Nanofluidics for sale or offer for sale by Nanofluidics or Sublicensees within the scope of its (or their) sales operations. Nanofluidics shall require all such third parties to assume confidentiality obligations consonant with Article 7 of this Agreement.

3.4 IURTC and IU may use the Intellectual Property for non-commercial educational and research purposes and permit other universities and non-profit research institutes to do the same, it being understood that no rights will be extended to commercial entities pursuant to this section.

3.5 Except with respect to Confidential Information provided by Nanofluidics under this Agreement, Nanofluidics may not in any way restrict the rights of IU, other universities or non-profit institutions, or their faculty, staff, students, or employees from publishing the results of their research related to the Intellectual Property.

3.6 This Agreement provides Nanofluidics and Sublicensees no ownership rights of any kind in the Intellectual Property. All ownership rights remain the property of IURTC.

3.7 In accordance with Public Laws 96-517, 97-256 and 98-620, codified at 35 U.S.C. §§ 200-212, the United States government retains certain rights to inventions arising from federally supported research or development. Under these laws and implementing regulations, the government may impose requirements on such inventions. Licensed Products embodying inventions subject to these laws and regulations sold in the United States must be substantially manufactured in the United States. The license rights granted in this Agreement are expressly made subject to these laws and regulations as they may be amended from time to time. Nanofluidics shall be required to abide by all such laws and regulations and shall ensure that all sublicenses under this Agreement impose a similar requirement upon all Sublicensees.

3.8 Nanofluidics shall ensure that appropriate markings, such as the patent number included in the Patent Rights, appears in accordance with each country's patent laws, on all Licensed Products (or their packaging, as appropriate) sold by or on behalf of Nanofluidics and all Sublicensees.

4 **Diligence:** Nanofluidics agrees to use commercially reasonable efforts to develop, manufacture, promote and sell Licensed Products (including sales through agents or distributors) in accordance with the Development Plan.

4.1 Within sixty days of the Effective Date of this Agreement, Nanofluidics will provide IURTC with a Development Plan that contains Nanofluidics' good faith, bona fide plans for commercializing Licensed Products as rapidly and extensively as practicable. The Development Plan will contain the following information:

4.1.1 A summary of work completed as of the submission date of the Development Plan relating to development of Licensed Products and a description of each Licensed Product planned for development.

4.1.2 Tasks to be performed by Nanofluidics, its contractors and/or Sublicensees to develop Licensed Product to the point of commercialization, including estimated time schedules for specific tasks to be accomplished.

4.1.3 Tasks to be performed to achieve regulatory approval or other certification of Licensed Product, including estimated time schedules for each.

4.1.4 Identification of the primary country(ies) in which the Licensed Product(s) will be sold and a good faith estimate of time of First Commercial Sale in the primary country(ies).

4.2 Nanofluidics will update the Development Plan and report progress against the Plan in writing to IURTC no later than January 31 of the Calendar Year following the Calendar Year in which the Effective Date falls and no later than January 31 of each subsequent Calendar Year. The updates and reports will summarize in reasonable detail the progress achieved and any problems encountered in the development, evaluation, testing, manufacture, initial sale, and/or initial marketing of each Licensed Product. Upon reasonable request by IURTC, Nanofluidics will consult with IURTC about tasks, schedules and progress.

4.3 Prior to the First Commercial Sale of any Licensed Product, Nanofluidics will be considered diligent developing any Licensed Product so long as Nanofluidics timely provides the required updates and progress reports to the Development Plan and so long as Nanofluidics:

4.3.1 Provides financial and other resources required to maintain progress in accomplishing the Development Plan as to any Licensed Product.

4.3.2 Uses commercially reasonable efforts to conduct and/or enable others to conduct all activities required to maintain scheduled progress to accomplish the Development Plan as to any Licensed Product.

4.4 Within [...***...] after the First Commercial Sale of a Licensed Product Nanofluidics will be considered diligent if [...***...].

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4.5 If Nanofluidics has ceased to develop, manufacture, promote and sell Licensed Products (including sales through agents or distributors) in accordance with the provisions of this Article, for reasons other than: (a) a governmental agency has withheld regulatory approval notwithstanding Nanofluidics' diligent efforts to obtain such approval; (b) Nanofluidics encountered unanticipated technical or scientific problems that have been promptly reported in writing to IURTC; or (c) Nanofluidics encountered other causes beyond its reasonable control, notwithstanding its diligent efforts to overcome them, and which have been promptly reported in writing to IURTC; then IURTC must notify Nanofluidics of its belief that Nanofluidics has not reasonably fulfilled the diligence obligations pursuant to any provisions in Article 4 and provide reasonable justification for such belief. Upon provision of such notice and at the request of IURTC, Nanofluidics must show cause why the exclusivity granted hereunder should not be terminated. If within ninety (90) days after IURTC's service of notice, Nanofluidics has not provided IURTC with reasonable evidence that Nanofluidics has met the diligence obligations of this Article 4, then IURTC may immediately terminate the exclusive license granted hereunder. Notwithstanding the foregoing, the Parties agree to engage in good faith discussions, and negotiations as necessary, prior to any early termination of this Agreement as provided herein.

5 **Fees, Payments, and Royalties**

5.1 Nanofluidics shall pay to IURTC a non-refundable, non-creditable license issue fee of [...***...]. The license fee of [...***...] shall be paid in three separate installments, each payable on or before [...***...], [...***...], and [...***...].

5.2 Within fifteen (15) days after the Effective Date, Nanofluidics shall pay to IURTC [...***...] as reimbursement for documented expenses incurred for preparing, filing, and prosecuting patents and patent applications prior to the Effective Date.

5.3 Beginning on the first anniversary of the Effective Date until the Calendar Half of the First Commercial Sale that occurs in a primary country designated in the Development Plan, Nanofluidics shall pay to IURTC a non-refundable, non-creditable license maintenance fee of [...***...] per Calendar Half.

5.4 Nanofluidics shall pay to IURTC a non-refundable minimum royalty during the Term of this Agreement. The first calendar period for which the minimum royalty will be paid will begin on the first day of the Calendar Half following the Calendar Half in which the First Commercial Sale occurs. Payments under this Section 5.3 will be due in the following amounts for the corresponding periods:

Period	Minimum Royalty
[...***...]	[...***...]
[...***...]	[...***...]
[...***...]	[...***...]
[...***...]	[...***...]

5.4.1 Minimum royalties will be paid within thirty (30) days of the end of each respective Calendar Half.

5.4.2 Minimum royalties will be creditable against earned royalties for the Calendar Year in which they were or are to be paid.

5.5 Nanofluidics shall pay to IURTC an earned royalty of:

5.5.1 [...***...] of Net Sales of a sequencing service provided by Nanofluidics to a third party, excluding services promoted as a Diagnostic.

5.5.2 [...***...] of Net Sales of Nanofluidics to a third party, excluding Diagnostic products and services, and sequencing services under Section 5.5.1.

5.5.3 [...***...] of Net Sales of a Diagnostic product or service sold by Nanofluidics to a third party.

5.5.4 In the event the [...***...] are offered in combination with other product(s), service(s) or component(s) for a single price, then the Net Sales of the [...***...] will be calculated by multiplying the gross invoice price of the combination by the fraction A/(A+B), where A is the catalog price, during the royalty period in question, of the [...***...] sold separately, and B is the total catalog price, during the royalty period in question, of the other product(s), service(s) or component(s) sold separately. If the [...***...] or the other product(s), service(s) or component(s) are not offered separately during that royalty period, then the gross invoice price on the combination will be reasonably allocated between the [...***...] and other product(s), service(s) or component(s), based on their relative cost of goods determined by Generally Accepted Accounting Principles (GAAP).

5.5.5 Earned royalties will be accumulated and reported each Calendar Half. Nanofluidics will pay to IURTC earned royalties accumulated during a Calendar Half within thirty (30) days of the end of said Calendar Half.

5.6 In the event Nanofluidics is obligated to pay, pursuant to any bona fide, arm's length contract or any judgment effective after the Effective Date of this Agreement, any amounts to any third parties with respect to a Licensed Product, Nanofluidics may deduct [...***...] percent [...***...] of the amounts owing to such third party from the royalties owing to IURTC pursuant to Section 5.5 for such Licensed Product. However, such royalties to be paid to IURTC pursuant to Section 5.5 shall not be so reduced to less than [...***...] of the amounts that would have otherwise be due IURTC with respect to such Licensed Product.

5.7 In the event any patent or any claim thereof included within the Patent Rights is disclaimed through reissue or reexamination, or held invalid or unenforceable by a court

or other government agency of competent jurisdiction, and no other Valid Claim covers the Licensed Product in the Territory, then all obligation to pay royalties based on such patent or claim will cease as of the date of such decision, provided that if such decision is vacated or overruled, royalty payments shall then be resumed.

5.8 Nanofluidics shall pay to IURTC [...***...] percent [...***...] of all Sublicensing Revenue.

5.8.1 Sublicensing Revenue is fully creditable against minimum royalties in the Calendar Year in which they were or are to be paid.

5.8.2 Sublicensing Revenue will be accumulated and reported on a Calendar Half basis. Nanofluidics will pay to IURTC sublicense fees accumulated during a Calendar Half within thirty (30) days of the end of said Calendar Half.

5.9 Nanofluidics will pay IURTC the following milestone payments:

5.9.1 A one time payment of [...***...] due after annual Net Sales equals or exceeds [...***...].

5.9.2 A one time payment of [...***...] upon regulatory approval of a Diagnostic Product.

5.10 No multiple royalty will be required to be paid because a Licensed Product or its manufacture, use, sale or importation is covered by more than one Valid Claim.

6 **Place and Method of Payment; Reports and Records; Audit; Interest**

6.1 All dollar ($) amounts referred to in this Agreement are expressed in United States dollars. All payments to IURTC shall be made in United States dollars by check or electronic transfer payable to “Indiana University Research and Technology Institute”. Any Sales revenues for Licensed Products in currency other than United States dollars shall be converted to United States dollars at the conversion rate for the foreign currency as published in the Eastern edition of The Wall Street Journal as of the last business day in the United States of the applicable Calendar Half.

6.2 Checks shall be sent to:

Indiana University Research and Technology Corporation
2455 Reliable Parkway
Chicago, IL 60686-2455

The IURTC Tech No. [...***...] and purpose of payment must be included with the check.

6.3 Wire transfer payments should be sent to:

[...***...]
[...***...]
[...***...]
[...***...]

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The IURTC Tech No. [...***...] and purpose of the payment must be included with the wire transfer information. Nanofluidics must add wire transfer fees to the payment.

6.4 Nanofluidics shall deliver to IURTC, within forty-five (45) days of the end of each Calendar Half in which earned royalties and/or sublicense fees are owed and payable, a written report setting forth the calculation of the payments made to IURTC for that Calendar Half, including at least the following:

6.4.1 The number of Licensed Products sold and amount of Sales by country.

6.4.2 Gross receipts for Sales of Licensed Products including total amounts invoiced and received.

6.4.3 Deductions, as defined in Section 2.11, giving totals by each type.

6.4.4 Net Sales of Licensed Products by country.

6.4.5 Earned royalty amounts credited against minimum royalty payments or vice versa.

6.5 Nanofluidics shall maintain, and shall require its Sublicensees to maintain, complete and accurate books of account and records that would enable an independent auditor to verify the amounts paid as royalties, fees and payments under this Agreement. Nanofluidics must also require its Sublicensees to file reports to Nanofluidics to enable Nanofluidics to comply with all record keeping and reporting obligations in this Agreement. The books and records must be maintained for three years following the Calendar Half after submission of the reports required by this Article. Upon reasonable notice by IURTC, Nanofluidics must give IURTC (or auditors or inspectors appointed by and representing IURTC) access to all books and records in Nanofluidics' possession relating to Sales of Licensed Products by Nanofluidics and its Sublicensees to conduct, at IURTC's expense, an audit or review of those books and records. This access must be available at least once every six (6) months, during regular business hours, during the Term of the Agreement and for the three Calendar Years following the year in which termination or expiration occurs. Any audit or review by or on behalf of IURTC shall not extend to books and records previously examined hereunder or to books and records relating to a period more than three years prior to the audit date. However, if the audit or review reports that Nanofluidics has underpaid royalties by [...***...] or more for any Calendar Half, Nanofluidics shall reimburse IURTC for the costs and expenses of the accountants and auditors in connection with the review and audit.

6.6 Any amounts not paid by Nanofluidics to IURTC when due shall accrue interest, from the due date until payment is made, at an annual rate equal to [...***...] (or the maximum allowed by law, if less than the amount specified herein).

7 **Confidentiality**

7.1 Nanofluidics and IURTC will maintain in secrecy and not disclose to any third party any Confidential Information. Nanofluidics and IURTC will ensure that their respective employees have access to the Confidential Information only on a need-to-know basis and are obligated by written agreement to keep the Parties' confidentiality obligations under this Agreement. As used in this Section, IURTC is a "Disclosing Party" of its Confidential Information and a "Receiving Party" of Nanofluidics' Confidential Information, and Nanofluidics is a "Disclosing Party" of its Confidential Information and a "Receiving Party" of IURTC's Confidential Information.

7.2 The obligations of confidentiality specified in this Article will not extend to Confidential Information that:

7.2.1 Becomes part of the public domain through no fault of either Party;

7.2.2 Was known to the Recipient Party before disclosure by the Disclosing Party as established by written records in the Recipient Party's possession;

7.2.3 Comprises identical subject matter to that which had been originally and independently developed by the Recipient Party without knowledge or use of any Confidential Information; or

7.2.4 Was disclosed to the Recipient Party by a third party having a right to make the disclosure.

7.3 Notwithstanding the other terms of this Article 7, Nanofluidics may, to the extent necessary, use Confidential Information to secure governmental approval to clinically test or market a Licensed Product, to comply with a court order or governmental rule or regulation, or to show to a potential sublicensee or contractor subject to an appropriate confidentiality agreement. Nanofluidics may use and disclose Confidential Information to the extent necessary to carry out its obligations and exercise its rights under this Agreement, and (without limiting the foregoing) may disclose this Agreement to its investors and prospective investors. Nanofluidics will, in any such use, take all reasonably available steps to maintain confidentiality of the disclosed Information and to guard against any further disclosure.

7.4 IURTC also may disclose the existence of this Agreement and only to the extent of the grant in Article 3 to a third party that inquires whether a license to the Intellectual Property is available. However, IURTC shall not disclose the name of Nanofluidics as the Licensee, unless Nanofluidics has already made such disclosure publicly or unless Nanofluidics agrees in writing that IURTC may disclose such information.

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8 **Representations and Warranties**

8.1 IURTC represents and warrants that:

8.1.1 It is a corporation organized, existing, and in good standing under the laws of Indiana.

8.1.2 It has the authority to enter into this Agreement and that the person signing on its behalf has the authority to do so.

8.1.3 To the best of its knowledge, it is the owner (subject to any rights retained by the U.S. government by operation of law) of the Intellectual Property licensed in this Agreement and that it has the authority to grant the licenses set forth herein.

8.1.4 To the best of its knowledge, as of the Effective Date of the Agreement, there are no threatened or pending actions, suits or claims against IURTC challenging IURTC's ownership or control of the Intellectual Property licensed in this Agreement.

8.1.5 To the best of its knowledge, all inventors named in patents within the Patent Rights have, unless indicated otherwise to the contrary, have an obligation to assign to IURTC their right, title and interest in and to the patents describing and claiming their invention(s) and have already made such an assignment.

8.1.6 It has not previously granted and will not grant during the Term, any right, license or interest in or to the Intellectual Property, or any portion thereof, inconsistent with the rights and licenses granted to Nanofluidics herein.

8.1.7 There are no threatened or pending actions, suits, claims or arbitration proceedings in any way relating to the validity or enforceability of U.S. Patent No. 6,399,335.

8.1.8 It is not a party to any agreement or arrangement that would prevent it from performing its duties and fulfilling its obligations to Nanofluidics under this Agreement.

8.2 Nanofluidics represents and warrants that:

8.2.1 It is a corporation duly organized, existing, and in good standing under the laws of Delaware.

8.2.2 The execution, delivery and performance of this Agreement have been authorized by all necessary corporate action on the part of Nanofluidics and that the person signing the Agreement on behalf of Nanofluidics has the authority to do so.

8.2.3 The making or performance of this Agreement would not violate any separate agreement it has with a third party.

8.2.4 It is not a party to any agreement or arrangement that would prevent it from performing its duties and fulfilling its obligations to IURTC under this Agreement.

8.2.5 It has, or will obtain at the time specified in Article 12, the insurance coverage called for in Article 12.

8.2.6 It will obtain any additional licenses from any third party needed to perform and fulfill its duties and obligations under this Agreement, including, but not limited to, the Development Plan.

8.2.7 There is no pending litigation and no threatened claims against it that could impair its ability or capacity to perform and fulfill its duties and obligations under this Agreement, including, but not limited to, the Development Plan.

8.3 Nothing in this Agreement shall be construed as:

8.3.1 A warranty or representation by IURTC or IU as to the validity, scope, or efficacy of Intellectual Property.

8.3.2 A grant, by implication, estoppel, or otherwise, of any licenses or rights under patents or other intellectual property rights of IURTC or other persons, other than the rights expressly granted above to Intellectual Property.

8.3.3 A grant of rights to either Party to use the name of the other in advertising, publicity, or otherwise, except as expressly authorized herein, without the written permission of the other Party.

8.3.4 A grant of rights to Licensee to use the name of IU in advertising publicity, or otherwise without the written permission of IU.

8.4 IURTC PROVIDES THE INTELLECTUAL PROPERTY "AS IS" AND MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS OF THE INTELLECTUAL PROPERTY OR LICENSED PRODUCTS DERIVED FROM OR INCLUDING IT FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE INTELLECTUAL PROPERTY OR ANY LICENSED PRODUCT WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER RIGHTS, OR ANY OTHER EXPRESS OR IMPLIED WARRANTIES. IURTC MAKES NO REPRESENTATION OR WARRANTY WITH RESPECT TO THE PERFORMANCE OF THE INTELLECTUAL PROPERTY OR ANY LICENSED PRODUCT, INCLUDING THEIR SAFETY, EFFECTIVENESS, OR COMMERCIAL VIABILITY. IURTC WILL NOT BE

LIABLE TO NANOFLUIDICS, OR ITS SUCCESSORS, ASSIGNS, CONTRACTORS, OR SUBLICENSEES, OR ANY THIRD PARTY REGARDING ANY CLAIM ARISING FROM OR RELATING TO NANOFLUIDICS' USE OF THE INTELLECTUAL PROPERTY, ANY LICENSED PRODUCT, OR FROM THE MANUFACTURE, USE, IMPORTATION OR SALE OF LICENSED PRODUCTS, OR FOR ANY CLAIM FOR LOSS OF PROFITS, LOSS OR INTERRUPTION OF BUSINESS, OR FOR INDIRECT, SPECIAL, EXEMPLARY, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND.

9 **Application, Prosecution, and Maintenance of Patent Rights**

9.1 IURTC shall control the preparation, filing, prosecution, issue and maintenance of patents within the Patent Rights. IURTC will select qualified outside patent counsel reasonably acceptable to Nanofluidics and corresponding foreign associates to prepare, file, prosecute and maintain U.S. patents/applications and foreign counterparts within the Patent Rights. IURTC will consult with Nanofluidics regarding the prosecution of patent applications including, without limitation, by providing Nanofluidics a reasonable opportunity, and sufficiently in advance, to review and comment on proposed submissions to any patent office, before the submission is filed and will reasonably consider the advice of Nanofluidics with respect to patent prosecution. IURTC will keep Nanofluidics reasonably informed of the status of Patent Rights patents and applications by timely giving Nanofluidics copies of communications relating to such Patent Rights that are received from any patent office or outside patent counsel of record or foreign associate.

9.2 During the Term of the Agreement, Nanofluidics will reimburse IURTC for all reasonable and documented costs and expenses incurred by IURTC in the preparation, filing, prosecution, issue and maintenance of patents and applications within the Patent Rights within thirty (30) days of receipt from IURTC of copies of billing invoices for such costs and expenses; provided, however, that IURTC will have provided Nanofluidics reasonable advance notice of such activities and the estimated costs expected to be incurred if those costs exceed those specified in the IURTC Outside Counsel Guidelines, and afforded Nanofluidics the opportunity to provide input regarding such activities and estimated costs.

9.3 IURTC will diligently prosecute and maintain the applications and patents within the Patent Rights as long as Nanofluidics timely satisfies its reimbursement obligations hereunder. IURTC will prepare, file and prosecute additional applications within the Patent Rights as Nanofluidics may reasonably request, in IURTC's name at Nanofluidics' sole expense.

9.4 If Nanofluidics elects not to reimburse IURTC for any fees or expenditures relating to any Patent Rights, Nanofluidics shall give IURTC written notice of such election at least ninety (90) days in advance of the date on which such expenditure is to be made or such fee is due to be paid. Upon IURTC's receipt of such notice, the license to those patent applications or patents in the Patent Rights granted to Nanofluidics under Sections 3.1

and 3.2 for which IURTC has not been reimbursed shall be free, at IURTC's sole discretion and without any further obligation to Nanofluidics, to continue prosecution or maintenance, for IURTC's sole use and benefit or to abandon the patent applications.

9.5 Nanofluidics' failure to reimburse IURTC for patent expenses incurred in connection with filing, prosecution, issue, and maintenance of patent applications or patents in the Patent Rights without notification pursuant to Section 9.4 shall be considered a material breach subject to the termination provisions of this Agreement.

10 **Infringement, Enforcement, and Defense**

10.1 The Parties shall give prompt written notice (the "Infringement Notice") to each other of (a) any known or suspected infringement of the Intellectual Property by a third party, and (b) any claim that a Licensed Product infringes the intellectual property rights of a third party that dominate the inventions claimed in the Patent Rights patent.

10.2 In the event either party becomes aware of a suspected infringement of the Intellectual Property that is of substantial commercial significance in the Field by a third party, Nanofluidics at its sole expense may attempt to abate such suspected infringement. Nanofluidics shall have the right, but shall not be obligated, to initiate and prosecute an infringement action at its own expense, in its own name and entirely under its own direction and control. In such event, Nanofluidics shall also be entitled to all recoveries in any such action or proceeding. Nanofluidics shall consult with IURTC prior to and in conjunction with all significant issues, shall keep IURTC informed of all proceedings, and shall provide copies to IURTC of all pleadings and other papers related to such actions. IURTC will provide reasonable assistance to Nanofluidics in prosecuting any such actions, and shall lend its name to such actions or proceedings if requested by Nanofluidics or required by law. IURTC shall have the right to participate and be represented in any such actions or proceedings by its own counsel at its own expense.

10.3 Nanofluidics at its sole expense shall defend third party claims for (a) patent or intellectual property infringement and injury, and (b) death, bodily injury, property damage, damage to business, or product liability brought against Nanofluidics and IURTC arising from or relating to Intellectual Property or a Licensed Product. Nanofluidics will have the right to conduct the defense of such actions through outside counsel of its choice who are reasonably acceptable to IURTC. Nanofluidics shall consult with IURTC prior to and in conjunction with all significant issues, shall keep IURTC informed of all proceedings, and shall provide copies to IURTC of all pleadings, legal analyses, and other papers related to such actions. IURTC will provide reasonable assistance to Nanofluidics in defending any such actions. In such event, Nanofluidics shall also be entitled to all recoveries in any such actions.

10.4 Notwithstanding anything herein to the contrary and absent IURTC's prior written consent, Nanofluidics shall not settle or compromise any claim or action in a manner that imposes restrictions or obligations on IURTC, requires any financial payment by IURTC, or grants rights or concessions to a third party to Intellectual Property or a Licensed Product.

10.5 Nanofluidics will be entitled to offset against royalties and fees due under Sections 5.4 and 5.5 fifty percent (50%) of its reasonable and necessary attorney's fees and expenses incurred in abating, bringing, or defending against third party claims of infringement or unfair trade practices against Intellectual Property, or in bringing or defending an action against a third party under this Article, provided, however, that in no event shall the royalty and fee payments due to IURTC be reduced by more than fifty percent (50%) in any Calendar Year.

10.6 If Nanofluidics fails or declines to take any action under Section 10.2 within a reasonable time after learning of third party infringement or unfair trade practices, IURTC shall have the right, but not the obligation, to take appropriate actions against any such third party at its own expense. If Nanofluidics fails to defend a claim or action under Section 10.3 within twenty (20) days of learning of the same, IURTC may assume the defense at its own expense for the account of and at the risk of Nanofluidics and any resulting liability will be deemed conclusively to be a liability of Nanofluidics.

11 **Indemnification.**

11.1 Nanofluidics shall indemnify, defend, and hold harmless IURTC, its Board of Directors, and employees, IU's faculty, staff, employees, students, and IURTC and IU's successors, assigns, and agents (collectively, "IURTC Indemnitees") from and against any and all judgments, liabilities, losses, damages, actions, claims, or expenses (including all attorney's fees and costs incurred by IURTC Indemnitees) arising out of, relating to, or incidental to (a) the use of any Intellectual Property in the design, development, production, manufacture, sale or offer for sale, use, importation, lease, marketing or promotion of any Licensed Product by Nanofluidics or its contractors, employees, Sublicensees, assigns, or agents, (b) injury or death to any person, damage to property, or any injury to business, including, but not limited to, business interruption or damage to reputation, arising out of, relating to, or incidental to the use of Intellectual Property or a Licensed Product, (c) any third party claim that any use or licensing of Intellectual Property or development of Licensed Products by Nanofluidics violates or infringes a third party's intellectual property rights.

11.2 Nanofluidics' indemnification obligations shall not apply to any liability, damage, loss or expense to the extent that it is attributable to (a) the willful misconduct of the IURTC Indemnitees, or (b) any breach of IURTC's warranties or obligations under this Agreement.

12 **Insurance**

12.1 Nanofluidics will at all times comply, through insurance or self-insurance, with all statutory workers' compensation and employers' liability requirements covering all employees with respect to activities undertaken in performance of this Agreement. This requirement may be met by insurance or self-insurance coverage provided to Nanofluidics by a Sublicensee.

12.2 In addition to the foregoing, Nanofluidics will at appropriate times obtain and maintain occurrence-based Broad Form Comprehensive General Liability (BFCGL) insurance with a reputable and financially secure insurance carrier(s). The BFCGL insurance will include, among all other coverages standing in such BFCGL policies, coverage for product liability and contractual liability.

12.3 The insurance policy shall identify IURTC as an additional insured and shall provide to Nanofluidics, its Affiliates, for the express benefit and protection of IURTC Indemnitees and in order to satisfy Nanofluidics' indemnity obligations in Article 11, minimum annual limits of [...***...].

12.4 Insurance policies purchased to comply with this Article shall be kept in force for two years after the last sale the last Licensed Product is sold.

12.5 Nanofluidics will provide IURTC with a certificate of insurance and notices of subsequent renewals. The certificates and policies must provide that Nanofluidics' carrier will notify IURTC in writing at least thirty (30) days prior to cancellation or material change in coverage.

12.6 The specified minimum coverages do not constitute a limitation on Nanofluidics' obligation to indemnify IURTC under this Agreement.

13 **Termination**

13.1 Nanofluidics may terminate this Agreement with or without cause on ninety (90) days advance written notice to IURTC. The license rights granted in Article 3 shall terminate at the end of the 90-day period.

13.2 IURTC may terminate this Agreement as provided in Article 4.5 for Nanofluidics' failure to [...***...].

13.3 Subject to Section 13.3.8, IURTC may terminate this Agreement on sixty (60) days advance written notice to Nanofluidics upon Nanofluidics' material breach of the Agreement. The termination becomes effective at the end of the sixty-day period unless Nanofluidics has fully cured the breach within that time. A material breach includes, but is not limited to, material failure of one or more of the following:

13.3.1 Failure to pay timely any fee, royalty, or other payment required under this Agreement.

13.3.2 Failure to keep accurate and complete books and records, failure to require that Sublicensees keep accurate books and records, and failure to allow reasonable audit and inspection, all as required by Article 6.

13.3.3 Failure to comply with the confidentiality requirements of Article 7.

13.3.4 Failure to obtain, maintain, and/or timely report levels of insurance, as required in Article 12.

13.3.5 Breach or falsity of any of Nanofluidics' representations or warranties made in this Agreement.

13.3.6 Failure to indemnify in accordance with Article 11 of this Agreement.

13.3.7 Failure to include all necessary and required terms in all sublicenses, or inclusion of any prohibited terms.

13.3.8 Notwithstanding the foregoing, if Nanofluidics disputes that it is in breach concerning the amount of payment to be made hereunder (for purpose of clarity, the breach concerning the amount of payment to be made as used in this Section 13.3.8 does not include the situation in which Nanofluidics refuses to make any payment under this Agreement), IURTC shall not have the right to terminate this Agreement unless it has been determined in an arbitration proceeding that this Agreement was breached, and Nanofluidics fails to cure such breach within sixty (60) days after such determination. The Parties agree that the arbitration proceeding shall be conducted by a sole arbitrator selected by the Parties in accordance with the licensing rules of the American Arbitration Association, and be completed within thirty (30) days. During the arbitration proceeding, each party shall submit a proposal setting forth the terms of a proposed resolution. The arbitrator is empowered only to select one of the proposed resolutions in whole. The arbitrator may not modify the terms of this Agreement. The award rendered thereon by the arbitrator shall be final and binding on the Parties thereto. In the event that Nanofluidics is found in such arbitration proceeding to be in breach for failure to fulfill its payment obligations under this Agreement, Nanofluidics shall cure such breach by paying the damage owed to IURTC with interest at the rate set forth in Section 6.6, and by reimbursing IURTC the attorney's fees that IURTC incurred in the arbitration proceeding.

13.4 If Nanofluidics enters bankruptcy or receivership, voluntarily or involuntarily, all obligations of IURTC and all rights (but not obligations) of Nanofluidics terminate immediately without the need for either IURTC or Nanofluidics to take any action.

13.5 Upon the date of termination of this Agreement for any reason, Nanofluidics shall return, and shall cause all Sublicensees, if sublicensing agreements are also terminated, to return to IURTC all Confidential Information of IURTC (as defined in Article 7) received during the Term of this Agreement.

13.6 As of the date of termination of this Agreement by either Party for any reason pursuant to the terms herein, all license rights granted to Nanofluidics under Article 3 shall terminate. Nanofluidics' obligations to pay fees, royalties, or other payments and patent expenses (Article 10) accruing prior to termination shall survive termination.

14 **Use of Names:** Neither Party may use the name of the other for any commercial, advertisement, or promotional purpose without the prior written consent of the other. Nanofluidics may not use the name of IU for any commercial, advertisement, or promotional purpose without the prior written consent of IU.

15 **Assignment or Pledge of the Agreement:** This Agreement, in whole or in part, shall not be assigned by either Party to any third party without the written consent of the non-assigning Party. However, Nanofluidics may assign the entire Agreement, without IURTC's consent, to a third party that acquires substantially all of Nanofluidics' business or assets through merger, sale, acquisition, or other similar transaction, provided that the successor agrees in writing (with a copy of such assent to IURTC within ten (10) days of the effective date of the transaction) to assume all obligations and liabilities of Nanofluidics to IURTC. The rights granted in this Agreement may not be pledged or hypothecated in any way by Nanofluidics or any Sublicensee to secure any purchase, lease, or loan.

16 **Notice:** Any required or permissive notice under this Agreement will be sufficient if in writing and delivered personally, by recognized national overnight courier, or by registered or certified mail, postage prepaid and return receipt requested, to the address below and will be deemed to have been given as of the date shown on the receipt if by certified or registered mail, or the day following dispatch if by overnight courier.

If to IURTC:

Vice President of Technology Transfer
Attn: IURTC Tech No. 0009
Indiana University Research and Technology Corporation
351 W. 10th Street
Indianapolis, IN 46202

If to Nanofluidics:

Hugh Martin
Nanofluidics, Inc.
1505 Adams Drive
Menlo Park, CA 94025

Cc: Vern Norviel
Wilson Sonsini Goodrich and Rosati
650 Page Mill Road
Palo Alto, CA 94304

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17 **General Provisions**

17.1 This Agreement shall be governed by and interpreted according to the laws of the State of Indiana.

17.2 No waiver of any breach of this Agreement shall constitute a waiver of any other breach of the same or any other provision of this Agreement, and no waiver shall be effective unless made in writing by the Party against whom the waiver is sought to be asserted.

17.3 The Parties acknowledge that they have read this Agreement in its entirety and agree that this instrument comprises the entire agreement, contract, and understanding of the Parties relating to the subject matter of the Agreement.

17.4 This Agreement cannot be changed, modified or amended except by a written instrument subscribed by authorized representatives of the respective Parties.

17.5 Neither Party is an agent or contractor of the other as a result of any transaction under or related to this Agreement. Neither Party may in any way pledge the other Party's credit or incur any obligation on behalf of the other Party.

17.6 IURTC shall not be liable to Nanofluidics for any special, consequential, incidental, or indirect damages arising out of or relating to this Agreement, however caused, under any theory of liability.

17.7 The provisions of this Agreement are severable in that if any provision in the Agreement is finally determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions of the Agreement shall remain in full force and effect.

17.8 If the performance of any obligation under this Agreement is prevented or impaired by acts of war, riot, acts or defaults of common carriers, or governmental laws or regulations, a Party will be excused from performance so long as such cause continues to prevent or impair that Party's performance. The Party claiming such force majeure excuse must promptly notify the other Party of the existence of the cause and must at all times use diligent efforts to resume and complete performance. This Section 18.8 will not excuse Nanofluidics' obligation to pay fees, payments and royalties under Article 5 of the Agreement.

17.9 IURTC has no responsibility and assumes no liability for product design, development, pre- or post-market regulatory approval, servicing, distribution, or marketing of any Licensed Product, or for any decisions made or strategies devised relating to any Licensed Product.

17.10 Nanofluidics agrees, that in the event an IU faculty or staff member serves Nanofluidics or any sublicensee in the capacity of consultant, officer, employee, board member, advisor, or other designation, pursuant to contract or otherwise, such IU faculty or staff member shall serve in his or her individual capacity, as an independent contractor, and

not as an agent or representative of IURTC or IU, that IURTC or IU exercises no authority or control over such faculty or staff member while acting in such capacity, that IURTC or IU receives no benefit from such activity, and that IURTC or IU assume no liability or obligation in connection with any such work or service undertaken by such faculty or staff member. Nanofluidics further agrees that any breach, error, or omission by an IU faculty or staff member acting in the capacity set forth above in this paragraph shall not be imputed or otherwise attributed to IURTC or IU, and shall not constitute a breach of this Agreement by IURTC.

17.11 All representations, warranties, covenants, and agreements made herein that, by their express terms or by implication, are to be performed after the execution or termination of this Agreement, or are prospective in nature, shall survive such execution and/or termination, as the case may be. This shall include, but not be limited to, the provisions in Articles 5, 6, 7, 8, 11, 12 and 14.

17.12 Each Party shall, at the reasonable request of the other, execute and deliver to the other such instruments and/or documents and shall take such actions as may be required to more effectively carry out the terms of this Agreement.

17.13 This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall be deemed one instrument.

17.14 This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall be deemed one instrument.

Witness: The Parties have caused this Agreement to be executed in duplicate by their duly qualified representatives.

Nanofluidics, Inc.	**IURTC**
/s/ Stephen Turner, Ph.D. **Signature**	/s/ Jack H. Pincus, Ph.D. **Signature**
Stephen Turner, Ph.D. **Name**	Jack H. Pincus, Ph.D. **Name**
CTO **Title**	Vice President of Technology Transfer Indiana University Research & Technology Corporation **Title**
6/14/05 **Date**	6/15/05 **Date**

*** Confidential Treatment Requested