


Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005) Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼		RECORDATION FORM COVER SHEET PATENTS ONLY		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.					
1. Name of conveying party(ies): Xenogen Corporation		2. Name and address of receiving party(ies) Name: EuclidSR Partners, LP, as Collateral Agent Internal Address: _____ _____ _____ Street Address: _____ 45 Rockefeller Plaza, Suite 3240 _____ City: New York State: NY Zip: 10111 Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
3. Nature of conveyance: <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input checked="" type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date: 03/14/2003					
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) 08/844,336; 09/183,566; 09/527,061; 09/905,668 B. Patent No.(s) 5,824,468; D469,181 Additional numbers attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Soohyun Susan Lee Internal Address: _____ Direct Phone: 650-481-8719 Direct Fax: 650-845-5000 Street Address: _____ 650 Page Mill Road City: Palo Alto State: CA Zip: 94304		6. Total number of applications and patents involved: 28 7. Total fee (37 CFR 3.41).....\$ 1,120.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: 23-2415 (Client Ref#: 16410.041)			
DO NOT USE THIS SPACE					
9. Signature.  Soohyun Susan Lee Name of Person Signing   Signature  3/21/03 Date  Total number of pages including cover sheet, attachments, and documents: 23					

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**4. Application Number(s) or Patent Number(s) CONTINUED:**

**A. Patent Application No.(s):**

09/657,289  
09/464,795  
09/439,381  
09/795,056  
09/465,978  
09/888,049  
10/121,960  
10/094,146  
10/151,463  
10/223,072  
10/126,912  
09/955,005  
10/189,886  
10/068,573  
10/177,647  
10/081,040  
60/395,357  
60/396,313  
60/415,996  
60/385,397  
60/415,857  
60/359,663

**XENOGEN CORPORATION****SECURITY AGREEMENT**

This Security Agreement (as amended, modified or otherwise supplemented from time to time, this "**Security Agreement**"), dated as of March 14, 2003, is executed by **XENOGEN CORPORATION**, a Delaware corporation (together with its successors and assigns, "**Company**"), in favor of **COLLATERAL AGENT** (as herein defined) on behalf of the Investors listed on the signature pages hereof.

**RECITALS**

A. The Company has issued convertible promissory notes, dated as of the date hereof, as amended, modified or otherwise supplemented from time to time (each a "**Note**" and collectively, the "**Notes**") in the aggregate principal amount of \$3,000,000 in favor of the Investors.

B. In order to induce each Investor to extend the credit evidenced by the Notes, Company has agreed to enter into this Security Agreement and to grant Collateral Agent, for the benefit of itself and the Investors, the security interest in the Collateral described below.

**AGREEMENT**

NOW, THEREFORE, in consideration of the above recitals and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Company hereby agrees with Collateral Agent and the Investors as follows:

1. **Definitions and Interpretation.** When used in this Security Agreement, the following terms have the following respective meanings:

"**Collateral**" has the meaning given to that term in Section 2 hereof.

"**Obligations**" means all loans, advances, debts, liabilities and obligations, howsoever arising, owed by Company to Collateral Agent and the Investors of every kind and description (whether or not evidenced by any note or instrument and whether or not for the payment of money), now existing or hereafter arising under or pursuant to the terms of the Notes and the other Transaction Documents, including, all interest, fees, charges, expenses, attorneys' fees and costs and accountants' fees and costs chargeable to and payable by Company hereunder and thereunder, in each case, whether direct or indirect, absolute or contingent, due or to become due, and whether or not arising after the commencement of a proceeding under Title 11 of the United States Code (11 U.S.C. Section 101 et seq.), as amended from time to time (including post-petition interest) and whether or not allowed or allowable as a claim in any such proceeding.

"**Permitted Liens**" means (a) Liens for taxes not yet delinquent or Liens for taxes being contested in good faith and by appropriate proceedings for which adequate reserves have been established; (b) Liens in respect of property or assets imposed by law which were incurred in the

ordinary course of business, such as carriers', warehousemen's, materialmen's and mechanics' Liens and other similar Liens arising in the ordinary course of business which are not delinquent beyond their allowable cure period or remain payable without penalty or which are being contested in good faith and by appropriate proceedings; (c) Liens incurred or deposits made in the ordinary course of business in connection with workers' compensation, unemployment insurance and other types of social security, and mechanic's Liens, carrier's Liens and other Liens to secure the performance of tenders, statutory obligations, contract bids, government contracts, performance and return of money bonds and other similar obligations, incurred in the ordinary course of business, whether pursuant to statutory requirements, common law or consensual arrangements; (d) Liens in favor of the Collateral Agent; (e) Liens securing obligations under a capital lease if such Liens do not extend to property other than the property leased under such capital lease; (f) Liens upon any equipment acquired or held by Company or any of its Subsidiaries to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment, so long as such Lien extends only to the equipment financed, and any accessions, replacements, substitutions and proceeds (including insurance proceeds) thereof or thereto; and (g) non-exclusive licenses or sublicenses granted in the ordinary course of Company's business.

"UCC" means the Uniform Commercial Code as in effect in the State of California from time to time.

All capitalized terms not otherwise defined herein shall have the respective meanings given in the Notes. Unless otherwise defined herein, all terms defined in the UCC have the respective meanings given to those terms in the UCC.

2. Grant of Security Interest. As security for the Obligations, Company hereby pledges to Collateral Agent and grants to Collateral Agent a security interest of first priority in all right, title and interests of Company in and to the intellectual property described in Schedule A hereto (collectively, the "Collateral").

Notwithstanding the foregoing, the security interest granted herein shall not extend to, and the term "Collateral" shall not include, any property, rights or licenses to the extent that the granting of a security interest therein would be contrary to applicable law or violate the terms of, or create a default under (with or without the passage of time), any agreement to which Company is a party.

3. Representations and Warranties regarding Intellectual Property. Company represents and warrants to Collateral Agent and the Investors as of the date hereof that: (a) Company does not own any patents, trademarks, copyrights or mask works registered in, or the subject of pending applications in, the U.S. Patent and Trademark Office or the U.S. Copyright Office other than those described on Schedule A hereto; (b) Company has, except for Permitted Liens, the sole, full and unencumbered right, title and interest in and to the trademarks shown on Schedule A and the goods and services covered by the registrations thereof and, to the extent registered, such registrations are, to Company's knowledge, valid and enforceable and in full force and effect; (c) Company has, except for Permitted Liens, the sole, full and unencumbered right, title and interest in and to each of the patents shown on Schedule A and the registrations thereof are, to Company's knowledge, valid and enforceable and in full force and effect; (d) Company has, except for Permitted Liens, the sole, full and unencumbered right, title and interest in and to each of the copyrights shown on Schedule A

and according to the records of the Copyright Office and to Company's knowledge, each of said copyrights is valid and enforceable and in full force and effect; (e) Company has, except for Permitted Liens, the sole, full and unencumbered right, title and interest in and to the mask works shown on Schedule A and according to the records of the Copyright Office and to Company's knowledge, each of said mask works is valid and enforceable and in full force and effect; (f) there is no claim by any third party that any patents, trademarks, copyrights or mask works shown on Schedule A are invalid and unenforceable or do or may violate the rights of any Person; (g) all licenses (other than non-exclusive licenses to end-users) of the Collateral which Company has granted, or anticipates granting in the near future, to any Person are set forth in Schedule A hereto; (h) Company has obtained from each employee who may be considered the inventor of patentable inventions (invented within the scope of such employee's employment and relating to the Collateral) an assignment to Company of all rights to such inventions, including patents resulting therefrom; and (i) Company has taken all reasonable steps necessary in its discretion to protect the secrecy and the validity under applicable law of all material trade secrets relating to the Collateral.

4. Covenants Regarding Collateral in the Form of Intellectual Property. Company hereby agrees that:

(a) Company will perform all acts and execute all documents, including notices of security interest for each relevant type of intellectual property within the Collateral in forms suitable for filing with the U.S. Patent and Trademark Office or the U.S. Copyright Office, that may be necessary or desirable to record, maintain, preserve, protect and perfect Collateral Agent's interest in the Collateral, the Lien granted to Collateral Agent in the Collateral and the first priority of such Lien;

(b) Except where the Company, in the exercise of its reasonable business judgment, deems any such trademark, patent, copyright or mask work, as applicable, not to have any significant commercial value or except to the extent that Collateral Agent gives its prior written consent:

(i) Company (either itself or through licensees) will continue to use its trademarks within the Collateral in connection with each and every trademark class of goods or services applicable to its current line of products or services as reflected in its current catalogs, brochures, price lists or similar materials in order to maintain such trademarks in full force and effect free from any claim of abandonment for nonuse, and Company will not (and will not knowingly permit any licensee thereof to) do any act or knowingly omit to do any act whereby any such material trademark may become invalidated;

(ii) Company will not do any act or omit to do any act whereby any material patent registrations within the Collateral may become abandoned or dedicated to the public domain or the remedies available against potential infringers weakened and shall notify Collateral Agent immediately if it knows of any reason or has reason to know that any such patent registration may become abandoned or dedicated; and

(iii) Company will not do any act or omit to do any act whereby any material copyrights or mask works within the Collateral may become abandoned or dedicated to the public domain or the remedies available against potential infringers weakened and shall notify

Collateral Agent immediately if it knows of any reason or has reason to know that any such copyright or mask work may become abandoned or dedicated to the public domain.

(c) Company will promptly (and in any event within five (5) business days) notify Collateral Agent upon the filing, either by Company or through any agent, employee, licensee or designee, of (i) an application for the registration of any patent, trademark, copyright or mask work with the Patent and Trademark Office or the Copyright Office or any similar office or agency in any other country or any political subdivision thereof, (ii) any assignment of any patent or trademark, which Company may acquire from a third party, with the Patent and Trademark Office or any similar office or agency in any other country or any political subdivision thereof, or (iii) any assignment of any copyright or mask work, which Company may acquire from a third party, with the Copyright Office or any similar office or agency in any other country or any political subdivision thereof. Upon the request of Collateral Agent, Company shall execute and deliver any and all assignments, agreements, instruments, documents and papers as Collateral Agent may request to evidence Collateral Agent's security interest in such patent, trademark (and the goodwill and general intangibles of Company relating thereto or represented thereby), copyright or mask work, and Company authorizes Collateral Agent to amend an original counterpart of the applicable notice of security interest executed pursuant to Section 4(a) of this Security Agreement without first obtaining Company's approval of or signature to such amendment and to record such document with the Patent and Trademark Office or Copyright Office, as applicable.

(d) Company will take all necessary steps in any proceeding before the U.S. Patent and Trademark Office or the U.S. Copyright Office to diligently prosecute or maintain, as applicable, each application and registration of the Collateral, including filing of renewals, affidavits of use, affidavits of incontestability and opposition, interference and cancellation proceedings (except to the extent that dedication, abandonment or invalidation is permitted hereunder);

(e) While any Obligations are outstanding, Company shall (i) make application to the U.S. Patent and Trademark Office to register any material unpatented but patentable inventions developed by Company or its employees (within the scope of their employment), unless Company, in the exercise of its reasonable business judgment, deems any such patent not to have any significant commercial value or determines that its rights thereunder are better preserved as a trade secret; (ii) make application to the U.S. Patent and Trademark Office to register any registerable but unregistered material trademarks used by Company in connection with its products or services; and (iii) make application to the U.S. Copyright Office to register any material unregistered copyright or mask work to which Company has rights;

(f) Company shall (i) use proper statutory notice in connection with its use of the patents, trademarks, copyrights and mask works included within the Collateral, (ii) maintain consistent standards of quality in its manufacture of products sold under the trademarks within the Collateral or provision of services in connection with the trademarks within the Collateral, and (iii) take all steps as it deems reasonably necessary to protect the secrecy and the validity under applicable law of all material trade secrets relating to the Collateral;

(g) Company agrees that if it learns of any use by any Person of any term or design likely to cause confusion with any trademark included within the Collateral, Company shall

promptly notify Collateral Agent of such use and of all steps taken and to be taken to remedy any infringement of any such trademark; and

(h) Company shall maintain with each employee who may have access to the trade secrets of Company relating to the Collateral an agreement by which such employee agrees not to disclose such trade secrets and with each employee who may be the inventor of patentable inventions (invented within the scope of such employee's employment and relating to the Collateral) an invention assignment agreement requiring such employee to assign all rights to such inventions, including patents and patent applications, to Company and further requiring such employee to cooperate fully with Company, its successors in interest, including Collateral Agent, and their counsel, in the prosecution of any patent application or in any litigation involving the invention, whether such cooperation is required during such employee's employment with Company or after the termination of such employment.

5. Authorized Action by Collateral Agent. Company hereby irrevocably appoints Collateral Agent as its attorney-in-fact (which appointment is coupled with an interest) and agrees that Collateral Agent may perform (but Collateral Agent shall not be obligated to and shall incur no liability to Company or any third party for failure so to do) any reasonable act which Company is obligated by this Security Agreement to perform, and to exercise such rights and powers as Company might reasonably exercise with respect to the Collateral, including the right to (a) collect by legal proceedings or otherwise and endorse, receive and receipt for all dividends, interest, payments, proceeds and other sums and property now or hereafter payable on or on account of the Collateral; (b) enter into any extension, reorganization, deposit, merger, consolidation or other agreement pertaining to, or deposit, surrender, accept, hold or apply other property in exchange for the Collateral; (c) make any compromise or settlement, and take any action it deems advisable, with respect to the Collateral; (d) insure, process and preserve the Collateral; (e) pay any indebtedness of Company relating to the Collateral; and (f) execute UCC financing statements and other documents, instruments and agreements required hereunder; provided, however, that Collateral Agent shall not exercise any such powers granted pursuant to subsections (a) through (c) prior to the occurrence of an Event of Default and shall only exercise such powers during the continuance of an Event of Default. Company agrees to reimburse Collateral Agent upon demand for any reasonable out-of-pocket costs and expenses, including attorneys' fees, that Collateral Agent may incur while acting as Company's attorney-in-fact hereunder, all of which costs and expenses are included in the Obligations. It is further agreed and understood between the parties hereto that such care as Collateral Agent gives to the safekeeping of its own property of like kind shall constitute reasonable care of the Collateral when in Collateral Agent's possession; provided, however, that Collateral Agent shall not be required to make any presentment, demand or protest, or give any notice in connection with the Obligations or with respect to the Collateral.

#### 6. Litigation and Other Proceedings

(a) Company shall have the right and obligation to commence and diligently prosecute such suits, proceedings or other actions for infringement or other damage, or reexamination or reissue proceedings, or opposition or cancellation proceedings as are reasonable to protect any of the patents, trademarks, copyrights, mask works or trade secrets within the Collateral. No such suit, proceeding or other actions shall be settled or voluntarily dismissed, nor shall any party

be released or excused of any claims of or liability for infringement, without the prior written consent of Collateral Agent, which consent shall not be unreasonably withheld or delayed.

(b) Upon the occurrence, and during the continuation, of an Event of Default, and if Company fails to reasonably enforce any rights in the Collateral in the event of a substantial infringement of any rights thereunder by a third party, Collateral Agent shall have the right, but not the obligation, to bring suit or to institute proceedings in the name of Company or Collateral Agent to enforce any rights in the Collateral, including any license thereunder, in which event Company shall at the request of Collateral Agent do any and all lawful acts and execute any and all documents reasonably required by Collateral Agent in aid of such enforcement. If Collateral Agent elects not to bring suit to enforce any right under the Collateral, including any license thereunder, and requests that Company do so, Company agrees to use all commercially reasonable measures as it may decide, whether by suit, proceeding or other action, to cause to cease any infringement of any right under the Collateral by any Person and for that purpose agrees to diligently maintain any action, suit or proceeding against any Person so infringing necessary to prevent such infringement.

#### 7. Default and Remedies.

(a) Default. Company shall be deemed in default under this Security Agreement upon the occurrence, and during the continuance, of an Event of Default (as defined in the Notes).

(b) Remedies. Upon the occurrence, and during the continuance, of any such Event of Default, Collateral Agent shall have the rights of a secured creditor under the UCC, all rights granted by this Security Agreement and by law, including the right to: (a) require Company to assemble the Collateral and make it available to Collateral Agent and the Investors at a place to be designated by Collateral Agent and the Investors; and (b) prior to the disposition of the Collateral, store, process, repair or recondition it or otherwise prepare it for disposition in any manner and to the extent Collateral Agent and the Investors deems appropriate and in connection with such preparation and disposition, without charge, use any trademark, trade name, copyright, patent or technical process used by Company. Company hereby agrees that ten (10) business days' notice of any intended sale or disposition of any Collateral is reasonable. In furtherance of Collateral Agent's rights hereunder and in the event that Collateral Agent disposes of the Collateral as a remedy hereunder, Company hereby grants to Collateral Agent an irrevocable, non-exclusive license (exercisable without royalty or other payment by Investor, but only in connection with the exercise of remedies hereunder) to use, license or sublicense any patent, trademark, trade name, copyright or other intellectual property contained within the Collateral. Notwithstanding anything to the contrary, the Collateral Agent shall not take any action to enforce its rights or pursue any remedies against the Company or the Collateral without first consulting with all of the holders of the Notes and will proceed only with the written approval of a Majority In Interest.

(c) Application of Collateral Proceeds. The proceeds and/or avails of the Collateral, or any part thereof, and the proceeds and the avails of any remedy hereunder (as well as any other amounts of any kind held by Collateral Agent at the time of, or received by Collateral Agent after, the occurrence of an Event of Default) shall be paid to and applied as follows:



(i) First, to the payment of reasonable costs and expenses, including all amounts expended to preserve the value of the Collateral, of foreclosure or suit, if any, and of such sale and the exercise of any other rights or remedies, and of all proper fees, expenses, liability and advances, including reasonable legal expenses and attorneys' fees, incurred or made hereunder by Collateral Agent;

(ii) Second, to the payment to each Investor of the amount then owing or unpaid on such Investor's Note, and in case such proceeds shall be insufficient to pay in full the whole amount so due, owing or unpaid upon such Note, then its Pro Rata Share of the amount remaining to be distributed (to be applied first to accrued interest and second to outstanding principal);

(iii) Third, to the payment of other amounts then payable to each Investor under any of the Transaction Documents, and in case such proceeds shall be insufficient to pay in full the whole amount so due, owing or unpaid under such Transaction Documents, then its Pro Rata Share of the amount remaining to be distributed; and

(iv) Fourth, to the payment of the surplus, if any, to Company, its successors and assigns, or to whomsoever may be lawfully entitled to receive the same.

For purposes of this Security Agreement, the term "Pro Rata Share" shall mean, when calculating a Investor's portion of any distribution or amount, that distribution or amount (expressed as a percentage) equal to a fraction (i) the numerator of which is the original outstanding principal amount of such Investor's Note and (ii) the denominator of which is the original aggregate outstanding principal amount of all Notes issued. In the event that a Investor receives payments or distributions in excess of its Pro Rata Share, then such Investor shall hold in trust all such excess payments or distributions for the benefit of the other Investors and shall pay such amounts held in trust to such other Investors upon demand by such Investors.

## 8. Collateral Agent.

(a) Appointment. The Investors hereby appoint EuclidSR Partners, LP, as collateral agent for the Investors under this Security Agreement (in such capacity, the "**Collateral Agent**") to serve from the date hereof until the termination of the Security Agreement.

### (b) Powers and Duties of Collateral Agent, Indemnity by Investors.

(i) Each Investor hereby irrevocably authorizes the Collateral Agent to take such action and to exercise such powers hereunder as provided herein or as requested in writing by the Investors of a Majority in Interest in accordance with the terms hereof, together with such powers as are reasonably incidental thereto. Collateral Agent may execute any of its duties hereunder by or through agents or employees and shall be entitled to request and act in reliance upon the advice of counsel concerning all matters pertaining to its duties hereunder and shall not be liable for any action taken or omitted to be taken by it in good faith in accordance therewith.

(ii) Neither the Collateral Agent nor any of its directors, officers or employees shall be liable or responsible to any Investor or to Company for any action taken or

omitted to be taken by Collateral Agent or any other such person hereunder or under any related agreement, instrument or document, except in the case of gross negligence or willful misconduct on the part of the Collateral Agent, nor shall the Collateral Agent or any of its directors, officers or employees be liable or responsible for (i) the validity, effectiveness, sufficiency, enforceability or enforcement of the Notes, this Security Agreement or any instrument or document delivered hereunder or relating hereto; (ii) the title of Company to any of the Collateral or the freedom of any of the Collateral from any prior or other liens or security interests; (iii) the determination, verification or enforcement of Company's compliance with any of the terms and conditions of this Security Agreement; (iv) the failure by Company to deliver any instrument or document required to be delivered pursuant to the terms hereof; or (v) the receipt, disbursement, waiver, extension or other handling of payments or proceeds made or received with respect to the collateral, the servicing of the Collateral or the enforcement or the collection of any amounts owing with respect to the Collateral.

(iii) In the case of this Security Agreement and the transactions contemplated hereby and any related document relating to any of the Collateral, each of the Investors agrees to pay to the Collateral Agent, on demand, its Pro Rata Share of all reasonable out-of-pocket fees and expenses incurred in connection with the operation and enforcement of this Security Agreement, the Notes or any related agreement to the extent that such fees or expenses have not been paid by Company. In the case of this Security Agreement and each instrument and document relating to any of the Collateral, each of the Investors and the Company hereby agrees to hold the Collateral Agent harmless, and to indemnify the Collateral Agent from and against any and all loss, damage, expense or liability which may be incurred by the Collateral Agent under this Security Agreement and the transactions contemplated hereby and any related agreement or other instrument or document, as the case may be, unless such liability shall be caused by the willful misconduct or gross negligence of the Collateral Agent; provided however that the Company shall not be required to hold the Collateral Agent harmless nor to indemnify Collateral Agent for any fees and expenses due to Collateral Agent from the other Investors.

## 9. Miscellaneous.

(a) Notices. Except as otherwise provided herein, all notices, requests, demands, consents, instructions or other communications to or upon Company or Collateral Agent under this Security Agreement shall be in writing and faxed, mailed or delivered to each party to the facsimile number or its address set forth below (or to such other facsimile number or address as the recipient of any notice shall have notified the other in writing). All such notices and communications shall be effective (a) when sent by Federal Express or other overnight service of recognized standing, on the business day following the deposit with such service; (b) when mailed, by registered or certified mail, first class postage prepaid and addressed as aforesaid through the United States Postal Service, upon receipt; (c) when delivered by hand, upon delivery; and (d) when faxed, upon confirmation of receipt.

Collateral Agent:

EuclidSR Partners, LP  
45 Rockefeller Plaza  
Suite 3240  
New York, NY 10111  
Telephone: (212) 218-6880  
Facsimile: (212) 218-6877  
Attention: Milton Pappas

Company:

Xenogen Corporation  
860 Atlantic Avenue  
Alameda, California 94501  
Telephone: (510) 291-6100  
Facsimile: (510) 291-6196  
Attention: Chief Financial Officer

with a copy to:

Wilson Sonsini Goodrich & Rosati  
Professional Corporation  
One Market, Spear Tower, Suite 3300  
San Francisco, California 94105  
Telephone: (415) 947-2000  
Facsimile: (415) 947-2099  
Attention: Karen Dempsey, Esq.

(b) Nonwaiver. No failure or delay on Collateral Agent's part in exercising any right hereunder shall operate as a waiver thereof or of any other right nor shall any single or partial exercise of any such right preclude any other further exercise thereof or of any other right.

(c) Amendments and Waivers. This Security Agreement may not be amended or modified, nor may any of its terms be waived, except by written instruments signed by Company and Collateral Agent. Each waiver or consent under any provision hereof shall be effective only in the specific instances for the purpose for which given.

(d) Assignments. This Security Agreement shall be binding upon and inure to the benefit of Collateral Agent and Company and their respective successors and assigns; provided, however, that Company may not sell, assign or delegate rights and obligations hereunder without the prior written consent of Collateral Agent.

(e) Cumulative Rights, etc. The rights, powers and remedies of Collateral Agent under this Security Agreement shall be in addition to all rights, powers and remedies given to Collateral Agent by virtue of any applicable law, rule or regulation of any governmental authority, any Transaction Document or any other agreement, all of which rights, powers, and remedies shall be cumulative and may be exercised successively or concurrently without impairing Collateral Agent's rights hereunder.

(f) Payments Free of Taxes, Etc. All payments made by Company under the Transaction Documents shall be made by Company free and clear of and without deduction for any and all present and future taxes, levies, charges, deductions and withholdings. In addition, Company shall pay upon demand any stamp or other taxes, levies or charges of any jurisdiction with respect to the execution, delivery, registration, performance and enforcement of this Security Agreement. Upon request by Collateral Agent, Company shall furnish evidence satisfactory to Collateral Agent that all requisite authorizations and approvals by, and notices to and filings with, governmental authorities and regulatory bodies have been obtained and made and that all requisite taxes, levies and charges have been paid.

(g) Partial Invalidity. If at any time any provision of this Security Agreement is or becomes illegal, invalid or unenforceable in any respect under the law or any jurisdiction, neither the legality, validity or enforceability of the remaining provisions of this Security Agreement nor the legality, validity or enforceability of such provision under the law of any other jurisdiction shall in any way be affected or impaired thereby.

(h) Construction. Each of this Security Agreement and the other Transaction Documents is the result of negotiations among, and has been reviewed by, Company, Investors, Collateral Agent and their respective counsel. Accordingly, this Security Agreement and the other Transaction Documents shall be deemed to be the product of all parties hereto, and no ambiguity shall be construed in favor of or against Company, Investors or Collateral Agent.

(i) Entire Agreement. This Security Agreement taken together with the other Transaction Documents constitute and contain the entire agreement of Company, Investors and Collateral Agent with respect to this particular secured convertible note financing and supersede any and all prior agreements, negotiations, correspondence, understandings and communications among the parties, whether written or oral, respecting the subject matter hereof.

(j) Other Interpretive Provisions. References in this Security Agreement and each of the other Transaction Documents to any document, instrument or agreement (i) includes all exhibits, schedules and other attachments thereto, (ii) includes all documents, instruments or agreements issued or executed in replacement thereof, and (iii) means such document, instrument or agreement, or replacement or predecessor thereto, as amended, modified and supplemented from time to time and in effect at any given time. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Security Agreement or any other Transaction Document refer to this Security Agreement or such other Transaction Document, as the case may be, as a whole and not to any particular provision of this Security Agreement or such other Transaction Document, as the case may be. The words "include" and "including" and words of similar import when used in this Security Agreement or any other Transaction Document shall not be construed to be limiting or exclusive.

(k) Governing Law. This Security Agreement shall be governed by and construed in accordance with the laws of the State of California without reference to conflicts of law rules (except to the extent governed by the UCC).

(1) Counterparts. This Security Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one instrument.

[The remainder of this page is intentionally left blank]

IN WITNESS WHEREOF, Company has caused this Security Agreement to be executed as of the day and year first above written.

XENOGEN CORPORATION

By:   
Name: David W. Carter  
Title: Co-Chief Executive Officer and Chairman

AGREED:

EUCLIDSR PARTNERS, LP  
As Collateral Agent

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

IN WITNESS WHEREOF, Company has caused this Security Agreement to be executed as of the day and year first above written.

**XENOGEN CORPORATION**

By: \_\_\_\_\_  
Name: David W. Carter  
Title: Co-Chief Executive Officer and Chairman

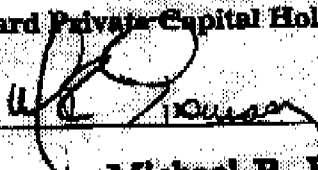
**AGREED:**

**EUCLIDSR PARTNERS, LP**  
**As Collateral Agent**

By: Milton J. Pappas  
Name: Milton J. Pappas  
Title: General Partner

**INVESTORS:**

**Harvard Private Capital Holdings, Inc.**

By:   
Name: **Michael R. Eisenberg**  
Title: **Authorized Signatory**

**Brentwood Associates VIII, L.P.**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**S.R. One Limited**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**EuclidSR Partners, LP**

By: **EuclidSR Associates, L.P., its General Partner**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_



**INVESTORS:**

**Harvard Private Capital Holdings, Inc.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Brentwood Associates VIII, L.P.**

By:  \_\_\_\_\_

Name: Brian Arnold

Title: Managing Member

**S.R. One Limited**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EuclidSR Partners, LP**

By: EuclidSR Associates, L.P., its General Partner

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**INVESTORS:**

**Harvard Private Capital Holdings, Inc.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Brentwood Associates VIII, L.P.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**S.R. One Limited**

By: *R. J. Whitaker*

Name: R. J. Whitaker

Title: Vice President

**EuclidSR Partners, LP**

By: EuclidSR Associates, L.P., its General Partner

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**INVESTORS:**

**Harvard Private Capital Holdings, Inc.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Brentwood Associates VIII, L.P.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**S.R. One Limited**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**EuclidSR Partners, LP**

By: EuclidSR Associates, L.P., its General Partner

By: Milton J. Pappas

Name: Milton J. Pappas

Title: General Partner

**EuclidSR Biotechnology Partners, LP**

**By: EuclidSR Biotechnology Associates, L.P., its  
General Partner**

By: Milton J. Pappas

Name: Milton J. Pappas

Title: General Partner

**SCHEDULE A  
TO SECURITY AGREEMENT****COPYRIGHTS**DescriptionRegistration DateRegistration No.

None

**PATENTS**TitleDate IssuedPatent No.

- |   |          |           |
|---|----------|-----------|
| 1. Detection of listeria by means of recombinant bacteriophages | 10/20/98 | 5,824,468 |
| 2. Low Intensity Light Imaging Apparatus or Similar Article     | 1/21/03  | D469,181  |

**PATENT APPLICATIONS**TitleApplication DateApplication No.

- |   |          |            |
|---|----------|------------|
| 1. Biodetectors Targeted to Specific Ligands  | 4/18/97  | 08/844,336 |
| 2. Biodetectors Targeted to Specific Ligands (CIP)  | 10/30/98 | 09/183,566 |
| 3. Animal Models and Methods for Sepsis   | 3/16/00  | 09/527,061 |
| 4. Multi-View Imaging Apparatus   | 7/13/01  | 09/905,668 |
| 5. Luciferase Expression Cassettes and Methods of Use   | 9/7/00   | 09/657,289 |
| 6. Non-Invasive Evaluation of Physiological Response in a Mammal  | 12/16/99 | 09/464,795 |
| 7. Graphical User Interface for In-Vivo Imaging   | 11/15/99 | 09/439,381 |
| 8. Light-Tight Specimen Chamber   | 2/21/01  | 09/795,056 |
| 9. Methods and Compositions for Screening for Angiogenesis Modulating Compounds   | 12/16/99 | 09/465,978 |
| 10. Compositions and Methods for Use Thereof in Modifying the Genomes of Microorganisms                                   | 9/26/02  | 09/888,049 |
| 11. Isolation and Identification of Mouse and Human Transcription Control Elements Associated with Cytochrome Expression  | 4/11/02  | 10/121,960 |
| 12. Methods of Screening for Introduction of DNA Into a Target Cell   | 3/7/02   | 10/094,146 |
| 13. Method and Apparatus for Determining Target Depth, Brightness, and Size Within a Body Region                          | 5/17/02  | 10/151,463 |
| 14. Modified Railroad Worm Red Luciferase   | 8/15/02  | 10/223,072 |
| 15. Isolation and Identification of Transcription Control Elements Associated with Mouse Eosinophil Peroxidase Expression | 4/19/02  | 10/126,912 |

16. Imaging Lens Arrangement Designed for Low Light Conditions	9/17/01	09/955,005
17. Fluorescence Illumination Assembly for an Imaging Apparatus	7/3/02	10/189,886
18. Light Calibration Device for Use in Low Level Light Imaging	2/6/02	10/068,573
19. Absolute Intensity Determination for a Light Source in Low Level Light Imaging Systems	6/20/02	10/177,647
20. Multiple Output Anesthesia System	2/20/02	10/081,040

**Provisional Patent Applications:**

1. Method and Apparatus for 3-D Reconstruction of Light Emitting Sources	7/16/02	60/395,357
2. In Vivo 3D Imaging of Light-Emitting Reporters	7/16/02	60/396,313
3. Diptera Luciferase Compositions and Methods	10/4/02	60/415,996
4. Living Specimen Induction Chamber	5/31/02	60/385,397
5. In Vivo Bio-Molecular Array Devices and Methods	10/2/02	60/415,857
6. Bottom Fluorescence Illumination Assembly for an Imaging Apparatus	2/22/02	60/359,663

**TRADEMARKS**

	<u>Mark</u>	<u>Registration Date</u>	<u>Registration No.</u>
1.	"LivingImage"	11/7/00	2,402,773

**TRADEMARK APPLICATIONS**

	<u>Mark</u>	<u>Application Date</u>	<u>Application No.</u>
1.	"Xenogen"	8/7/98	75/621,123
		6/20/00	76/072,712
2.	"Discovery in the Living Organism"	4/28/00	76/035,819
3.	"Bioware"	11/18/99	75/854937
4.	"LPTA"	1/27/00	75/902,180
5.	"IVIS"	2/24/00	75/924,328
6.	Xenogen design	6/2/00	76/062,364

**MASK WORKS**DescriptionRegistration DateRegistration No.

None

**LICENSES OF COLLATERAL  
(other than non-exclusive licenses to end-users)**

Distributor agreement with SC BioSciences, appointing it exclusive distributor of IVIS™ Imaging Systems, accessories and Bioware™ in Japan and non-exclusive distributor of LPTA™ animal models in Japan. Agreement involves foreign equivalents of patents and trademarks within the Collateral.

Finalizing a non-exclusive license with Promega Corp. permitting it to develop and sell to not-for-profit customers products and services covered by "Animal Models and Methods for Sepsis" and "Biodetectors Targeted to Specific Ligands". In conjunction with this license, Promega may also use the methods claimed in Xenogen's imaging patents to develop, market and sell products claimed by the two patent applications listed above.

Finalizing non-exclusive marketing services agreement with Charles River Laboratories, Inc. granting rights to market transgenic animal production and custom gene targeting services performed by Xenogen Biosciences and involving a limited license to some of the Xenogen trademarks listed above.

Exclusive research collaboration agreement with Morphochem AG in the field of bacterial biofilms and including a limited right for Morphochem to practice certain of Company's patents as necessary to perform its obligations under the collaboration.