

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
TISSUE REPAIR COMPANY	11/12/2007

RECEIVING PARTY DATA

Name:	LIFE SCIENCES CAPITAL, LLC
Street Address:	6 East 43rd Street
Internal Address:	28th Floor
City:	New York
State/Country:	NEW YORK
Postal Code:	10017

PROPERTY NUMBERS Total: 10

Property Type	Number
Patent Number:	7138381
Application Number:	10348051
Patent Number:	6723512
Patent Number:	6613563
Application Number:	10264284
Patent Number:	6551618
Patent Number:	6503886
Patent Number:	6472146
Patent Number:	6451527
Patent Number:	6037329

CORRESPONDENCE DATA

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CH \$400.00 7138381

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Address Line 4: New York, NEW YORK 10112-3800

ATTORNEY DOCKET NUMBER:

03491.000005

NAME OF SUBMITTER:

Jonathan Berschadsky

**Total Attachments: 21**

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**INTELLECTUAL PROPERTY SECURITY AGREEMENT**

**INTELLECTUAL PROPERTY SECURITY AGREEMENT** (this "Agreement"), dated as of November 12, 2007, among LIFE SCIENCES CAPITAL, LLC (together with its successors and assigns, if any, "Secured Party"), InnerCool Therapies, Inc., a Delaware corporation ("InnerCool"), Tissue Repair Company, a Delaware corporation ("TRC"), and Cardium Therapeutics, Inc., a Delaware corporation ("Cardium" and, together with InnerCool and TRC, individually, a "Borrower," and collectively, the "Borrowers"). Secured Party has an office at 6 East 43rd Street, New York, New York 10017, and the chief executive office and place of business of each of the Borrowers is 3611 Valley Centre, Suite 525, San Diego, California 92130.

**RECITALS**

Borrowers have entered into a Loan and Security Agreement with Secured Party, dated as of the date hereof (the "Loan Agreement"), pursuant to which Secured Party has agreed to make a loan to Borrowers upon the terms and subject to the conditions set forth therein. It is a condition to the Secured Party's lending funds to the Borrowers that the Borrowers grant to Secured Party a security interest in the Borrowers' Intellectual Property (as herein defined) pursuant to the terms hereof.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, receipt of which is hereby acknowledged, Borrowers and Secured Party agree as follows:

**1. DEFINITIONS.**

As used in this Agreement, the following terms have the meanings specified below:

"Affiliate" means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

"Agreement" - as defined in the heading hereof.

"Borrower" and "Borrowers" - as defined in the heading hereof.

"Business Day" means any day that is not a Saturday, Sunday or other day on which commercial banks in New York City are authorized or required by law to remain closed.

"Collateral" means all of the Borrowers' presently owned or hereafter acquired Intellectual Property, all substitutions and replacements therefor, and all proceeds thereof.

"Event of Default" - as defined in Section 8.1 of the Loan Agreement.

"Intellectual Property" means any and all copyright, trademark, servicemark, patent, design right, software, license, trade secret and intangible rights of any Borrower and any applications, registrations, claims, licenses, awards, judgments, amendments, renewals, extensions, improvements and insurance claims related to any of the foregoing, now owned or

hereafter acquired, or any claims for damages by way of any past, present or future infringement of any of the foregoing, including, without limitation, the Intellectual Property identified on Schedule 1 hereto.

“Lien” means, with respect to any asset, any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset.

“Loan” means the aggregate principal amount of all advances made by Secured Party pursuant to the Loan Agreement.

“Loan Documents” - as defined in Section 1 of the Loan Agreement.

“Note” - as defined in Section 2.2 of the Loan Agreement.

“Obligations” means all unpaid principal of and accrued and unpaid interest on the Loan, all accrued and unpaid fees and all expenses, reimbursements, indemnities and other obligations of the Borrowers to the Secured Party arising under the Loan Agreement, the Note, this Agreement or any other agreement or instrument relating thereto, and other debt, obligations and liabilities of any kind whatsoever of Borrowers to Secured Party, now existing or arising in the future, excluding any warrants or other equity interests.

“Permitted Liens” means (i) Liens in favor of Lender, (ii) Liens for taxes not yet due or for taxes being contested in good faith and which do not involve, in the judgment of Lender, any risk of the sale, forfeiture or loss of any of the Collateral, (iii) Liens existing on the date hereof and described on Schedule 5.7 hereto, (iv) purchase money security interests (including the interests of lessors under Capital Leases), provided that the security interest attaches only to the financed property (and any accessions, attachments, replacements or improvements thereon) and secures no obligations than the balance of the purchase price thereof, and (v) inchoate materialmen's, mechanic's, repairmen's and similar liens arising by operation of law in the normal course of business and which are not delinquent, (vi) other Liens subordinated to the Liens in favor of the Lender on terms satisfactory to Lender in its sole discretion, (vii) Liens of carriers, warehousemen, mechanics, materialmen, vendors, and landlords incurred in the ordinary course of business, (viii) Liens arising from bankers' liens, rights of setoff and similar Liens incurred on deposits or securities accounts made in the ordinary course of business to the extent the Lender has a security interest in such accounts, (ix) Liens for taxes not at the time delinquent or thereafter payable without penalty or being contested in good faith, provided provision is made to the reasonable satisfaction of the Lender for the eventual payment thereof if subsequently found payable; (x) Liens consisting of easements, rights-of-way, minor defects or irregularities in title, zoning restrictions or other restrictions on the use of real property that do not, in the aggregate, interfere in any material respect with the ordinary conduct of business of the Borrowers and their subsidiaries taken as a whole; and (xi) Liens arising from cash deposits to secure letters of credit and surety obligations not to exceed the aggregate principal amount of \$500,000 at any time.

“Person” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, governmental authority or other entity.

“PTO” means the United States Patent and Trademark Office.

“Secured Party” - as defined in the heading hereof.

“UCC” means the Uniform Commercial Code, as in effect in any applicable jurisdiction, as amended from time to time.

All other terms used but not defined herein which are defined in the UCC shall have the meanings given to such terms in the UCC.

## 2. SECURITY INTEREST.

**2.1. Grant of Security Interest.** As a security for the prompt payment and performance of the Obligations, Borrowers hereby grant to Secured Party a lien on and security interest in the Collateral.

**2.2. Financing Statements; Other Filings.** Borrowers hereby authorize Secured Party to file financing statements, continuation statements and such other documents as Secured Party shall deem necessary or appropriate with all appropriate jurisdictions to perfect Secured Party’s security interest granted hereby. Borrowers hereby authorize Secured Party to file this Agreement and such other documents as Secured Party shall deem necessary or appropriate with the PTO, the U.S. Copyright Office and any foreign authorities to perfect Secured Party’s security interest granted hereby. Borrowers hereby agree that they will, at Borrowers’ sole cost and expense, execute and deliver such further documents and instruments and take such further actions as may be reasonably requested by Secured Party to evidence, perfect and protect Secured Party’s security interest in the Collateral.

**2.3. Termination of Security Interest.** The Secured Party’s Lien on the Collateral shall continue until all of the Obligations are indefeasibly paid in full. Upon such payment in full, the Secured Party shall, at Borrowers’ sole cost and expense, release its Liens in the Collateral and all rights therein shall revert to Borrowers. Notwithstanding the foregoing, the Secured Party’s Lien on the Collateral may be terminated prior to satisfaction of the Obligations upon the terms set forth in Section 3.3 of the Loan Agreement.

**2.4. Additional Provisions Relating to Security Interest.** Notwithstanding the foregoing provisions of this Section 2, the grant of a security interest as provided herein shall not extend to, and the term “Collateral” shall not include, any general intangibles of Borrowers (whether owned or held as licensee or lessee, or otherwise), to the extent that (i) such general intangibles are not assignable or capable of being encumbered as a matter of law or, with respect to intangibles held as licensee or lessee, under the terms of the license, lease or other agreement applicable thereto (but solely to the extent that any such restriction shall be enforceable under applicable law), without the consent of the licensor or lessor thereof or other applicable party thereto and (ii) such consent has not been obtained; provided, however, that the foregoing grant of security interest shall extend to, and the term “Collateral” shall include, (A) any general intangible which is an account receivable or a proceed of, or otherwise related to the enforcement or collection of, any account receivable, or goods which are the subject of any account receivable, (B) any and all proceeds of any general intangibles which are otherwise excluded to the extent that the assignment or encumbrance of such proceeds is not so restricted, and (C) upon obtaining the consent of any such licensor, lessor or other applicable party’s consent with respect to any such otherwise excluded general intangibles, such general intangibles as well as any and all proceeds thereof that might have theretofore have been excluded from such grant of a security interest and the term “Collateral”.

## 3. DEFAULT AND REMEDIES.

**3.1. Secured Party Remedies.** Upon the occurrence and during the continuance of an Event of Default, in addition to any other rights and remedies Secured Party may have at law or in equity or pursuant to the Loan Agreement, Secured Party shall have all of the rights and remedies of a secured party following default under the UCC and under any other applicable law. Without limiting the

foregoing, Secured Party shall have the right to (i) sell the Collateral at public or private sale, in whole or in part, and have the right to bid and purchase at said sale, or (ii) lease, license or otherwise dispose of all or part of the Collateral, applying proceeds from such disposition to the Obligations in such order as Secured Party may elect. Any notice that Secured Party is required to give to Borrowers under the UCC of the time and place of any public sale or the time after which any private sale or other intended disposition of the Collateral is to be made shall be deemed to constitute reasonable notice if such notice is given to the last known address of Borrowers at least five (5) days prior to such action. All rights and remedies provided to Secured Party herein, in the Loan Agreement or at law or in equity are cumulative, and none of such rights or remedies is exclusive.

**3.2. Sale of Collateral.** Proceeds from any sale or lease or other disposition of Collateral shall be applied: first, to all costs of repossession, storage, and disposition, including without limitation attorneys', appraisers', and auctioneers' fees; second, to discharge the Obligations, in whatever order Secured Party shall elect, in its sole discretion; and third, to Borrowers or such other Person as shall be entitled thereto. Borrowers shall remain fully liable, jointly and severally, for any deficiency.

#### 4. MISCELLANEOUS.

**4.1. Assignment.** This Agreement may be assigned, in whole or in part, by Secured Party to any assignee of all or a portion of the rights of Secured Party under the Loan Agreement, without notice to Borrowers, and Borrowers agree not to assert against any such assignee, or assignee's assigns, any defense, set-off, recoupment claim or counterclaim which any Borrower has or may at any time have against Secured Party for any reason whatsoever; provided, however, that Secured Party shall not assign this Agreement to a competitor of any Borrower. Borrowers agree to confirm in writing receipt of the notice of assignment as may be reasonably requested by Secured Party or assignee.

**4.2. Notices.** All notices to be given in connection with this Agreement shall be in writing, shall be addressed to the parties at their respective addresses set forth in this Agreement (unless and until a different address may be specified in a written notice to the other party), and shall be deemed given (i) on the date of receipt if delivered in hand or by confirmed facsimile or electronic transmission, (ii) on the next Business Day after being sent by express mail or national overnight courier service, and (iii) on the fourth Business Day after being sent by registered or certified mail, postage prepaid, return receipt requested. Any notice to any of the Borrowers shall be sufficiently given if delivered to such Borrower in care of Cardium.

**4.3. Correction of Agreement.** Secured Party may correct patent errors and fill in all blanks in this Agreement consistent with the agreement of the parties.

**4.4. Performance.** Time is of the essence of this Agreement. This Agreement shall be binding, jointly and severally, upon all parties described as "Borrower" and their respective successors and assigns, and shall inure to the benefit of Secured Party, its successors and assigns.

**4.5. Payment of Fees.** Whether or not any Closing occurs or any portion of the Loan is advanced to Borrowers, Borrowers agree, jointly and severally, to pay on demand all reasonable attorneys' fees and other costs incurred by Secured Party in connection with the enforcement, assertion, defense or preservation of Secured Party's rights and remedies under this Agreement, or if prohibited by law, such lesser sum as may be permitted.

**4.6. Rights Cumulative.** Secured Party's rights and remedies under this Agreement or otherwise arising are cumulative and may be exercised singularly or concurrently. Neither the failure nor any delay on the part of the Secured Party to exercise any right, power or privilege under this Agreement shall

operate as a waiver, nor shall any single or partial exercise of any right, power or privilege preclude any other or further exercise of that or any other right, power or privilege. SECURED PARTY SHALL NOT BE DEEMED TO HAVE WAIVED ANY OF ITS RIGHTS UNDER THIS AGREEMENT OR UNDER ANY OTHER AGREEMENT, INSTRUMENT OR PAPER SIGNED BY ANY BORROWER UNLESS SUCH WAIVER IS EXPRESSED IN WRITING AND SIGNED BY SECURED PARTY. A waiver on any one occasion shall not be construed as a bar to or waiver of any right or remedy on any future occasion.

**4.7. Incorporation of Loan Agreement; Entire Agreement.** The provisions of the Loan Agreement are incorporated herein. In the event of any conflict between the terms of this Agreement and the Loan Agreement, the terms of the Loan Agreement shall control. This Agreement and the Loan Agreement constitute the entire agreement between the parties with respect to the subject matter hereof and thereof and supersede all prior understandings (whether written, verbal or implied) with respect to such subject matter. THIS AGREEMENT SHALL NOT BE CHANGED OR TERMINATED ORALLY OR BY COURSE OF CONDUCT, BUT ONLY BY A WRITING SIGNED BY BOTH PARTIES. Section headings contained in this Agreement have been included for convenience only, and shall not affect the construction or interpretation of this Agreement.

**4.8. Binding Effect.** This Agreement shall continue in full force and effect until all of the Obligations has been indefeasibly paid in full to Secured Party or its assignee, unless terminated earlier in accordance with Section 3.3 of the Loan Agreement. The surrender, upon payment or otherwise, of any Note or any of the other documents evidencing any of the Obligations shall not affect the right of Secured Party to retain the Collateral for such other Obligations as may then exist or as it may be reasonably contemplated will exist in the future. Unless theretofore terminated pursuant to Section 3.3 of the Loan Agreement, this Agreement shall automatically be reinstated if Secured Party is ever required to return or restore the payment of all or any portion of the Obligations (all as though such payment had never been made).

**4.9. Waiver of Jury Trial.** BORROWERS AND SECURED PARTY UNCONDITIONALLY WAIVE THEIR RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, ANY OF THE OTHER LOAN DOCUMENTS, ANY OF THE INDEBTEDNESS SECURED HEREBY, ANY DEALINGS BETWEEN BORROWERS AND SECURED PARTY RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION OR ANY RELATED TRANSACTIONS, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN BORROWERS AND SECURED PARTY PURSUANT TO THE LOAN AGREEMENT . THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT. THIS WAIVER IS IRREVOCABLE. THIS WAIVER MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING. THE WAIVER ALSO SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT, ANY OTHER LOAN DOCUMENTS, OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THIS TRANSACTION OR ANY RELATED TRANSACTION. THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

**4.10. Governing Law.** THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES OF SUCH STATE), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, REGARDLESS OF THE LOCATION OF THE COLLATERAL.

*[Signature Page Follows]*

IN WITNESS WHEREOF, Borrowers and Secured Party, intending to be legally bound hereby, have duly executed this Agreement in one or more counterparts, each of which shall be deemed to be an original and all of which together shall constitute one agreement, as of the date first set forth above.

SECURED PARTY:

LIFE SCIENCES CAPITAL, LLC

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

Name: AMIRAPU SOMASUNDRAM

Title: PRESIDENT + CEO

BORROWERS:

INNERCOOL THERAPIES, INC.

By: Tyler Dylan

Name: Tyler M. Dylan

Title: Chief Business Officer

TISSUE REPAIR COMPANY

By: Dennis M. Mulroy

Name: Dennis M. Mulroy

Title: Chief Financial Officer

CARDIUM THERAPEUTICS, INC.

By: Tyler Dylan

Name: Tyler M. Dylan

Title: Chief Business Officer



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**U.S. PATENTS AND PENDING APPLICATIONS OWNED BY TISSUE REPAIR COMPANY**

<b>Serial No.</b>	<b>Filing Date</b>	<b>Patent No. or Public. No.</b>	<b>Issue Date or Public. Date</b>	<b>Inventors</b>	<b>Title</b>
1	Jul 2, 2002	7,138,381	Nov 21, 2006	Baird, Chandler, Sosnowski	Compositions containing nucleic acids and ligands for therapeutic treatment
2	Jan 17, 2003	20040138155*	Jul 15, 2004	Baird, Gonzalez, Logan, Berry	Devices containing DNA encoding neurotrophic agents and related compositions and methods
3	May 24, 2001	<u>6,723,512</u>	Apr 20, 2004	Larocca, Kassner, Baird	<u>Methods using genetic package display for detecting and identifying protein-protein interactions that facilitate internalization and transgene expression and cells or tissues competent for the same and methods for evolving gene delivery vectors</u>
4	Mar 13, 1998	6,613,563*	Sep 2, 2003	Sosnowski, Baird, Pierce, Curiel, Douglas, Rogers	Viral vectors with modified tropism
5	Oct 2, 2002	20030148979	Aug 7, 2003	Sosnowski, Pierce	Traversal of nucleic acid molecules through a fluid space and expression in repair cells
6	Oct 23, 1998	<u>6,551,618*</u>	Apr 22, 2003	Baird, Gonzalez, Logan, Berry	Compositions and methods for delivery of agents for neuronal regeneration and survival
7	Nov 24, 1999	<u>6,503,886</u>	Jan 7, 2003	Baird, Chandler, Sosnowski	Compositions containing nucleic acids and ligands for therapeutic treatment
8	Nov 17, 1998	<u>6,472,146</u>	Oct 29, 2002	Larocca, Baird, Kassner	Methods for identification on internalizing ligands and identification of known and putative ligands
9	Feb 26, 1999	<u>6,451,527</u>	Sep 17, 2002	Larocca, Baird, Kassner	Methods using genetic package display for selecting internalizing ligands for gene delivery
10	Sep 24, 1996	<u>6,037,329</u>	Mar 14, 2000	Baird, Chandler, Sosnowski	Compositions containing nucleic acids and ligands for therapeutic treatment

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