## 503631227 12/31/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3677857

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

#### **CONVEYING PARTY DATA**

Name	Execution Date
BIOMEDICAL RESEARCH MODELS, INC.	12/29/2015

## **RECEIVING PARTY DATA**

Name:	PEOPLE'S UNITED BANK, NATIONAL ASSOCIATION
Street Address:	120 FRONT STREET
City:	WORCESTER
State/Country:	MASSACHUSETTS
Postal Code:	01608

## **PROPERTY NUMBERS Total: 4**

Property Type	Number	
Application Number:	11032487	
Application Number:	13044379	
Application Number:	13583845	
Application Number:	14149670	

#### CORRESPONDENCE DATA

**Fax Number:** (508)459-8315

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 508-459-8015

Email: KLAFOND@FLETCHERTILTON.COM

Correspondent Name: KAREN M LAFOND, ESQ

Address Line 1: 370 MAIN STREET

Address Line 4: WORCESTER, MASSACHUSETTS 01608

NAME OF SUBMITTER:	KAREN M LAFOND
SIGNATURE:	KAREN/M/LAFOND
DATE SIGNED:	12/31/2015

## **Total Attachments: 7**

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## PATENT SECURITY AGREEMENT

PATENT SECURITY AGREEMENT (the "Agreement") dated as of December 29, 2015 between **Biomedical Research Models, Inc.** (herein, "Borrower"), a corporation duly organized and validly existing under the laws of the Commonwealth of Massachusetts having a principal place of business at 10 New Bond Street, Worcester, Massachusetts 01606 and **People's United Bank, National Association** (herein, in such capacity, together with any successor thereto in such capacity, called the "Lender") with a place of business at 120 Front Street, Worcester, Massachusetts 01608.

### **RECITALS:**

- A. The Borrower, the Lender and certain other parties entered into a Loan and Security Agreement of even date herewith (together with all amendments and other modifications, if any from time to time made thereto, the "Loan and Security Agreement");
- B. As a condition precedent to the making of the Loans under the Loan and Security Agreement, Borrower is required to execute and deliver this Agreement and to grant to the Lender a continuing security interest in all of the Patent Collateral (as defined below) to secure all the Obligations;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and in order to induce the Lender to make the Loans to the Borrower pursuant to the Loan and Security Agreement, Borrower agrees, for the benefit of the Lender, as follows:

SECTION 1. **Definitions**. Unless otherwise defined herein or the context otherwise requires, capitalized terms used in this Agreement, including its preamble and recitals, having the meanings provided in the Loan and Security Agreement. In addition, for purposes hereof: (i) "Intellectual Property" means trademarks, copyrights, service marks, trade names, trade styles, logos, goodwill, trade secrets, patents, and licenses acquired under any statutory, common law or registration process in any state or nation at any time, or under any agreement executed with any person or entity at any time; (ii) the term "license" refers not only to rights granted by agreement from the owner of patents, copyrights, trademarks, service marks and the like, but also to rights granted by a franchisor under a franchise or similar agreement. (The foregoing enumeration is not intended as a limitation of the meaning of the term "license"); and (iii) the term "Obligations" means all liabilities and obligations now or hereafter owing from the Borrower or Borrower to the Lender of whatever kind or nature, whether or not currently contemplated at the time of this Agreement, whether such obligations be direct or indirect, absolute or contingent or due or to become due, including, without limitation, all unpaid principal under any Note of the Borrower and all amounts due under the Guaranty of the Borrower, all accrued interest and all reasonable costs and expenses, including reasonable attorney's fees, costs and expenses relating to the appraisal and/or valuation of assets and all costs and expenses incurred or paid by the Lender in exercising, preserving, defending, collecting, administering, enforcing or protecting any of its rights under the Obligations or hereunder or with respect to the Collateral or any litigation arising out of the transactions evidenced by the Obligations.

- SECTION 2. **Grant of Security Interest**. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, to secure the Guaranty which secures all of the Obligations of the Borrower, the Borrower does hereby assign, pledge and grant to the Lender a security interest in all of the Borrower's right, title and interest in and to the following property (the "Patent Collateral"), whether now owned or hereafter existing or acquired:
  - (a) all of Borrower's patents, patent applications, inventions, trade secrets, know-how, proprietary information and rights in patents, inventions, trade secrets, know-how and proprietary information owned by others, which, in the case of patents or patent applications, are now or hereafter issued by or filed with the U.S. Patent and Trademark Office or any similar office or agency of any other countries, including, without limitation, the patents and patent applications listed on Schedule I attached hereto and made part thereof (the "Patents");
    - (b) all Intellectual Property that is related to the Patent Collateral; and
  - (c) all proceeds of all of the foregoing (such as, by way of example, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements of the Patents, all rights corresponding thereto throughout the world and all re-issues, divisions, continuations, renewals, extensions and continuations-in-part thereof.
- SECTION 3. **Borrower's Covenants and Representations**. The Borrower represents, warrants and covenants that, to the best of its knowledge:
  - (a) The Patents are subsisting and have not been adjudged invalid or unenforceable, in whole or in part;
  - (b) Each of the Patents is valid and enforceable and the Borrower has notified the Lender in writing of all prior assignments (including public uses and sales) of which it is aware;
  - (c) The Borrower is the sole and exclusive owner of the entire and unencumbered right, title and interest in and to each of the Patents, free and clear of any liens, charges and encumbrances except as disclosed in the Loan and Security Agreement, including without limitation, licenses, shop rights and covenants by the Borrower not to sue third persons;
  - (d) The Borrower has the unqualified right to enter into this Agreement and perform its terms and has entered and will enter into written agreements with each of its present and future employees, agents and consultants which will enable it to comply with the covenants herein contained; and

(e) Until all of the Obligations shall have been satisfied in full, it will not enter into any agreement (for example, a license agreement) which is inconsistent with the Borrower's obligations under this Agreement, without the Lender's prior written consent.

SECTION 4. **Security Agreement**. This Agreement has been executed and delivered by Borrower for the purpose of recording the security interest of the Lender in the Collateral with the United States Patent and Trademark Office and with the corresponding offices and authorities of any local, state or foreign governments. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Lender under the Loan and Security Agreement. The Loan and Security Agreement (and all rights and remedies of the Lender thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 5. Additional Collateral. If, before the Obligations shall have been satisfied in full, the Borrower shall obtain rights to any new patentable inventions, or become entitled to the benefit of any patent application or patent or any reissue, division, continuation, renewal, extension or continuation-in-part of any Patents or any improvement on any Patents, the provisions of Section 2 hereof shall automatically apply thereto and the Borrower shall give to the Lender prompt notice thereof in writing. The Borrower authorizes the Lender to modify this Agreement by amending Schedule I hereto to include any such future patents and patent applications.

SECTION 6. Attorney-in-Fact. The Borrower hereby appoints the Lender, or its designee, as the Borrower's true and lawful attorney-in-fact (without requiring the Lender to act as such), with full power, upon the occurrence of an Event of Default and at any time thereafter, as follows: (a) to sell, transfer or assign the Patents and the other Patent Collateral or any part thereof, (b) to grant any license or sublicense to make, have made, use or sell under or pursuant to any or all of the Patents, (c) to seek issuance of all Patents in accordance with this Agreement (d) to execute and file assignments of the Patents and the other Patent Collateral in the name of the Borrower with the U.S. Patent and Trademark Office or any similar office or agency of any other country as it may deem appropriate, (e) to perform all acts required or permitted to be performed in connection with maintaining the Patents and the other Patent Collateral, and (6) to perform all other acts to perfect and continue the Lender's security interest in, and to protect, preserve and enforce the Patents and the other Patent Collateral.

SECTION 7. Lender's Fees and Expenses. Any and all reasonable fees, costs and expenses, of whatever kind or nature, including reasonable attorneys' fees and legal expenses, incurred by the Lender in connection with the preparation of this Agreement and all other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including all taxes in connection therewith) in public offices, the payment or discharge of any taxes, counsel fees, maintenance fees, encumbrances or otherwise protecting, maintaining, preserving the Patents and the other Patent Collateral, or in defending or prosecuting any actions or proceedings arising out of or related to the Patents and the other Patent Collateral, shall be borne and paid by the Borrower on demand by the Lender and until so paid shall be added to the principal amount of the Obligations and shall bear interest at the highest rate prescribed under the Obligations.

SECTION 8. Patents to be Issued; Lender's Expenses. The Borrower shall have the duty, through counsel acceptable to the Lender, to prosecute diligently any patent application with respect to the Patents pending as of the date of this Agreement or thereafter until the Obligations shall have been paid in full, to make application on unpatented but patentable inventions and to preserve and maintain all rights in patent applications and the Patents. Any expenses incurred in connection with such an application shall be borne by the Borrower. The Borrower shall not abandon any right to file a patent application, or any pending patent application or patent without the consent of the Lender, which consent shall not be unreasonably withheld. Lender agrees that Cooley LLP, the Borrower's current patent counsel, are acceptable counsel.

SECTION 9. **Enforcement**. The Lender shall have the right but shall in no way be obligated to bring suit in its own name to enforce the Patents and the other Patent Collateral and any license thereunder, in which event the Borrower shall at the request of the Lender do any and all lawful acts and execute any and all proper documents required by the Lender in aid of such enforcement and the Borrower shall promptly, upon demand, reimburse and indemnify the Lender for all costs and expenses incurred by the Lender in the exercise of its rights under this Section 9.

SECTION 10. Cumulative Rights and Remedies. All of the Lender's rights and remedies, with respect to the Patents and the other Patent Collateral, whether established hereby or by the Loan and Security Agreement, or by any other agreements or by law shall be cumulative and may be exercised singularly or concurrently.

SECTION 11. **Release of Security Interest**. Upon payment in full of all Obligations and the termination of all commitments, if any of the Lender, the Lender shall, at Borrower's expense, execute and deliver to Borrower all instruments and other documents as may be necessary or proper to release the lien on the security interest in the Patent Collateral which has been granted hereunder.

SECTION 12. **Acknowledgment**. Borrower does hereby further acknowledge and affirm that the rights and remedies of the Lender with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Loan and Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein.

SECTION 13. Loan Document. This Agreement is a Loan Document executed pursuant to the Loan and Security Agreement and shall (unless otherwise expressly indicated herein) be construed, administered and applied in accordance with the terms and provisions of the Loan and Security Agreement.

SECTION 14. **Counterparts**. This Agreement may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement.

IN WITNESS WHEREOF, Borrower has caused this Agreement to be duly executed and delivered as of the day and year first above.

By:

Biomedical Research Models, Inc.

Witness

Dennis L. Guberski, President

Duly Authorized

#### THE COMMONWEALTH OF MASSACHUSETTS

Worcester, ss.

December 29, 2015

On this 29<sup>th</sup> day of December, 2015, before me, the undersigned notary public, personally appeared Dennis L. Guberski, as President of Biomedical Research Models, Inc., proved to me through satisfactory evidence of identification, which was photographic identification with signature issued by a federal or state governmental agency, oath or affirmation of a credible witness, personal knowledge of the undersigned, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose as President of Biomedical Research Models, Inc.

Notary Public /

My commission expires:

## **SCHEDULE I**

# Patents and Patent Applications Owned by Biomedical Research Models, Inc.

Title	Country	Status	App. No./Filing Date	Patent No./Issue Date *Pub. No.
Methods for tailoring the immune response to an antigen or immunogen	US	Pending	11/032,487 01/07/2005	*US20060035853
Methods for tailoring the immune response to an antigen or immunogen	CA	Granted	2552004 01/07/2005	2552004 3/5/2013
Methods for tailoring the immune response to an antigen or immunogen	EP	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	BE	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	DK	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	FR	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	DE	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	NL	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	IT	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/ 2011
Methods for tailoring the immune response to an antigen or immunogen	ES	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/ 2011
Methods for tailoring the immune response to an antigen or immunogen	UK	Granted	05722399.2 01/07/2005	EP1706140B1 6/15/2011
Methods for tailoring the immune response to an antigen or immunogen	JР	Granted	2006-549488 01/07/2005	4705591 3/18/2011
Methods of cancer treatment/prevention using cancer cell-specific surface antigens	US	Abando ned	11/666,956 05/21/2008	*US20080267963
A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	US	Pending	13/044,379 03/09/2011	*US20120027841
A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	US	Pending	13/583,845 03/09/2011	*US20130195961

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A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	CA	Pending	2,792,679 03/09/2011	
A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	ЕР	Pending	11754011.2-1216 03/09/2011	*EP2544693
A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	НК	Pending	13108342.3 03/09/2011	
A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	СО	Pending	US20130195961; Additional coverage has been requested	
A novel mucosal vaccination approach for Herpes Simplex Virus Type-2	VZ	Pending	US20130195961; Additional coverage has been requested	
Therapeutic vaccines for treating Herpes Simplex Virus Type 2 infections	AR	Pending	20140100059 01/07/2014	
Therapeutic vaccines for treating Herpes Simplex Virus Type 2 infections	VE	Pending	000003-2014 01/07/2014	
Therapeutic vaccines for treating Herpes Simplex Virus Type 2 infections	US	Pending	14/149,670 01/07/2014	*US 20140193483
Therapeutic vaccines for treating Herpes Simplex Virus Type 2 infections	wo	Pending	PCT/US2014/010516 01/07/2014	*WO 2014/107731
Therapeutic vaccines for treating Herpes Simplex Virus Type 2 infections	СО	Pending	US20140193483; Additional coverage has been requested	
Therapeutic vaccines for treating Herpes Simplex Virus Type 2 infections	VZ	Pending	US20140193483; Additional coverage has been requested	

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**RECORDED: 12/31/2015** 

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