

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3327188

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KONRAD KARCZEWSKI	11/23/2012
MICHAEL SNYDER	12/13/2012
ATUL J. BUTTE	12/05/2012
JOEL T. DUDLEY	12/10/2012
MICHAEL CHERRY	12/13/2012
ALAN BOYLE	12/13/2012
EURIE HONG	12/10/2012
JULIE PARK	04/24/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY
<b>Street Address:</b>	1705 EL CAMINO REAL
<b>City:</b>	PALO ALTO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94306
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13592292
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(949)852-0004
<i>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.</i>	
<b>Phone:</b>	949.852.0000
<b>Email:</b>	pair@kppb.com
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<b>Address Line 4:</b>	ANAHEIM, CALIFORNIA 92806
<b>ATTORNEY DOCKET NUMBER:</b>	S31-03829
<b>NAME OF SUBMITTER:</b>	TRUDI THOMPSON

<b>SIGNATURE:</b>	/tt/
<b>DATE SIGNED:</b>	04/27/2015
<b>Total Attachments: 11</b> source=03829assignment#page1.tif source=03829assignment#page2.tif source=03829assignment#page3.tif source=03829assignment#page4.tif source=03829assignment#page5.tif source=03829assignment#page6.tif source=03829assignment#page7.tif source=03829assignment#page8.tif source=03829assignment#page9.tif source=03829assignment#page10.tif source=03829assignment#page11.tif	

**RECORDATION FORM COVER SHEET**  
**PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)  
Konrad Karczewski, Michael Snyder,  
Atul J. Butte, Joel T. Dudley, Michael Cherry,  
Alan Boyle, Eurie Hong, Julie Park  
Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies)  
The Board of Trustees of the Leland Stanford  
Name: Junior University  
Internal Address: \_\_\_\_\_  
\_\_\_\_\_

3. Nature of conveyance/Execution Date(s):  
Execution Date(s) <sup>11/23/12; 12/13/12; 12/5/12; 12/10/12; 12/13/12; 12/13/12;</sup>  
12/10/12, 4/24/15  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

Street Address: 1705 El Camino Real  
\_\_\_\_\_  
City: Palo Alto  
State: CA  
Country: US Zip: 94306  
Additional name(s) & address(es) attached?  Yes  No

4. Application or patent number(s):  This document serves as an Oath/Declaration (37 CFR 1.63).  
A. Patent Application No (s)  
13/592292  
Additional numbers attached?  Yes  No

B. Patent No.(s)  
\_\_\_\_\_

5. Name and address to whom correspondence concerning document should be mailed:  
Name: KPPB LLP  
Internal Address: Suite 1050  
\_\_\_\_\_  
Street Address: 2400 E. Katella  
\_\_\_\_\_  
City: Anaheim  
State: CA Zip: 92806  
Phone Number: 949.852.0000  
Docket Number: S31-03829  
Email Address: pair@kppb.com

6. Total number of applications and patents involved: 1  
7. Total fee (37 CFR 1.21(h) & 3.41) \$ \_\_\_\_\_  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

8. Payment Information  
Deposit Account Number 50-4407  
Authorized User Name \_\_\_\_\_

9. Signature: /Jacqueline D. Stroncek/ April 27, 2015  
Signature Date

Jacqueline D. Stroncek Total number of pages including cover sheet, attachments, and documents: 11  
Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

## ASSIGNMENT OF PATENT APPLICATION

WHEREAS, Konrad Karczewski, Michael Snyder, Atul J. Butte, Joel T. Dudley, Michael Cherry, Alan Boyle, and Eurie Hong, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below identified application for United States Letters Patent:

Title of Invention: Method and System for the Use of Biomarkers for Regulatory Dysfunction in Disease

Date(s) of execution of Declaration:

Filing Date: 22-AUG-2012

Application No.: 13592292

WHEREAS, THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY located at 1705 El Camino Real, Palo Alto, CA 94306-1160, a university located in the United States, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents do assign to Assignee all right, title, and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that he will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has signed his name on the date indicated.

Full Name: Konrad Karczewski  
Residence Address: 209 Running Farm Lane 105  
Stanford, CA 94305

Mailing Address:

Check if same as above [ X ]

Citizenship: USA

Dated: 11/23/12

  
\_\_\_\_\_  
Konrad Karczewski

Full Name: Michael Snyder  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_

\_\_\_\_\_  
Michael Snyder

Full Name: Atul J. Butte  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_

\_\_\_\_\_  
Atul J. Butte

IN TESTIMONY WHEREOF, Assignor has signed his name on the date indicated.

Full Name: Konrad Karczewski  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Konrad Karczewski


Full Name: Michael Snyder  
Residence Address:  
949 Cottrell Way, Stanford, CA 94305

Mailing Address:  
300 Pasteur Dr. M344, Stanford, CA 94305-5120

Check if same as above [ X ]

Citizenship: USA

Dated: 12/13/2012

  
Michael Snyder

Full Name: Atul J. Butte  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Atul J. Butte

IN TESTIMONY WHEREOF, Assignor has signed his name on the date indicated.

Full Name: Konrad Karczewski  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Konrad Karczewski

Full Name: Michael Snyder  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Michael Snyder

Full Name: Atul J. Butte  
Residence Address: 2020 Monterey Ave  
Menlo Park, CA 94025

Mailing Address:

Check if same as above [ X ]

Citizenship: USA

Dated: 12/5/2012  
  
Atul J. Butte

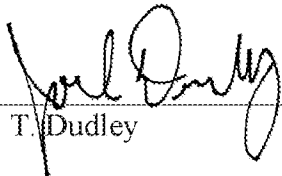
Full Name: Joel T. Dudley  
Residence Address: 136 Soundview Ave, Rye, NY 10580

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: 12/10/2012

  
\_\_\_\_\_  
Joel T. Dudley

Full Name: Michael Cherry  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship: United States of America

Dated: \_\_\_\_\_

\_\_\_\_\_  
Michael Cherry

Full Name: Alan Boyle  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_

\_\_\_\_\_  
Alan Boyle



Full Name: Joel T. Dudley  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Joel T. Dudley

Full Name: J. Michael Cherry  
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Mailing Address:

Check if same as above [ X ]

Citizenship: USA

Dated: December 13, 2012  
  
J. Michael Cherry

Full Name: Alan Boyle  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Alan Boyle

Full Name: Joel T. Dudley  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Joel T. Dudley

Full Name: Michael Cherry  
Residence Address:

Mailing Address:

Check if same as above [ X ]

Citizenship:

Dated: \_\_\_\_\_  
Michael Cherry

Full Name: Alan Boyle  
Residence Address: 100 Loyola Ave  
Menlo Park CA 94025

Mailing Address:

Check if same as above [ X ]

Citizenship: United States of America

Dated: December 13, 2012  
  
Alan Boyle

Full Name: Eurie Hong  
Residence Address: 227 Ada Ave, Unit C  
Mountain View, CA 94043

Mailing Address:

Check if same as above [ X ]

Citizenship: USA



Dated: \_\_\_\_\_ 12-10-2012 \_\_\_\_\_  
Eurie Hong

## ASSIGNMENT

### ASSIGNMENT OF APPLICATION

THIS ASSIGNMENT, by **Konrad Karczewski**, residing in Stanford, California, USA  
**Michael Snyder**, residing in Stanford, California, USA  
**Atul J. Butte**, residing in Menlo Park, California, USA  
**Joel T. Dudley**, residing in Rye, New York, USA  
**Eurie Hong**, residing in Mountain View, California, USA  
**Alan Boyle**, residing in Menlo Park, California, USA  
**J. Michael Cherry**, residing in Stanford, California, USA  
**Julie Park**, residing in Mountain View, California, USA  
(hereinafter referred to as the **ASSIGNORS**):

WHEREAS, said **ASSIGNORS** have invented certain new and useful improvements in:

**“Method and System for the Use of Biomarkers for Regulatory Dysfunction in Disease”**

filed on August 22, 2012, as U.S. Patent Application No. 13/592292, and listing the above named persons as inventors.

WHEREAS, **The Board of Trustees of the Leland Stanford Junior University**, a non-profit organization duly organized under and pursuant to the laws of California, and having its principal place of business at 1705 El Camino Real, Palo Alto, California 94306-1106, (hereinafter referred to as the **ASSIGNEE**) is desirous of acquiring the entire right, title and interest in and to said invention and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefore and thereon:

NOW THEREFORE, for good and valuable considerations, said **ASSIGNORS** sell, assign, transfer to the **ASSIGNEE**, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned invention, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefore and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said **ASSIGNEE**, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the **ASSIGNORS**, had this sale and assignment not been made.

AND for the same consideration, the said **ASSIGNORS** hereby covenant and agree to and with said **ASSIGNEE**, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said **ASSIGNORS** are the lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said **ASSIGNORS** have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, the said **ASSIGNORS** hereby covenant and agree to and with said **ASSIGNEE**, its successors, legal representatives and assigns, that said **ASSIGNORS** will, whenever counsel of said **ASSIGNEE**, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said invention in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and

documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention, without charge to said ASSIGNEE, its successors, legal representatives and assigns, but at the cost and expense of said ASSIGNEE, its successors, legal representatives and assigns.

AND the said ASSIGNORS hereby requests the Commissioner of Patents to issue said Letters Patent of the United States to said ASSIGNEE as the ASSIGNEE of said invention and the Letters Patent to be issued thereon for the use and behalf of said ASSIGNEE, its successors, legal representatives and assigns.

Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
Konrad Karczewski

Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
Michael Snyder


Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
Atul J. Butte

Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
Joel T. Dudley

Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
Eurie Hong

Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
Alan Boyle

Date \_\_\_\_\_ Name of Inventor \_\_\_\_\_  
J. Michael Cherry

Date 4/24/15 Name of Inventor   
Julie Park