

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4848888

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SAMUEL LAI	06/02/2015
ARTHI KANNAN	06/04/2015
KENETTA NUNN	05/26/2015
DURAI BABU SUBRAMANI	02/23/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
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<b>City:</b>	CHAPEL HILL
<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	27516
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14438511
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(919)854-1401
<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>	919-854-1400
<b>Email:</b>	bmedlin@myersbigel.com
<b>Correspondent Name:</b>	MYERS BIGEL, P.A.
<b>Address Line 1:</b>	PO BOX 37428
<b>Address Line 4:</b>	RALEIGH, NORTH CAROLINA 27627
<b>ATTORNEY DOCKET NUMBER:</b>	5470-682TS
<b>NAME OF SUBMITTER:</b>	BETTY-LOU MEDLIN
<b>SIGNATURE:</b>	/bettyloumedlin/
<b>DATE SIGNED:</b>	03/02/2018
<b>Total Attachments: 6</b>	
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**PATENT**

**REEL: 045091 FRAME: 0444**

ASSIGNMENT

THIS ASSIGNMENT, made by us, Samuel Lai, a citizen of Canada, residing at 106 Oak Spring Ct, Carrboro, North Carolina 27510; Arthi Kannan, a citizen of the United States of America, residing at 359 Longmillgate Road, Morrisville, North Carolina 27560; ~~Kenneth~~ <sup>Kenneth</sup> Nunn, a citizen of the United States of America, residing at ~~3325 Coachmans Way, Durham,~~ <sup>113 Shiner Ave. Apt 12 Moscow, ID 83843</sup> North Carolina 27705; and Dural Babu Subramani, a citizen of India, residing at 1521 E. Franklin Street #C206, Chapel Hill, North Carolina 27514;

WITNESSETH: That,

WHEREAS, we are the joint inventors, along with Ying-Ying Wang and Richard Cone, of certain new and useful improvements in COMPOSITIONS AND METHODS FOR INHIBITING PATHOGEN INFECTION for which U.S. Provisional Application No. 61/719,689 was filed on October 29, 2012 in the United States Patent and Trademark Office and PCT International Application No. PCT/US2013/067328 was filed on October 29, 2013, and U.S. Patent Application No. 14/438,511 was filed on April 24, 2015 in the United States Patent and Trademark Office; and

WHEREAS, The University of North Carolina at Chapel Hill, a constituent institution of The University of North Carolina and an educational institution chartered under the laws of the State of North Carolina having a principal place of business at 100 Europa Drive, Suite 430, Chapel Hill, North Carolina 27517, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said applications, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer and convey unto said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and applications, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues or other forms of protection thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted along with any term extensions thereon or therefor, together with the right to claim the priority of said applications in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee,

its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and applications above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to promptly communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives; and we hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without further compensation, but at the expense of said assignee or its representatives.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 2<sup>nd</sup> day of June, 2015.

  
Samuel Lai

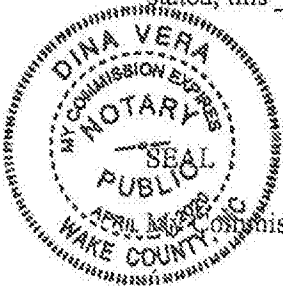
(SEAL)

STATE OF NORTH CAROLINA)

COUNTY OF Orange

Before me personally appeared the person described in and who executed the foregoing instrument, and s/he acknowledged to me that s/he executed the same for the purposes therein stated, this 2<sup>nd</sup> day of June, 2015.

  
Notary Public



Commission Expires: April 12, 2020

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Attorney Docket No. 5470.682TS  
Application Serial No. 14/438,511

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 4<sup>th</sup> day of  
June, 2015.

K. Arthi (SEAL)  
Arthi Kannan

Witnessed By:

P. Nachiappan

Date: 04/06/2015

P. NACHIAPPAN

4<sup>th</sup> June 2015

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 26 day of

May, 2015.

Kennetta Nunn (SEAL)  
Kennetta Nunn  
Kennetta

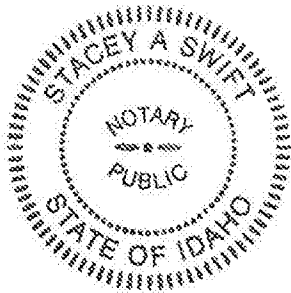
Idaho  
STATE OF NORTH CAROLINA)  
COUNTY OF Latah

Before me personally appeared the person described in and who executed the foregoing instrument, and s/he acknowledged to me that s/he executed the same for the purposes therein stated, this 26 day of May, 2015.

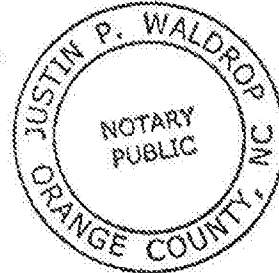
Stacey A. Swift  
Notary Public

SEAL

My Commission Expires: 06/02/2020



IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 23 day of  
February, 2018.  
Durai Babu Subramani (SEAL)  
Durai Babu Subramani



STATE OF NORTH CAROLINA)  
COUNTY OF Orange }

Before me personally appeared the person described in and who executed the foregoing instrument, and s/he acknowledged to me that s/he executed the same for the purposes therein stated, this 23 day of February, 2018.

Justin P. Waldrop  
Notary Public

SEAL

My Commission Expires: 02/07/2023

WHEREBY The University of North Carolina at Chapel Hill acknowledges and  
accepts the assignment;

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 26<sup>th</sup> day of  
February, 2018. The undersigned warrants and represents that he/she has the authority  
to sign this Assignment on behalf of the Assignee, The University of North Carolina at Chapel  
Hill.

By: Jacqueline Quay (SEAL)  
Title: Jacqueline Quay

STATE OF NORTH CAROLINA)

COUNTY OF ORANGE )

Before me personally appeared the person described in and who executed the foregoing  
instrument, and he/she acknowledged to me that he/she executed the same for the purposes  
therein stated, this 26<sup>th</sup> day of February, 2018.

Doris Bonita Perry  
Notary Public



My Commission Expires: June 28, 2020