

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MARK I. GREENE	11/16/2016
HONGTAO ZHANG	11/16/2016
HIROMICHI TSUCHIYA	07/14/2017
YASUHIRO NAGAI	11/16/2016
LIAN LAM	11/16/2016
AARON RUNKLE	07/16/2017
JEFFREY DREBIN	01/30/2017
MEI QING JI	11/17/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA
<b>Street Address:</b>	3160 CHESTNUT STREET
<b>Internal Address:</b>	SUITE 200
<b>City:</b>	PHILADELPHIA
<b>State/Country:</b>	PENNSYLVANIA
<b>Postal Code:</b>	19104
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	17375459
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)842-7899
<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>	202-842-7800
<b>Email:</b>	zIPPatentDocketingMailboxUS@cooley.com, hdoan@cooley.com, cphillipnouchet@cooley.com
<b>Correspondent Name:</b>	COOLEY LLP - ATTN PATENT GROUP
<b>Address Line 1:</b>	1299 PENNSYLVANIA AVE NW
<b>Address Line 2:</b>	SUITE 700
<b>Address Line 4:</b>	WASHINGTON, D.C. 20004
<b>ATTORNEY DOCKET NUMBER:</b>	PENN-002/05US 321199-2085

<b>NAME OF SUBMITTER:</b>	FUMIN SHI
<b>SIGNATURE:</b>	/Fumin Shi/
<b>DATE SIGNED:</b>	04/27/2022
<b>Total Attachments: 13</b> source=PENN-002_05US Assignment (Executed)#page1.tif source=PENN-002_05US Assignment (Executed)#page2.tif source=PENN-002_05US Assignment (Executed)#page3.tif source=PENN-002_05US Assignment (Executed)#page4.tif source=PENN-002_05US Assignment (Executed)#page5.tif source=PENN-002_05US Assignment (Executed)#page6.tif source=PENN-002_05US Assignment (Executed)#page7.tif source=PENN-002_05US Assignment (Executed)#page8.tif source=PENN-002_05US Assignment (Executed)#page9.tif source=PENN-002_05US Assignment (Executed)#page10.tif source=PENN-002_05US Assignment (Executed)#page11.tif source=PENN-002_05US Assignment (Executed)#page12.tif source=PENN-002_05US Assignment (Executed)#page13.tif	

## ASSIGNMENT

**Mark I. GREENE**, residing at 300 Righters Mill Road, Penn Valley, PA 19301; **Hongtao ZHANG**, residing at 1651 Valley Greene Road, Paoli, PA 19301; **Hiromichi TSUCHIYA**, residing at 1700 Benjamin Franklin Parkway, Apt. 418, Philadelphia, PA 19103; **Yasuhiro NAGAI**, residing at 1700 Benjamin Franklin Parkway, Apt. 1701, Philadelphia, PA 19103; **Lian LAM**, residing at 1707 S. 11<sup>th</sup> Street, Philadelphia, PA 19148; **Aaron RUNKLE**, residing at 907 Autumn River Run, Philadelphia, PA 19128; **Jeffrey DREBIN**, 1121 Barberry Road, Bryn Mawr, PA 19010; and **Mei Qing JI**, residing at 38 Chatham Drive, Voorhees, NJ 08043 (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled **COMBINATION OF IFN-GAMMA AND ANTI-ERBB ANTIBODY FOR THE TREATMENT OF CANCERS**, and which is a:

- (1) ☐ provisional application  
(a) ☐ to be filed herewith; or  
(b) ☐ bearing Application No. , and filed on ;
- (2) ☒ non-provisional application  
(a) ☐ to be filed herewith; or  
(b) ☒ bearing Application No. **15/019,924**, and filed on **February 9, 2016**; and/or
- (3) ☐ PCT application  
(a) ☐ bearing Application No. , and filed on .

**WHEREAS**, The Trustees of the University of Pennsylvania, a corporation having its principal place of business at 3160 Chestnut Street, Suite 200, Philadelphia, PA 19104 its successors, legal representatives and assigns, (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention(s); the application(s) for patent identified above; the right to file applications for patent of the United States or other countries on the Invention(s); any application(s) for patent of the United States or other countries claiming priority to, and/or the benefit of, these applications; any provisional or other right to recover any and all past, present, and future damages, including royalties, for any and all past, present, and future infringements of these application(s); and any and all patent(s) of the United States or other countries that may be granted therefor or thereon.

**NOW, THEREFORE**, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee or a predecessor in interest of the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee or a predecessor in interest of the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

(a) the Invention(s);

(b) the application(s) for patent identified above;

(c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Hague Convention, the Paris Convention for the Protection of Industrial Property, and under the Patent Cooperation Treaty, and all rights of claiming priority in any country of the world;

(d) any application(s) for patent of the United States or other countries claiming the Invention(s);

(e) any application(s) for patent of the United States or other countries claiming priority to, and/or the benefit of, at least one of the application(s) for patent identified above or any application(s) for patent claiming the Invention(s), including any substitute application(s), division(s), continuation(s), and continuation(s)-in-part;

(f) any provisional or other right to recover any and all past, present, and future damages, including royalties, for any and all past, present, and future infringements of any application for patent identified in the preceding paragraphs (b)-(e) and of any and all patent(s) granted based thereon in the United States and in all other countries; and

(g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b)-(e), including any reissue(s), reexamination(s), revival(s), renewal(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein, and

that Assignor will not make or enter into any assignment, sale, agreement or encumbrance which would conflict with these presents.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said application(s), and said patent(s), including interference and derivation proceedings, and any post-grant proceedings (e.g., opposition proceedings, post-grant reviews, *Inter partes* reviews, supplemental examinations, etc.) without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of COOLEY LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application(s) identified above when known.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date: Nov 16 / 2016 By: Mark I. Greene  
Mark I. GREENE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

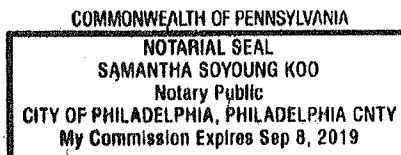
State of Pennsylvania )  
 ) ss.  
County of Philadelphia )

On 11/16/2016, before me, Samantha Soyoung Koo,  
Notary Public, personally appeared Mark I. Greene,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
which the person(s) acted, executed the instrument.

REQUIRED SENTENCE IF NOTARIZED IN CALIFORNIA: I certify under  
PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Samantha Soyoung Koo  
Signature of Notary Public



Place Notary Seal Above

My Commission Expires: \_\_\_\_\_

Date: Nov 16, 2016

By: [Signature]

Hongtao ZHANG

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of Pennsylvania )  
 ) ss.  
County of Philadelphia )

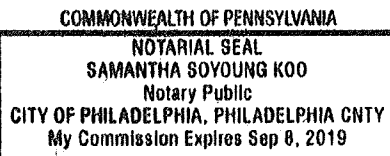
On 11/16/2016, before me, Samantha Soyoung Koo,  
Notary Public, personally appeared Hongtao Zhang,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
which the person(s) acted, executed the instrument.

REQUIRED SENTENCE IF NOTARIZED IN CALIFORNIA: I certify under  
PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

[Signature]

Signature of Notary Public



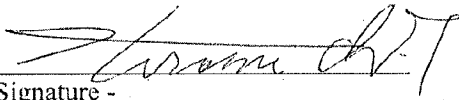
Place Notary Seal Above

My Commission Expires: \_\_\_\_\_

**Hiromichi TSUCHIYA**

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 14<sup>th</sup> day of July, year of 2017.



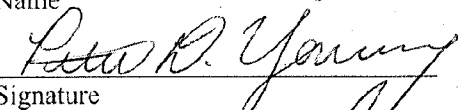
Signature -

\*\*\*\*\*  
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**WITNESS**

Tokyo, Japan  
Signed At (City/State)

Peter D. Young  
Name

  
Signature

8/14/2017  
Date





U.S. Department of State  
Individual Acknowledgment Certificate

JAPAN )

CITY OF TOKYO )

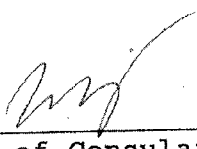
EMBASSY OF THE UNITED STATES OF AMERICA )

SS:

I certify that on this day the individual named below appeared before me and acknowledged to me that the attached instrument was executed freely and voluntarily.

Hironichi Tsuchiya

\_\_\_\_\_  
(Printed Name(s) of Individual(s))

  
(Signature of Consular Officer)

Momo Zhang  
Consular Associate of  
the United States of America

\_\_\_\_\_  
(Title of Consular Officer)

JUL 14 2017  
Date (mm-dd-yyyy)

Date: Nov 16/2016

By: [Signature]  
Yasuhiro NAGAI

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

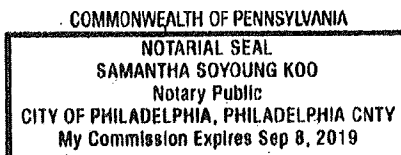
State of Pennsylvania )  
 ) ss.  
County of Philadelphia )

On 11/16/2016, before me, Samantha Soyoung Koo,  
Notary Public, personally appeared Yasuhiro Nagai,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
which the person(s) acted, executed the instrument.

REQUIRED SENTENCE IF NOTARIZED IN CALIFORNIA: I certify under  
PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

[Signature]  
Signature of Notary Public



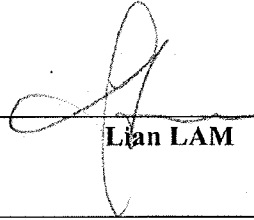
Place Notary Seal Above

My Commission Expires: \_\_\_\_\_

Date: \_\_\_\_\_

11/16/16

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

  
Lian LAM

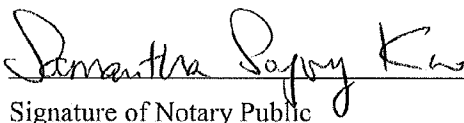
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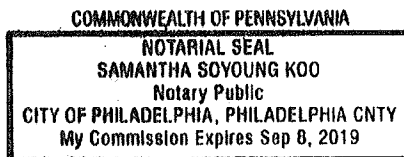
State of Pennsylvania )  
 ) ss.  
County of Philadelphia )

On 11/16/2016, before me, Samantha Soyoung Koo,  
Notary Public, personally appeared Lian Lam,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
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PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

  
Signature of Notary Public



Place Notary Seal Above

My Commission Expires: \_\_\_\_\_

Aaron RUNKLE

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

Executed this 16<sup>th</sup> day of July, year of 2017.



Signature -


\*\*\*\*\*

\*\*\*\*\*

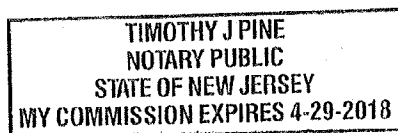
WITNESS

Marlton, New Jersey  
Signed At (City/State)

Timothy Pine  
Name

  
Signature

July 16, 2017  
Date



Date: 01/30/2017

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

Jeffrey DREBIN  
Jeffrey DREBIN

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of Pennsylvania )  
County of Philadelphia ) ss.

On 01/30/2017, before me, Samantha Soyoung Koo,  
Notary Public, personally appeared Jeffrey Drebin,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
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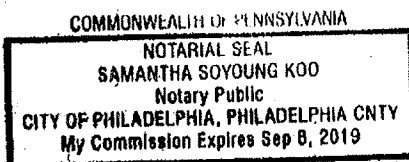
REQUIRED SENTENCE IF NOTARIZED IN CALIFORNIA: I certify under  
PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Samantha Soyoung Koo  
Signature of Notary Public

Place Notary Seal Above

My Commission Expires: \_\_\_\_\_



Date: 11/17/2016

By:   
Mei Qing Ji

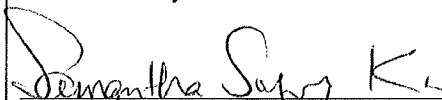
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

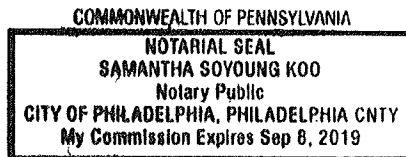
State of Pennsylvania )  
 ) ss.  
County of Philadelphia )

On 11/17/2016, before me, Samantha Soyoung Koo,  
Notary Public, personally appeared Mei Qing Ji,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
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PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

  
Signature of Notary Public



Place Notary Seal Above

My Commission Expires: \_\_\_\_\_

For and on behalf of ASSIGNEE:

Date: March 3, 2017

By: Jennifer Langenberger

Name: Jennifer Langenberger

Title: Director, Intellectual Property

Company: The Trustees of the University  
of Pennsylvania

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State of Pennsylvania  
County of Philadelphia ss.

On 3/3/17, before me, Stephanie M. Bongiovanni,  
Notary Public, personally appeared Jennifer A. Langenberger,  
who proved to me on the basis of satisfactory evidence, to be the person(s) whose  
name(s) is/are subscribed to the within instrument and acknowledged to me that  
he/she/they executed the same in his/her/their authorized capacity(ies), and that by  
his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of  
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PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Stephanie M. Bongiovanni

Signature of Notary Public

NOTARIAL SEAL  
STEPHANIE M. BONGIOVANNI, Notary Public  
City of Philadelphia, Phila. County  
My Commission Expires May 5, 2020

Place Notary Seal Above

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL  
STEPHANIE M. BONGIOVANNI, Notary Public  
City of Philadelphia, Phila. County  
My Commission Expires May 5, 2020