

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4468344

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CATHERINE JU-YING WU	01/13/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	DANA-FARBER CANCER INSTITUTE, INC.
<b>Street Address:</b>	450 BROOKLINE AVENUE
<b>City:</b>	BOSTON
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02215
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15537785
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(212)407-7799
<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>	2124077700
<b>Email:</b>	ipdocketny@vedderprice.com
<b>Correspondent Name:</b>	THOMAS J. KOWALSKI
<b>Address Line 1:</b>	1633 BROADWAY
<b>Address Line 2:</b>	VEDDER PRICE P.C.
<b>Address Line 4:</b>	NEW YORK, NEW YORK 10019
<b>ATTORNEY DOCKET NUMBER:</b>	47608.01.2004
<b>NAME OF SUBMITTER:</b>	JOSHUA HAMLET
<b>SIGNATURE:</b>	/Joshua Hamlet/
<b>DATE SIGNED:</b>	06/20/2017
<b>Total Attachments: 2</b>	
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ASSIGNMENT

I, **Catherine Ju-Ying Wu**, residing at: 117 Mason Terrace, Brookline, MA 02446, USA, being the inventor of certain improvements in the international application entitled: **METHODS FOR PROFILING THE T CELL REPERTOIRE** for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby assign unto **DANA-FARBER CANCER INSTITUTE, INC.** having a place of business at **450 Brookline Ave., Boston, MA 02215, USA**, its successors and assigns (1) the entire right, title and interest in all countries throughout the world in and to any and all of my inventions and discoveries in my United States Provisional Application No. 62/094,859 filed December 19, 2014 and a PCT International Application filed under the Patent Cooperation Treaty in the PCT United States Receiving Office (ROIUS) on December 21, 2015, identified as International Application No. PCT/US15/67154, and designating all PCT member countries/states, as well as in any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof, and any substitute applications therefore; (2) the full and complete right to file patent applications in the name of **DANA-FARBER CANCER INSTITUTE, INC.**, or their designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right title and interest in and to any Letters Patent which may issue on the aforesaid inventions, discoveries and applications in any country of the world and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in and to all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the following application:

United States Provisional Application No. 62/094,859 filed December 19, 2014 and all rights of priority in any country of the world deriving from the above-identified International Application.

I hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in any country throughout the world to **DANA-FARBER CANCER INSTITUTE, INC.** as the assignee of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me had this assignment, sale and transfer not been made.

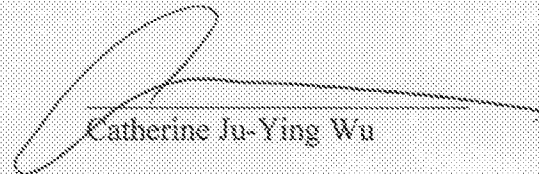
I agree, at any time, upon the request of **DANA-FARBER CANCER INSTITUTE, INC.** to execute and to deliver to **DANA-FARBER CANCER INSTITUTE, INC.** any

additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

I further agree, at any time, upon request of **DANA-FARBER CANCER INSTITUTE, INC.**, to execute and to deliver to **DANA-FARBER CANCER INSTITUTE, INC.**, such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do what is necessary to give full effect to and to perfect any and all rights of **DANA-FARBER CANCER INSTITUTE, INC.**, under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

In testimony of which I have hereupon affixed my signature it is my intention that this Assignment instrument be effective, and all rights transferred herein shall be considered to have vested in **DANA-FARBER CANCER INSTITUTE, INC.** as from the December 19, 2014 the filing date of the first filed United States Provisional Application No. 62/094,859 from which priority is hereby claimed.

1/13/16  
Date

  
Catherine Ju-Ying Wu

Commonwealth of Massachusetts )

) SS

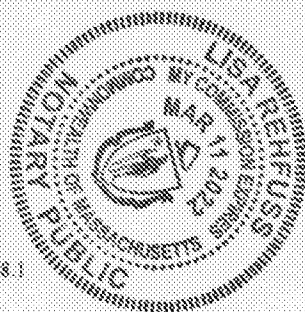
COUNTY OF Suffolk )

I, Lisa Refuss, a Notary Public in and for the county and Commonwealth aforesaid, do hereby certify that Catherine Ju-Ying Wu, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his free and voluntary act for the uses and purposes therein set forth.

IN WITNESS WHEREOF, I have hereunto set my hand and Notarial Seal, this 13 day of January, 2016.

  
Notary Public  
My Commission Expires: 3/11/22

SEAL



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