

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Michel C. Nussenzweig</td> <td>08/01/2011</td> </tr> <tr> <td>Pamela J. Bjorkman</td> <td>08/01/2011</td> </tr> </tbody> </table>		Name	Execution Date	Michel C. Nussenzweig	08/01/2011	Pamela J. Bjorkman	08/01/2011				
Name	Execution Date										
Michel C. Nussenzweig	08/01/2011										
Pamela J. Bjorkman	08/01/2011										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Howard Hughes Medical Institute</td> </tr> <tr> <td>Street Address:</td> <td>4000 Jones Bridge Road</td> </tr> <tr> <td>City:</td> <td>Chevy Chase</td> </tr> <tr> <td>State/Country:</td> <td>MARYLAND</td> </tr> <tr> <td>Postal Code:</td> <td>20815</td> </tr> </table>		Name:	Howard Hughes Medical Institute	Street Address:	4000 Jones Bridge Road	City:	Chevy Chase	State/Country:	MARYLAND	Postal Code:	20815
Name:	Howard Hughes Medical Institute										
Street Address:	4000 Jones Bridge Road										
City:	Chevy Chase										
State/Country:	MARYLAND										
Postal Code:	20815										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13558312</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13558312						
Property Type	Number										
Application Number:	13558312										
CORRESPONDENCE DATA											
<p>Fax Number: 6265778800 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 626-795-9900 Email: pto@cph.com Correspondent Name: CHRISTIE, PARKER & HALE, LLP Address Line 1: P.O. Box 29001 Address Line 4: Glendale, CALIFORNIA 91209</p>											
ATTORNEY DOCKET NUMBER:	69598/C766 NBC/CLM										
NAME OF SUBMITTER:	Nicole Ballew Chang										
<p>Total Attachments: 4 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif</p>											

PATENT

ASSIGNMENT

Assignment made August 1, 2011, by Michel C. Nussenzweig, MD, PhD ("Inventor") to the Howard Hughes Medical Institute, a Delaware corporation ("HHMI").

Recitals

WHEREAS, Inventor is an employee of HHMI and, as a condition of his employment, has signed the Agreement appended to HHMI's Policy on Intellectual Property (the "Intellectual Property Agreement");

WHEREAS, pursuant to the Intellectual Property Agreement, Inventor has agreed (a) to assign to HHMI all rights he may acquire in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by HHMI funds or funds under the control of HHMI (each a "Subject Property") and (b) to execute any agreements that may be desired by HHMI in connection with such assignment;

WHEREAS, Inventor has, alone or with others invented "Improving Anti-HIV Antibodies that Target the CD4 Binding-Site by Substituting Residue 54 of the Heavy Chain to a Residue with a Hydrophobic Sidechain that Mimics Phe43 of CD4" which may be the subject of a patent application (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, Inventor seeks to make a formal assignment of his interest in the Invention to HHMI, and HHMI desires the execution of a formal assignment of all of Inventor's right, title, and interest in the Invention.

NOW, THEREFORE, in consideration of the promises contained in and the acts performed and to be performed pursuant to the Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged by Inventor, Inventor agrees as follows:

1. Assignment. Inventor hereby assigns to HHMI his entire right, title, and interest in the Invention; any United States patent applications and all corresponding foreign patent applications which are directed to the Invention (including, without limitation, the patent application entitled "Improving Anti-HIV Antibodies that Target the CD4 Binding-Site by Substituting Residue 54 of the Heavy Chain to a Residue with a Hydrophobic Sidechain that Mimics Phe43 of CD4" filed in the United States Patent and Trademark Office on July 25, 2011 with Serial Number 61/511,425), and any and all patents issued therefrom; all United States or foreign division and continuation applications based on any of the foregoing, and any and all patents issued therefrom; and all claims which are directed to the Invention and which may be contained in continuation-in-part applications or in patents which issue therefrom.

2. Cooperation. Inventor agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable to assign Inventor's entire right, title and interest in the Invention to HHMI and to assist HHMI (or others

at the direction of HHMI) in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to the Invention.

3. Parties. The terms and provisions of the Assignment shall inure to the benefit of HHMI and its successors and assigns and shall be binding on the Inventor and his heirs, personal representatives and assigns.

4. Warranty. Inventor warrants and represents that he has not entered into any assignment, contract, or understanding in conflict herewith, and that there is no other person or entity whose consent is required in order for the Inventor to make the assignment contained herein.

Inventor:

Michel C. Nussenzweig
Michel C. Nussenzweig, MD, PhD

State of New York

County of New York

Then personally appeared before me the above-named Michel C. Nussenzweig, MD, PhD and acknowledged that he executed the foregoing instrument in his authorized capacity this 1 day of August, 2011

Notary Public:

Marguerite T. Pulty
MARGUERITE T. PULTY
(print name)

(SEAL)

MARGUERITE T. PULTY
Notary Public, State of New York
No. 41-4888778
Qualified in Nassau County
Commission Expires August 31, 2014

My Commission Expires: 08/31/2014

HHMI 04922

ASSIGNMENT

Assignment made 08/01, 2011, by Pamela J. Bjorkman, PhD ("Inventor") to the Howard Hughes Medical Institute, a Delaware corporation ("HHMI").

Recitals

WHEREAS, Inventor is an employee of HHMI and, as a condition of her employment, has signed the Agreement appended to HHMI's Policy on Intellectual Property (the "Intellectual Property Agreement");

WHEREAS, pursuant to the Intellectual Property Agreement, Inventor has agreed (a) to assign to HHMI all rights she may acquire in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by HHMI funds or funds under the control of HHMI (each a "Subject Property") and (b) to execute any agreements that may be desired by HHMI in connection with such assignment;

WHEREAS, Inventor has, alone or with others invented "Improving Anti-HIV Antibodies that Target the CD4 Binding-Site by Substituting Residue 54 of the Heavy Chain to a Residue with a Hydrophobic Sidechain that Mimics Phe43 of CD4" which may be the subject of a patent application (the "Invention"), and the Invention is a Subject Property; and

WHEREAS, Inventor seeks to make a formal assignment of her interest in the Invention to HHMI, and HHMI desires the execution of a formal assignment of all of Inventor's right, title, and interest in the Invention.

NOW, THEREFORE, in consideration of the promises contained in and the acts performed and to be performed pursuant to the Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged by Inventor, Inventor agrees as follows:

1. Assignment. Inventor hereby assigns to HHMI her entire right, title, and interest in the Invention; any United States patent applications and all corresponding foreign patent applications which are directed to the Invention (including without limitation, the patent application entitled "Improving Anti-HIV Antibodies that Target the CD4 Binding-Site by Substituting Residue 54 of the Heavy Chain to a Residue with a Hydrophobic Sidechain that Mimics Phe43 of CD4" filed in the United States Patent and Trademark Office on July 25, 2011 with Serial Number 61/511,425), and any and all patents issued therefrom, all United States or foreign division and continuation applications based on any of the foregoing, and any and all patents issued therefrom; and all claims which are directed to the Invention and which may be contained in continuation-in-part applications or in patents which issue therefrom.

2. Cooperation. Inventor agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable to assign Inventor's entire right, title and interest in the Invention to HHMI and to assist HHMI (or others

at the direction of HHMI) in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to the Invention.

3. Parties. The terms and provisions of the Assignment shall inure to the benefit of HHMI and its successors and assigns and shall be binding on the Inventor and her heirs, personal representatives and assigns.

4. Warranty. Inventor warrants and represents that she has not entered into any assignment, contract, or understanding in conflict herewith, and that there is no other person or entity whose consent is required in order for the Inventor to make the assignment contained herein.

Inventor:

Pamela J. Bjorkman
Pamela J. Bjorkman, PhD

State of California

County of LOS ANGELES

On 01 AUGUST 2011 before me, M.R. WERNER, Notary Public personally appeared Pamela Jane Bjorkman who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) 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.

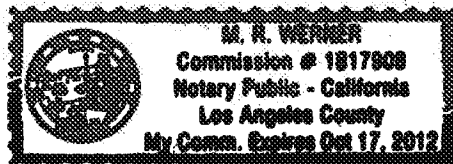
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public:

M.R. Werner

(SEAL)



M.R. WERNER
(print name)

My Commission Expires: 17 OCT 2012

CIT 5930
HHMI 04922

53396701