

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5741728

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
CATERINA GARONE	12/01/2017
MICHIO HIRANO	11/30/2017
RECEIVING PARTY DATA	
Name:	THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK
Street Address:	412 LOW MEMORIAL LIBRARY
Internal Address:	535 WEST 116TH STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10027
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16583852
CORRESPONDENCE DATA	
Fax Number:	(914)288-0023
<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>	
Phone:	9142880022
Email:	uspto@leasonellis.com
Correspondent Name:	LEASON ELLIS LLP
Address Line 1:	ONE BARKER AVE
Address Line 2:	FIFTH FLOOR
Address Line 4:	WHITE PLAINS, NEW YORK 10601
ATTORNEY DOCKET NUMBER:	01001/004197-US2
NAME OF SUBMITTER:	SAMANTHA CHAN
SIGNATURE:	/Samantha Chan/
DATE SIGNED:	09/27/2019
Total Attachments: 6	
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PATENT

REEL: 050511 FRAME: 0169

ASSIGNMENT

I, Caterina Garone, having a residence of Cambridge, GB;

(hereinafter "ASSIGNOR") in consideration of the sum of Ten Dollars (\$10.00), or the equivalent thereof, and other good and valuable consideration, the sufficiency of which and receipt of which are hereby acknowledged, paid to ASSIGNOR by

The Trustees of Columbia University in the City of New York

a Corporation having a place of business at 412 Low Memorial Library, 535 West 116th Street, New York, NY 10027 (hereinafter "ASSIGNEE"), do hereby sell and assign to said ASSIGNEE, its successors and assigns, the below indicated right, title, and interest, **throughout the world** in and to my Invention entitled:

**DEOXYNUCLEOSIDE THERAPY FOR DISEASES CAUSED BY UNBALANCED
NUCLEOTIDE POOLS INCLUDING MITOCHONDRIAL DNA DEPLETION
SYNDROMES**

invented by me and described by the above title and docket number in the United States of America; and all patents, divisions, reissues, continuations and any extensions thereof and rights of priority therein, said interest being my entire ownership interest in the same, to be held and enjoyed by said ASSIGNEE, its successors, assigns, or other legal representatives, to the full end of the term thereof, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made, including all rights of Assignor to recover for past infringement thereof;

And for the consideration aforesaid, I hereby covenant and agree to and with said ASSIGNEE, its successors and assigns, that whenever ASSIGNEE, its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with an application concerning said Invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of such application or patent issuing therefrom is lawful and desirable, I will sign all papers and drawings, take all rightful oaths and

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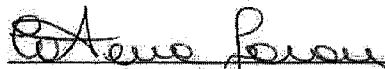
affidavits, and do all acts necessary or required to be done for the procurement of all lawful rights associated with the Invention, or for the reissue or continuation or extension of the same, will do all acts necessary or required to secure in said ASSIGNEE, its successors or assigns, the title to and full benefit of all rights hereby assigned, without charge to said ASSIGNEE or its successors or assigns, but at its or their expense; and I hereby appoint every present or future officer of said ASSIGNEE as my agent to sign all such papers and to do all such necessary acts on my behalf, to the fullest extent permitted by law;

And I hereby authorize and request the Commissioner of Patents and Trademarks and any other granting authority to issue any Letters Patent resulting from said Invention and application(s) concerning same to said ASSIGNEE.

This assignment shall have an effective date corresponding to the last date of execution.

I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that I have signed this document as my own free act and that all of the foregoing is true and correct.

Dated: 1.12.2017


Caterina Garone, Inventor

ACCEPTANCE BY ASSIGNEE

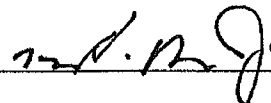
In connection with an assignment in any jurisdiction in which an acceptance by ASSIGNEE is required, I hereby accept this assignment on behalf of **The Trustees of Columbia University in the City of New York**. I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that (check all that apply):

☒ I am an officer of the above-identified ASSIGNEE,

☒ I have signed this document on behalf of ASSIGNEE with the full authority of the ASSIGNEE.

and that all the foregoing is true and correct.

Dated: Dec 11, 2017

By: 
Name:

Title:

Thomas H. Burrows Jr., J.D. Associate General Counsel Columbia University New York, N.Y. U.S.A. (212) 854-0681

ASSIGNMENT

I, Michio Hirano, having a residence of New York, NY;

(hereinafter "ASSIGNOR") in consideration of the sum of Ten Dollars (\$10.00), or the equivalent thereof, and other good and valuable consideration, the sufficiency of which and receipt of which are hereby acknowledged, paid to ASSIGNOR by

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a Corporation having a place of business at 412 Low Memorial Library, 535 West 116th Street, New York, NY 10027 (hereinafter "ASSIGNEE"), do hereby sell and assign to said ASSIGNEE, its successors and assigns, the below indicated right, title, and interest, **throughout the world** in and to my Invention entitled:

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And for the consideration aforesaid, I hereby covenant and agree to and with said ASSIGNEE, its successors and assigns, that whenever ASSIGNEE, its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with an application concerning said Invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of such application or patent issuing therefrom is lawful and desirable, I will sign all papers and drawings, take all rightful oaths and

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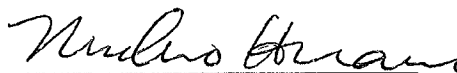
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And I hereby authorize and request the Commissioner of Patents and Trademarks and any other granting authority to issue any Letters Patent resulting from said Invention and application(s) concerning same to said ASSIGNEE.

This assignment shall have an effective date corresponding to the last date of execution.

I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that I have signed this document as my own free act and that all of the foregoing is true and correct.

Dated: 11/30/2017


Michio Hirano, Inventor

ACCEPTANCE BY ASSIGNEE

In connection with an assignment in any jurisdiction in which an acceptance by ASSIGNEE is required, I hereby accept this assignment on behalf of **The Trustees of Columbia University in the City of New York**. I declare under penalty of perjury under the laws of the United States of America, and under penalty of the laws of any other jurisdiction before which this document may be presented, that (check all that apply):

☒ I am an officer of the above-identified ASSIGNEE,

☒ I have signed this document on behalf of ASSIGNEE with the full authority of the ASSIGNEE.

and that all the foregoing is true and correct.

Dated: Dec. 11, 2017

By:

Name:

Thomas H. Burrows Jr.

Title:

Thomas H. Burrows Jr., J.D.
Associate General Counsel
Columbia University
New York, N.Y. U.S.A.
(212) 854-0681