# 505340977 02/22/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5387759

SUBMISSION TYPE:		NEV	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASS	ASSIGNMENT			
CONVEYING PARTY	DATA					
			Name		Execution Date	
HOWARD HUGHES MEDICAL INSTIT			TUTE		09/24/2014	
RECEIVING PARTY D	ΑΤΑ					
Name:	Presiden	President and Fellows of Harvard College				
Street Address:	17 Quinc	17 Quincy Street				
City:	Cambride	Cambridge				
State/Country:	MASSAC	MASSACHUSETTS				
Postal Code:	02138	02138				
	I					
PROPERTY NUMBER	IS Total: 1					
Property Type			Number			
Application Number: 159		5958721				
CORRESPONDENCE	DATA					
Fax Number:	(6	617)495-9				
					<b>*</b> • • • • • • • • •	
Correspondence will					ccessful, it will be sent via US Mail.	
Correspondence will using a fax number, l	if provided;		unsuccessful, it will be			
Correspondence will	i <b>f provided;</b> (6	<i>if that is</i> 617) 495-	unsuccessful, it will be			
<i>Correspondence will using a fax number, l</i> Phone:	i <b>f provided;</b> (6 si	<i>if that is</i> 617) 495-	<b>unsuccessful, it will be</b> 3067 1urphy@harvard.edu			
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1:	i <b>f provided;</b> (6 si e: K 1;	<i>if that is</i> 617) 495- obhan_m AREN SI 350 MAS	<i>unsuccessful, it will be</i> 3067 hurphy@harvard.edu NCLAIR SACHUSETTS AVE	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2:	i <b>f provided;</b> (6 si s: K 1; H	<i>if that is</i> 617) 495- obhan_m AREN SI 350 MAS ARVARE	<i>unsuccessful, it will be</i> 3067 nurphy@harvard.edu NCLAIR SACHUSETTS AVE O UNIVERSITY, OFFICE	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1:	i <b>f provided;</b> (6 si s: K 1; H	<i>if that is</i> 617) 495- obhan_m AREN SI 350 MAS ARVARE	<i>unsuccessful, it will be</i> 3067 hurphy@harvard.edu NCLAIR SACHUSETTS AVE	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2:	i <b>f provided;</b> (6 si s: K 1; H C	<i>if that is</i> 617) 495- obhan_m AREN SI 350 MAS ARVARE	<i>unsuccessful, it will be</i> 3067 hurphy@harvard.edu NCLAIR SACHUSETTS AVE O UNIVERSITY, OFFICE GE, MASSACHUSETTS	e sent v	ria US Mail.	
Correspondence will using a fax number, f Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4:	if provided; (6 si e: K 13 H C NUMBER:	if that is 517) 495- obhan_m AREN SI 350 MAS ARVARE AMBRID 504	<i>unsuccessful, it will be</i> 3067 hurphy@harvard.edu NCLAIR SACHUSETTS AVE O UNIVERSITY, OFFICE GE, MASSACHUSETTS	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4:	if provided; (6 si e: K 13 H C NUMBER:	if that is 517) 495- obhan_m AREN SI 350 MAS ARVARE AMBRID 504	<i>unsuccessful, it will be</i> 3067 nurphy@harvard.edu NCLAIR SACHUSETTS AVE O UNIVERSITY, OFFICE GE, MASSACHUSETTS 5 REN SINCLAIR	e sent v	ria US Mail.	
Correspondence will using a fax number, f Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET F	if provided; (6 si e: K 13 H C NUMBER:	<i>if that is</i> 517) 495- obhan_m AREN SI 350 MAS ARVARE AMBRID 504 KAF	<i>unsuccessful, it will be</i> 3067 nurphy@harvard.edu NCLAIR SACHUSETTS AVE O UNIVERSITY, OFFICE GE, MASSACHUSETTS 5 REN SINCLAIR	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE:	if provided; (6 si e: K 13 H C NUMBER:	<i>if that is</i> 517) 495- obhan_m AREN SI 350 MAS ARVARE AMBRID 504 KAF	<i>unsuccessful, it will be</i> 3067 nurphy@harvard.edu NCLAIR SACHUSETTS AVE D UNIVERSITY, OFFICE GE, MASSACHUSETTS E REN SINCLAIR	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED:	if provided; (6 si e: K 13 H C NUMBER: R:	if that is 517) 495- obhan_m AREN SI 350 MAS ARVARE AMBRID 504 KAF /K.S 02/2	<i>unsuccessful, it will be</i> 3067 nurphy@harvard.edu NCLAIR SACHUSETTS AVE D UNIVERSITY, OFFICE GE, MASSACHUSETTS 5 REN SINCLAIR ./	e sent v	ria US Mail.	
Correspondence will using a fax number, i Phone: Email: Correspondent Name Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET I NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 3	ent_HHMI_to	if that is 517) 495- obhan_m AREN SI 350 MAS 350 MAS ARVARE 5048 5048 KAF 02/2 0_HU#pag	unsuccessful, it will be 3067 nurphy@harvard.edu NCLAIR SACHUSETTS AVE D UNIVERSITY, OFFICE GE, MASSACHUSETTS 5 REN SINCLAIR ./ 22/2019 ge1.tif	e sent v	ria US Mail.	

#### ASSIGNMENT

Assignor:

HOWARD HUGHES MEDICAL INSTITUTE 4000 Jones Bridge Road Chevy Chase, MD 20815

Assignee: PRESIDENT AND FELLOWS OF HARVARD COLLEGE 17 Quincy Street Cambridge, MA 02138

WHEREAS, I, David R. Liu, of Lexington, Massachusetts, as a duly appointed agent of Howard Hughes Medical Institute (HHMI), have developed certain inventions described in International PCT Patent Application No. **PCT/US14/54247** filed 09/05/2014, entitled: "DELIVERY SYSTEM FOR FUNCTIONAL NUCLEASES" which claims priority to U.S. Patent Application Nos. 14/462,189 filed 08/18/2014 and 14/462,163 filed 08/18/2014 and also claims priority to U.S. Provisional Patent Application No. 61/874,746 filed 09/06/2013; having full right to convey HHMI's entire right, title, and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, PRESIDENT AND FELLOWS OF HARVARD COLLEGE ("Assignee"), a non-profit corporation of the state of Massachusetts, having its principal place of business at 17 Quincy Street, Cambridge, Massachusetts 02138, is desirous of acquiring the entire right, title, and interest in and to said invention or inventions and any and all patents to be obtained therefore;

#### PATENT REEL: 048404 FRAME: 0842

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledge by the undersigned does hereby sell, assign, transfer, and set over unto said Assignee, its successors and assigns, HHMI's entire right, title, and interest throughout the world in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any application filed in any foreign country based thereon, including the right to file said foreign applications and claim priority under the provisions of any international convention or treaty; also the entire right, title, and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention or inventions and any divisional, continuation, or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the undersigned hereby authorizes and requests the issuing authority to issue any and all patents on said applications to said Assignee or its successors and assigns.

For purposes of complying with foreign requirements, the above paragraph is intended to expressly grant all the recited rights and grants in China, Korea, and Japan.

The undersigned further agrees, without any further payment or compensation by said Assignee or its successors and assigns, to communicate to said Assignee, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence of interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; executed and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said Assignee, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said invention or inventions in this or any foreign country.

#### PATENT REEL: 048404 FRAME: 0843

HU 5045

Assignor authorizes Assignee or Assignee's representative to supply and/or to correct any errors in the patent/application information provided above including but not limited to said application serial number(s) and filing date(s), prior to or after recordation.

IN TESTIMONY WHEREOF, the undersigned had hereunto set his/her hand and seal on the date after his/her signature.

9-24-4 (Date)

David R. Liu As duly appointed agent of the Howard Hughes Medical Institute

Witness's Signature

DX Sale

Witness's Printed Name

(Date)

### PATENT REEL: 048404 FRAME: 0844

**RECORDED: 02/22/2019**