#### 506863518 09/10/2021

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
FARAH NATOLI	08/05/2011
GAOZHONG ZHU	08/08/2011
JENNIFER TEREW	08/15/2011
YUAN JIANG	08/04/2011
JAMIE TSUNG	08/05/2011
ZAHRA SHAHROKH	08/05/2011
BRIAN VERNAGLIA	08/11/2011
JING PAN	08/05/2011
RICHARD PFEIFER	08/04/2011
PERICLES CALIAS	08/17/2011

### **RECEIVING PARTY DATA**

Name:	SHIRE HUMAN GENETIC THERAPIES, INC.
Street Address:	300 SHIRE WAY
City:	LEXINGTON
State/Country:	MASSACHUSETTS
Postal Code:	02421

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17350860

### **CORRESPONDENCE DATA**

Fax Number: (617)526-9899

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.

617-526-9633 Phone:

Email: tamoore@proskauer.com PROSKAUER ROSE LLP Correspondent Name: Address Line 1: ONE INTERNATIONAL PLACE Address Line 4: BOSTON, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER: SHR-1029CUS4

> **PATENT** REEL: 057445 FRAME: 0894

506863518

NAME OF SUBMITTER: FANGLI CHEN, PH.D.	
SIGNATURE:	/Fangli Chen, Reg. No. 51,551/
DATE SIGNED:	09/10/2021

#### **Total Attachments: 12**

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PATENT REEL: 057445 FRAME: 0895

Attorney Docket No: 2006685-0028 2006685-0029

## JOINT ASSIGNMENT

WHEREAS, each of the below-named inventors whose name and residence is set forth in the following Table 1:

Inventor Name	City, State Zip
1. Farah Natoli	Georgetown, MA 01833
2. Gaozhong Zhu	Weston, MA 02493
3. Jennifer Terew	Concord, MA 01742
4. Yuan Jiang	Londonderry, NH 03053
5. Jamie Tsung	Wellesley, MA 02482
6. Zahra Shahrokh	Weston, MA 02493
7. Brian Vernaglia	Winchester, MA 01890
8. Jing Pan	Boxborough, MA 01719
9. Richard Pfeifer	North Granby, CT 06060
10. Pericles Calias	Melrose, MA 02176

### Table 1

hereby declares and agrees, on behalf of himself/herself and all of his/her successors and assigns that each is aware of the patent applications entitled:

# METHODS AND COMPOSITIONS FOR CNS DELIVERY OF HEPARAN N-SULFATASE; and

	prepared for filing in the United States Patent and Trademark Office; or
	identified by United States Application Serial No. 13/168,957 and International o. PCT/US11/41922 both filed in the United States Patent and Trademark Office 011; and

 $\boxtimes$  and am also aware of the following priority applications:

Serial No.: 61/358,857; Filed: June 25, 2010 Serial No.: 61/360,786; Filed: July 1, 2010

Serial No.: 61/387,862; Filed: September 29, 2010 Serial No.: 61/435,710; Filed: January 24, 2011 Serial No.: 61/442,115; Filed: February 11, 2011 Serial No.: 61/476,210; Filed: April 15, 2011 Serial No.: 61/495,268; Filed: June 9, 2011

WHEREAS Shire Human Genetic Therapies, Inc. (hereinafter "ASSIGNEE"), having a usual place of business at 700 Main Street, Cambridge, MA 02139, desires to acquire or confirm an interest therein;

AND, I hereby request the Director of Patents and Trademarks of the United States to issue any and all patent(s) as shall be granted upon said application or applications based thereon to ASSIGNEE, its successors, assigns, and legal representatives;

AND, I covenant with said ASSIGNEE that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by me, and that full right to convey the same as herein expressed is possessed by me.

••	
SIGNED this	,20 <u>_/(</u>
	Pat Natoh
Name: Fa	rah Natoli
STATE OF Warachusetts	
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COUNTY OF Widdleson	
Before me this 5th day of August, 20 11 proved to me through satisfactory evidence of identity w	, personally appeared Fasak Natoli which was Lacked to me
to be the person whose name is signed on the preceding that he/she executed the same, of his/her own free will a	or attached document, and acknowledged
that he/she executed the same, of his/her own free win a	na for the purposes set form.
NOTARY	PUBLICE CUL
Name:	Bianta KOIL
My Comm	ission Expires: 24. 28, 2074
	A BIANKA D. KOLB A , Notary Public
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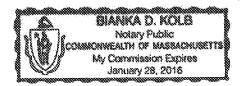
My Commission Expires January 28, 2016

SIGNED this OS day of	Angray , 20 !!  Name: Gaozhong Zhu
STATE OF Winach USEHS	SS.
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	NOTARY PUBLIC COLLAR LOS Name:  Name:  Bianka Ko/5  My Commission Expires:  Jan. 28, 2074
	BIANKA D. KOLB  Notary Public  COMMONWEALTH OF MASSACHUSETTS  My Commission Expires  January 28, 2018

SIGNED this 15th day of August	
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COUNTY OF Middlesey	
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NOTAR	Y PUBLIC PO WILL GOD
Name:	Bianka KOIE
My Com	mission Expires: 4.4. 28, 28/6
	BIANKA D. KOLB  Notary Public  COMMONWEALTH OF MASSACHUSETTS
	My Commission Expires January 28, 2018



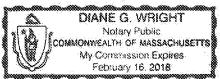
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	Juan 3
	Name: Yuan Jiang
STATE OF <u>Wanachusetts</u>	
COUNTY OF MIddlesy	
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that he/she executed the same, of his/her own	n free will and for the purposes set form.
	NOTARY PUBLIC & COLL COLL
V.	Name: Bauka 1284
	My Commission Expires:



SIGNED this day of	<u>August</u> , 2011.
	Name: Jamie Tsung
STATE OF <u>Minachuseetts</u> COUNTY OF <u>Middleseet</u>	SS.
proved to me through satisfactory evidence	e preceding or attached document, and acknowledged
	NOTARY PUBLIC MULL (LOC)
	Name: Bianta KB/b My Commission Expires: Ah. 28, 2016
	BIANKA C. KOLB  Notary Public  COMMONWEALTH OF MASSACHUSETTS  My Commission Expires  January 28, 2016

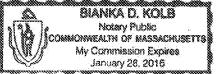
SIGNED this Of day of	<u>fung</u> , 20 <u>//</u> .			
July Le				
Name: Zahra Shahrokh				
STATE OF Manachusetts				
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that he/she executed the same, of his/her own free will and for the purposes set forth.				
	NOTARY PUBLIC BOULL GOT			
	Name: Bianka Kell			
*	My Commission Expires: 20 206			
	BIANKA D. KOLB  Notery Public  COMMONNEALTH OF MASSACHUSETTS  My Commission Expires  Jenuary 26, 2016			

SIGNED this day of	<u>(#\$(si,20])/</u>		
	Name-Brian Vernaglia		
STATE OF MASSA CHUSETTS COUNTY OF SUFFRE	SS.		
Before me this			
	NOTARY PUBLIC  MANGENTY  Name: DANE & WELCHT  My Commission Expires: 3/16/2018		



SIGNED this 5th day of Agust, 201.				
- Andre				
Name: Jing Pan				
STATE OF Masachusetts				
COUNTY OF Widdlesey ss.				
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BIANKA D. KOLB				
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My Commission Expires January 28, 2016				

SIGNED this day of August, 20 1/1.  Name: Richard Pfeifer				
STATE OF Marchusetts  COUNTY OF Middlesof  SS.				
Before me this day of				
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Page 13 of 13