

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5831617

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	PERICLES CALIAS	08/17/2011
	JING PAN	08/05/2011
	JAN POWELL	08/08/2011
	LAWRENCE CHARNAS	08/05/2011
	THOMAS MCCAULEY	08/11/2011
	TERESA LEAH WRIGHT	08/10/2011
	RICHARD PFEIFER	08/04/2011
	ZAHRA SHAHROKH	08/05/2011
RECEIVING PARTY DATA		
Name:	SHIRE HUMAN GENETIC THERAPIES, INC.	
Street Address:	700 MAIN STREET	
City:	CAMBRIDGE	
State/Country:	MASSACHUSETTS	
Postal Code:	02139	
PROPERTY NUMBERS Total: 1		
Property Type	Number	
Application Number:	16573557	
CORRESPONDENCE DATA		
Fax Number:	(617)526-9899	
<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:	(617) 526-9635	
Email:	sdwhite@proskauer.com	
Correspondent Name:	PROSKAUER ROSE LLP	
Address Line 1:	ONE INTERNATIONAL PLACE	
Address Line 4:	BOSTON, MASSACHUSETTS 02110	
ATTORNEY DOCKET NUMBER:	SHR-1029AUD2	
NAME OF SUBMITTER:	FANGLI CHEN, PH.D.	
SIGNATURE:	/Fangli Chen, Reg. No. 51,551/	

DATE SIGNED:	11/21/2019
Total Attachments: 11 source=SHR-1029AUSD2 Assignment#page1.tif source=SHR-1029AUSD2 Assignment#page2.tif source=SHR-1029AUSD2 Assignment#page3.tif source=SHR-1029AUSD2 Assignment#page4.tif source=SHR-1029AUSD2 Assignment#page5.tif source=SHR-1029AUSD2 Assignment#page6.tif source=SHR-1029AUSD2 Assignment#page7.tif source=SHR-1029AUSD2 Assignment#page8.tif source=SHR-1029AUSD2 Assignment#page9.tif source=SHR-1029AUSD2 Assignment#page10.tif source=SHR-1029AUSD2 Assignment#page11.tif	

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. Pericles Calias	Melrose, MA 02176
2. Jing Pan	Boxborough, MA 01719
3. Jan Powell	Concord, MA 01742
4. Lawrence Charnas	Natick, MA 01760
5. Thomas McCauley	Cambridge, MA 02141
6. Teresa Leah Wright	Lexington, MA 02142
7. Richard Pfeifer	North Granby, CT 06060
8. Zahra Shahrokh	Weston, MA 02493

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:

CNS DELIVERY OF THERAPEUTIC AGENTS; and

☐ prepared for filing in the United States Patent and Trademark Office; or

☒ identified by United States Application Serial No. **13/168,961** and International Application No. **PCT/US11/41924** both filed in the United States Patent and Trademark Office on **June 25, 2011**; and

☒ 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;

NOW, THEREFORE, to all whom it may concern be it known that, in consideration of agreements previously and duly entered into between the parties, and/or for other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned, and

transferred and/or do hereby sell, assign, and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title, and interest in and throughout the United States of America, its territories and all foreign countries, in and to any and all inventions described in the patent application, and/or any priority applications noted above; and hereby confirm that my sale, assignment, and/or transfer is and was effective at least as of the filing date of the patent application and/or priority application. My sale, assignment and/or transfer applies to the above-referenced patent application, and to any application that is based in whole or in part on the patent application, including to divisional, continuing, substitute, renewal, reissue, reexamination and other applications, for example that claim priority to the patent application. Also, this sale, assignment, transfer pertains to any and all other rights arising under or pursuant to any and all international agreements, treaties, or laws relating to the protection of industrial property, including all rights of priority under the International Convention for the Protection of Industrial Property, and in and to any such patent(s) as may issue thereon including any and all original and reissued patents which have been or shall be issued in the United States and foreign countries; said inventions, applications, and patent(s) to be held and enjoyed by ASSIGNEE for its own use and for its successors, assigns and legal representatives, to the full end of the term for which said patent(s) may be granted as fully and entirely as the same would have been held by me had this sale, assignment and transfer not been made;

AND, I hereby acknowledge that this Assignment, being of my entire right, title, and interest in and to the inventions, carries with it the right in ASSIGNEE, by attorneys and agents of ASSIGNEE selection, to apply for and receive any and all patent(s) for said inventions in its own name;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the patent(s) to ASSIGNEE, its successors, assignees, and legal representatives, but at its expense and charges, including the execution of application for patents in foreign countries, the execution of substitution, reissue, divisional or continuation applications, and the giving of testimony, preliminary statements, or other statements in any interference or other proceeding in which the inventions or any applications or patents directed to the inventions may be involved by communicating to the ASSIGNEE all facts I know relating to the inventions and their history, and generally by doing everything possible which ASSIGNEE shall consider desirable for aiding in securing and maintaining proper patent protection for the inventions and for vesting title in the inventions and all applications for patent and all patents on the inventions in ASSIGNEE;

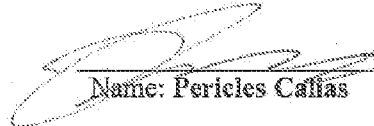
AND, I further hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number(s) and/or filing date(s) into this assignment document, if appropriate;

AND, I hereby appoint ASSIGNEE as my common agent for purposes of prosecuting international patent applications and any national patent applications for which such common agency is recognized;

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 17 day of August, 2011.

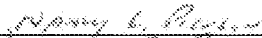

Name: Pericles Callas

STATE OF Massachusetts SS.

COUNTY OF Middlesex

Before me this 17 day of August, 2011, personally appeared Pericles Callas, and proved to me through satisfactory evidence of identity which was MA Drivers License to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC


Name: Nancy L. Platon
My Commission Expires: 08 Dec 2017

SIGNED this 5th day of August, 2011.

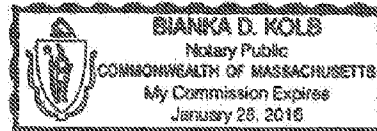
Jing Pan
Name: Jing Pan

STATE OF Massachusetts SS.
COUNTY OF Middlesex

Before me this 5th day of August, 2011, personally appeared Jing Pan, and proved to me through satisfactory evidence of identity which was known to me to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC

Bianka Kolb
Name: Bianka Kolb
My Commission Expires: Jan. 28, 2016



SIGNED this 8th day of August, 2011.



Name: Jan Powell

STATE OF Massachusetts
COUNTY OF Middlesex SS.

Before me this 8th day of August, 2011, personally appeared Jan Powell, and proved to me through satisfactory evidence of identity which was known to me to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC

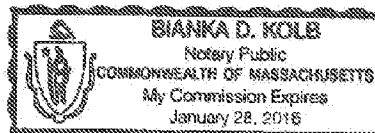


Name:

Bianca Kolb

My Commission Expires:

Jan. 28, 2016



SIGNED this 5th day of August, 2011.

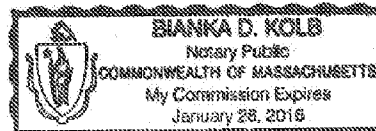
Lawrence Charnas
Name: Lawrence Charnas

STATE OF Massachusetts SS.
COUNTY OF Middlesex

Before me this 5th day of August, 2011, personally appeared Lawrence Charnas, and proved to me through satisfactory evidence of identity which was known to me to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC

Bianka Kolb
Name: Bianka Kolb
My Commission Expires: Jan. 28, 2016



SIGNED this 11th day of August, 20 11.

Thomas McCauley

Name: Thomas McCauley

STATE OF Massachusetts SS.

COUNTY OF Middlesex

Before me this 11 day of August, 20 11, personally appeared Thomas McCauley, and proved to me through satisfactory evidence of identity which was Mass. Driver's License to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC

Nancy L. Pearson
Name: Nancy L. Pearson
My Commission Expires: Dec. 8, 2017

SIGNED this 10th day of August, 2011.

[Signature]
Name: Teresa Leah Wright

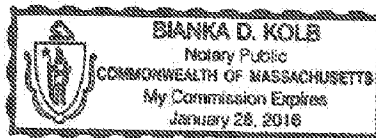
STATE OF Massachusetts
COUNTY OF Middlesex SS.

Teresa Leah Wright

Before me this 10th day of August, 2011, personally appeared 1, and proved to me through satisfactory evidence of identity which was known to me to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC

[Signature]
Name: BIANKA KOLB
My Commission Expires: JAN. 28, 2016



SIGNED this 4th day of August, 2011

[Signature]
Name: Richard Pfeiffer

STATE OF Massachusetts SS.
COUNTY OF Middlesex

Before me this 4th day of August, 2011, personally appeared Richard Pfeiffer and proved to me through satisfactory evidence of identity which was shown to me to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

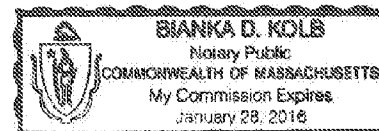
NOTARY PUBLIC [Signature]

Name:

Bianka Kolb

My Commission Expires:

Jan. 28, 2016



SIGNED this 05 day of Aug, 2011.

Zahra
Name: Zahra Shahrokh

STATE OF Massachusetts SS.
COUNTY OF Middlesex

Before me this 5th day of August, 2011, personally appeared Zahra Shahrokh, and proved to me through satisfactory evidence of identity which was KNOWN TO ME to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.

NOTARY PUBLIC

Bianka Kolb
Name: Bianka Kolb
My Commission Expires: Jan. 28, 2016

