

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5003586

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
HAO YIN	12/19/2017
WEN XUE	04/24/2017
DANIEL G. ANDERSON	06/06/2018
JOSEPH R. DORKIN	03/21/2018
TYLER E. JACKS	12/22/2016
RECEIVING PARTY DATA	
Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Street Address:	77 MASSACHUSETTS AVENUE
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15374227
CORRESPONDENCE DATA	
Fax Number:	(202)842-7899
<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:	617-937-2300
Email:	ddoyle@cooley.com
Correspondent Name:	COOLEY LLP
Address Line 1:	1299 PENNSYLVANIA AVENUE NW, SUITE 700
Address Line 4:	WSHINGTON, D.C. 20004
ATTORNEY DOCKET NUMBER:	MITX7117_03US 317239-2590
NAME OF SUBMITTER:	JAMES R. WHITTLE
SIGNATURE:	/James R. Whittle/
DATE SIGNED:	06/12/2018
Total Attachments: 8	
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COMBINED DECLARATION AND ASSIGNMENT

As below named inventors, **Hao YIN, Wen XUE, Daniel G. ANDERSON, Joseph R. DORKIN, and Tyler E. JACKS**, (each referred to as "Assignor") having made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled **METHOD FOR GENE EDITING**, and which is a:

- (1) provisional application
 (a) to be filed herewith; or
 (b) bearing Application No. , and filed on ;
- (2) non-provisional application
 (a) to be filed herewith; or
 (b) bearing Application No. **15/374,227**, and filed on **December 9, 2016**; or
- (3) PCT application
 (a) bearing Application No. , and filed on .

WHEREAS, Massachusetts Institute of Technology, a corporation having its principal place of business at 77 Massachusetts Avenue, Cambridge, MA 02139, its successors, legal representatives and assigns, (the "Assignee") is desirous of acquiring the entire right, title, and interest in and to said Invention; the application for patent identified above; the right to file applications for patent of the United States or other countries on the Invention; any application for patent of the United States or other countries claiming priority to these applications; any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent of the United States or other countries that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified in paragraph (1), (2) and/or (3);
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Hague Convention, the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;

(d) any application(s) for patent of the United States or other countries claiming the Invention(s);

(e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified in paragraph (1), (2) and/or (3) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and

(f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and

(g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) - (e), including any reissue(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of COOLEY LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application identified in paragraph (1), (2) and/or (3) when known.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.


I hereby declare that the above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Date: 12/19/2017

By: 

Name: Hao YIN
Mailing Address:
37 Fairmont Street
Unit 3
Cambridge, MA 02139

I certify that I know or have satisfactory evidence that Hao YIN signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date: 12/19/2017
(Type or Print)

Signed at: 50 Northern Ave. Boston, MA

Ying Chang
(Type or Print Name of Witness)


(Signature of Witness)

I hereby declare that the above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Date: 4/24/17

By: Wen Xue

Name: Wen XUE
Mailing Address:
the RNA Therapeutics Institute
University of Massachusetts Medical School
368 Plantation Street, AS4.2043
Worcester MA 01605

I certify that I know or have satisfactory evidence that Wen XUE signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date 4/24/17
(Type or Print)

Signed at Wen Xue

Ting ting Hong
(Type or Print Name of Witness)

Hong Tingting
(Signature of Witness)

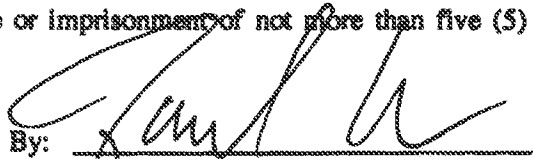
I hereby declare that the above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Date: 06/06/2018

By: 


Name: Daniel G. ANDERSON
Mailing Address:
78 Carter Drive
Framingham, MA 01701

I certify that I know or have satisfactory evidence that Daniel G. ANDERSON signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date 6/6/18
(Type or Print)

Signed at Cambridge, MA

Hilda Thompson
(Type or Print Name of Witness)

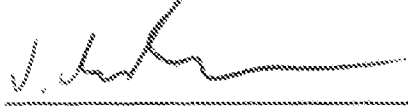

(Signature of Witness)

I hereby declare that the above-identified application was made or authorized to be made by me.

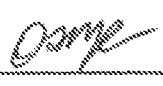
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims.

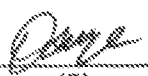
I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Date: 3/21/18 By: 
 Name: **Joseph R. DORKIN**
 Mailing Address:
49 Montrose Street
Somerville, MA 02143

I certify that I know or have satisfactory evidence that Joseph R. DORKIN signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date 3/21/18 Signed at  CRISPR Therapeutics
 (Type or Print) 610 Main Street
Cambridge, MA.

Gomez Karaca 
 (Type or Print Name of Witness) (Signature of Witness)

I hereby declare that the above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Date: 12/22/2016

By: 

Name: **Tyler E. JACKS**

Mailing Address:

20 Ruthven Road

Newton, MA 02458

I certify that I know or have satisfactory evidence that Tyler E. JACKS signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date 12/22/2016
(Type or Print)

Signed at Koch Institute
500 Main St., Cambridge, MA

Judy Teixeira
(Type or Print Name of Witness)


(Signature of Witness)

Date: June 11, 2018

By: Lesley Miller-Nicholson

Name: Lesley Millar-Nicholson
Title: Director
Company: ~~Massachusetts Institute of~~ Office
Technology

I certify that I know or have satisfactory evidence that Lesley Millar-Nicholson signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date 06/11/18
(Type or Print)

Signed at 77 Massachusetts Avenue, Cambridge, MA

Andy LOZADA
(Type or Print Name of Witness)

Andy Lozada
(Signature of Witness)