

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	FENG ZHANG	03/05/2020
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<b>Name:</b>	THE BROAD INSTITUTE, INC.	
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<b>City:</b>	CAMBRIDGE	
<b>State/Country:</b>	MASSACHUSETTS	
<b>Postal Code:</b>	02139	
<b>PROPERTY NUMBERS Total: 1</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Application Number:</b>	16717713	
<b>CORRESPONDENCE DATA</b>		
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<b>ATTORNEY DOCKET NUMBER:</b>	BROD-4220US	
<b>NAME OF SUBMITTER:</b>	LYNN F. MCMILLER	
<b>SIGNATURE:</b>	/Lynn F. McMiller/	
<b>DATE SIGNED:</b>	03/27/2020	

**Total Attachments: 3**

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**ASSIGNMENT - WORLDWIDE**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

**THE BROAD INSTITUTE, INC.**

415 Main Street  
Cambridge, MA 02142 US

**MASSACHUSETTS INSTITUTE OF TECHNOLOGY**

77 Massachusetts Avenue  
Cambridge, MA 02139 US

(hereinafter referred to singly and collectively as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

**CRISPR-ASSOCIATED TRANSPOSASE SYSTEMS AND METHODS OF USE  
THEREOF**

as set forth in this United States Patent Application

*check one*     ☐ executed concurrently herewith,  
                   ☐ executed on \_\_\_\_\_,  
                   ☒ Serial No. 16/717,713 Filed December 17, 2019

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for the above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, substitute applications, reissues, or extensions of said applications and Letters Patent, (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international convention or treaty; and (f) the right to sue in its own name and recover damages for past infringement of any Letters Patent which may issues from said applications in the United States and countries foreign thereto; such entire right, title, and interest throughout the world to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

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.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the right, title and interests, both legal and equitable, sold, assigned, and transferred herein free from all prior assignments, agreements, licenses or mortgages, security interests or other encumbrances whatsoever, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES, without further payment or compensation by said ASSIGNEE or its successor or assigns, to: (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, and depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY GRANTS to the law firm of **Johnson, Marcou, Isaacs & Nix, LLC** the power and authority to supply and/or to correct any errors in the patent/application information provided above including, but not limited to, said application serial number and filing date, which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office, or any other patent issuing authority, for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **Johnson, Marcou, Isaacs & Nix, LLC** do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

In testimony whereof, I hereunto set my hand and seal the day and year opposite my respective signature.

  
\_\_\_\_\_  
**FENG ZHANG**

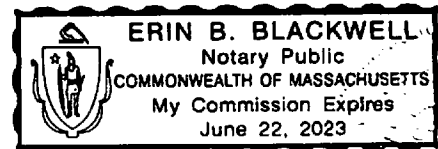
COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the aforementioned state, on this  
Five day of MARCH, 2020, personally appeared **FENG ZHANG**, who, being duly  
sworn, signed and acknowledged the foregoing Assignment.

  
\_\_\_\_\_  
**NOTARY PUBLIC**

SEAL

My Commission Expires: \_\_\_\_\_



**ACCEPTANCE OF ASSIGNMENT**

I, F. Brent Nix on behalf of Assignee, accept the assignment of the above-referenced  
application.

**F. Brent Nix, Esq.**  
**Principal**  
**Johnson, Marcou, Isaacs & Nix, LLC**