PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHARLES A. GERSBACH	12/16/2016
GREGORY E. CRAWFORD	12/01/2016
TIMOTHY E. REDDY	12/16/2016
TYLER S. KLANN	12/01/2016

RECEIVING PARTY DATA

Name:	DUKE UNIVERSITY
Street Address:	2812 ERWIN ROAD, SUITE 306
City:	DURHAM
State/Country:	NORTH CAROLINA
Postal Code:	27705

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15746653

CORRESPONDENCE DATA

Fax Number: (414)277-0656

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MICHAEL BEST & FRIEDRICH LLP **Correspondent Name:** Address Line 1: 100 EAST WISCONSIN AVENUE

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ATTORNEY DOCKET NUMBER:	028193-9198-US03
NAME OF SUBMITTER:	SANSUN YEH
SIGNATURE:	/sansun yeh/
DATE SIGNED:	01/22/2018

Total Attachments: 3

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PATENT REEL: 044690 FRAME: 0837

ASSIGNMENT

Pursuant to our obligation to Duke University (hereinafter referred to as "Assignee"), a North Carolina non-profit institution having its principal place of business at:

2812 Erwin Road, Suite 306 Durham, NC 27705

and for other valuable and sufficient consideration, receipt whereof is hereby acknowledged, we:

Charles A. Gersbach 3220 Wilderness Road Durham, NC 27712

Gregory E. Crawford 208 Maywood Way Chapel Hill, NC 27516

Timothy E. Reddy 242 Sweet Bay Place Carrboro, NC 27510

Tyler S. Klann 3759 SW Durham Drive Apartment 205 Durham, NC 27707

confirm our obligation to and hereby sell, assign and convey, unto Assignee, its successors and assigns, our entire right, title and interest

- (1) in and to inventions described in a patent application titled HIGH-THROUGHPUT SCREENING OF REGULATORY ELEMENT FUNCTION WITH EPIGENOME EDITING TECHNOLOGIES the specification of which was filed with our authority on July 22, 2016 as International Patent Application No. PCT/US2016/043756 (Atty. File No. 028193-9198-WO00) (hereinafter the "PCT application") which application claims the benefit of United States Provisional Patent Application No. 62/195,680, filed July 22, 2015 and United States Provisional Patent Application No. 62/293,313, filed February 9, 2016 (hereinafter the "U.S. provisional patent applications");
- (2) in and to the PCT application and the U.S. provisional patent applications, in and to all other U.S. patent applications (including PCT national phase, divisional, continuation, continuation-in-part, §111(b) provisional, §111(a), and reissue applications) based upon said inventions or claiming the benefit of the PCT application, or the U.S. provisional patent

PATENT REEL: 044690 FRAME: 0838 applications, and in and to the patent or patents to be granted thereon, to the full end of the term or terms for which said patent or patents may be granted;

- (3) in and to all patent applications on said invention now or hereafter filed in countries foreign to the United States of America, including foreign applications entering the national phase of the PCT application, and in and to any and all patents granted on said applications to the full end of the terms for which said patents may be granted; and
- (4) under the International Convention in respect to the PCT application and the U.S. provisional patent applications.

We agree that any patent applications of any foreign countries which may be filed shall be filed in the name of Assignee with a claim to priority based on the PCT application and the U.S. provisional patent applications.

We hereby agree that we will, upon demand of Assignee, its successors or assigns, and without further consideration to us, execute any and all papers that may be necessary, or deemed by Assignee, its successors or assigns, to be necessary, to a complete fulfillment of the intent and purposes of this Assignment, it being understood that any expense incident to the execution of such papers shall be paid by Assignee, its successors and assigns, and not by us.

The Commissioner of Patents and Trademarks of the United States is hereby authorized and requested to issue said patent or patents to Assignee.

Date (Z/

12/14/16

Charles A. Gersbach

Witness Signature

Witness Printed Name

12/1/2016	Com E Cofe
Date	Gregory E. Crawford
12/1/16	Witness Signature
Witness Date	// Withess Signature
	Tylur K-leinn Witness Printed Name
12/16/2016 Date	
Date	Timothy E. Reddy
12/16/16 Withess Date	Cha-
Withess Date	Witness Signature
	CHAPLES GERSBACH
	Witness Printed Name
12/1/10	Tyler S. Klann
Date	Tyler S. Klann
12/1/10	Com & CM
Witness Date	Witness Signature
	GLELORY E. CRAWFORD Witness Printed Name
	Witness Printed Name