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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FRANCESCA R. SALIPUR	12/14/2017
PAULA J BATES	04/21/2016
ELSA MERIT REYES-REYES	03/31/2016
BO XU	10/13/2016
GERALD B. HAMMOND	03/23/2016

RECEIVING PARTY DATA

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State/Country:	KENTUCKY
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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14426399

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	35783.04057
NAME OF SUBMITTER:	HARRY J. GUTTMAN
SIGNATURE:	/Harry J Guttman/
DATE SIGNED:	12/15/2017

PATENT REEL: 044408 FRAME: 0840 504690617

Total Attachments: 10 source=Assignment with all signatures#page1.tif source=Assignment with all signatures#page2.tif source=Assignment with all signatures#page3.tif source=Assignment with all signatures#page4.tif source=Assignment with all signatures#page5.tif source=Assignment with all signatures#page6.tif source=Assignment with all signatures#page7.tif source=Assignment with all signatures#page8.tif source=Assignment with all signatures#page9.tif source=Assignment with all signatures#page9.tif

PATENT REEL: 044408 FRAME: 0841

ASSIGNMENT AGREEMENT

University of Louisville Research Foundation, Inc., incorporated in the state of Kentucky, at the address of The Nucleus Building, 300 East Market Street, Suite 300, Louisville, KY 40202-1959 (referred to herein as "ASSIGNEE") and each undersigned inventor (referred to herein singly or collectively as "ASSIGNOR"), agree to THIS AGREEMENT, as follows:

1.0 DEFINITIONS

1.01 APPLICATIONS means

- (a) the application of U.S. Patent Application No. 14/426,399 with a 35 U.S.C. § 371 completion date of March 6, 2015, entitled "COMPOSITIONS AND METHODS FOR MODULATING DNMT1 INHIBITOR ACTIVITY" with Attorney Docket No. 35783.04057 (referred to herein as the SPECIFIC APPLICATION) and which is a national stage entry of PCT Application No. PCT/US13/58566 filed on September 6, 2013,
- (b) any application filed in the U.S. (e.g., a provisional, nonprovisional, or reissue application filed in the United States Patent and Trademark Office ("USPTO")), in a foreign jurisdiction (e.g., in the European Patent Office ("EPO") or in the Japanese Patent Office ("JPO")), or under an international treaty (e.g., under the Patent Cooperation Treaty ("PCT")) encompassing one or more inventions disclosed in the application in 1.01(a),
- (c) any application filed in the U.S. (e.g., a provisional, nonprovisional, or reissue application filed in the USPTO), in a foreign jurisdiction (e.g., in the EPO or in the JPO), or under an international treaty (e.g., under the PCT) encompassing one or more improvements of an application in 1.01(a) or 1.01(b) or one or more modifications of an application in 1.01(a) or 1.01(b).
- (d) any application filed in the U.S. (e.g., a provisional, nonprovisional, or reissue application filed in the USPTO), in a foreign jurisdiction (e.g., in the EPO or in the JPO), or under an international treaty (e.g., under the PCT) from which an application in 1.01(a), 1.01(b), or 1.01(c) directly or indirectly claims benefit under U.S. law (e.g., 35 U.S.C. §§ 119, 120, 121, 365), under foreign law, or under international law (e.g., the Paris Convention), and
- (e) any application filed in the U.S. (e.g., a provisional, nonprovisional, or reissue application filed in the USPTO), in a foreign jurisdiction (e.g., in the EPO or in the JPO), or under an international treaty (e.g., under the PCT) that directly or indirectly claims benefit to an application in 1.01(a), 1.01(b), 1.01(c), or 1.01(d) under U.S. law (e.g., 35 U.S.C. §§ 119, 120, 121, 365), under foreign law, or under international law (e.g., the Paris Convention), including without limitation any continuation application, any divisional application, any continuation-in-part application, any reissue application (e.g., a broadening reissue application), and any nonprovisional application (e.g., a PCT application designating the U.S.).

APPLICATIONS include but are not limited to applications for patents (e.g., applications for design patents, utility patents, industrial design patents, utility model patents, patents for invention, innovation patents, and patents of addition) and applications for other forms of protection for inventions (e.g., inventor's certificates).

1.02 PATENTS means all rights and privileges under any Letters Patent, patent, or certificate issued or published from any APPLICATION, including any reissue, any ex parte reexamination (including all certificates issuing or publishing therefrom), any inter partes reexamination (including all certificates issuing or publishing therefrom), any renewal, any extension, any patent resulting from any reexamination resulting from any supplemental examination (including all certificates issuing or publishing therefrom), any patent resulting from any covered business method patent review (including all certificates issuing or publishing therefrom), any patent review (including all certificates issuing or publishing therefrom), and any patent resulting from any inter partes review (including all certificates issuing or publishing therefrom).

1.03 INVENTIONS means

- (a) any invention disclosed in any APPLICATION or in any PATENT, and
- (b) any improvement or any modification of the inventions disclosed in any APPLICATION or any PATENT, including any invention first disclosed in an APPLICATION or a PATENT that is a continuation-in-part application.

2.0 ASSIGNMENT

2.01 ASSIGNOR hereby assigns, transfers, and sets over to ASSIGNEE and its successors and assigns, the entire worldwide right, title, and interest in and to APPLICATIONS, PATENTS, INVENTIONS and all rights, if any, to sue for past infringement for any APPLICATION, any PATENT, and any INVENTION.

3.0 COOPERATION AND AUTHORIZATION

- 3.01 ASSIGNOR agrees, without charge to ASSIGNEE, but at ASSIGNEE's expense (a) to execute all necessary papers (such as, but not limited to, declarations and disclaimers) to be used in connection with any APPLICATION (including but not limited to the SPECIFIC APPLICATION), as the ASSIGNEE or its successors and assigns may deem necessary or expedient; (b) to execute all papers in connection with any interference action (at the USPTO or in a civil action), derivation proceeding (at the USPTO or in a civil action) or other legal or quasi-legal proceedings relating to any APPLICATION, PATENT, or INVENTION in any venue (e.g., patent office or court) in the United States, any non-US national jurisdiction, any regional jurisdiction, and/or any international authority/organization, as the ASSIGNEE or its successors and assigns may deem necessary or expedient; (c) to cooperate with ASSIGNEE and its successors and assigns in every way possible in obtaining evidence (such as, but not limited to, performing experiments and providing facts and documents) and going forward in any such proceedings (at no expense to ASSIGNOR); and (d) to perform all other affirmative acts which may be necessary or desirable to obtain a grant of any PATENT.
- 3.02 ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States to issue and publish any patent or certificate within its jurisdiction that may be granted (a) upon any APPLICATION or (b) upon any procedure or any application that encompasses or is in connection with any INVENTION.
- 3.03 ASSIGNOR hereby authorizes the ASSIGNEE, its successors and assigns, to file in

its own name, applications for patents under the patent laws of any jurisdiction (e.g., any country, any regional entity, such as the EPO, or any international entity) of the world in connection with or that encompasses any INVENTION, under the Paris Convention for the Protection of Industrial Property claiming the priority of any APPLICATION or otherwise; ASSIGNOR hereby authorizes the ASSIGNEE, its successors and assigns, to secure in its own name any patent issued or published thereon.

3.04 ASSIGNOR and ASSIGNEE hereby grant to Harry J. Guttman and to the law firm of Calfee, Halter & Griswold LLP, authority and power to insert on THIS AGREEMENT any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or any patent office of any non-US national jurisdiction, regional jurisdiction, and/or international patent issuing authority/organization.

4.0 ACKNOWLEDGEMENTS, COVENANTS, AND WARRANTIES

- 4.01 ASSIGNOR acknowledges payment of one dollar (USD 1.00) or its equivalent, and other good and valuable consideration ("PAYMENT"). ASSIGNOR acknowledges the receipt, sufficiency, and adequacy of the PAYMENT in exchange for agreeing to the terms of THIS AGREEMENT, including but not limited to assigning SPECIFIC APPLICATION, APPLICATIONS, PATENTS, and INVENTIONS to ASSIGNEE in section 2.0.
- 4.02 ASSIGNOR covenants and warrants that ASSIGNOR has the full right to convey the entire right, title, and interest described in THIS AGREEMENT (e.g., the SPECIFIC APPLICATION and inventions disclosed in the SPECIFIC APPLICATION, and improvements and modifications of those inventions) to ASSIGNEE, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

5.0 GENERAL PROVISIONS

- 5.01 THIS AGREEMENT shall fulfill the purposes of a Deed of Assignment in jurisdictions requiring same.
- 5.02 THIS AGREEMENT will be interpreted and construed, and the legal relations created herein will be determined, in accordance with the laws of the United States of America and the laws of the State of Kentucky (excluding conflicts of laws).
- 5.03 Should any part or provision of THIS AGREEMENT be held unenforceable or in conflict with the law of any jurisdiction, the validity of the remaining parts or provisions will not be affected by such holding.
- 5.04 Headings (which are center justified, in all caps, and bold) used in THIS AGREEMENT are intended for convenience and shall not be deemed to supersede or modify any provision.
- 5.05 THIS AGREEMENT may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same

Page 3 of 10

instrument.

6.0 DECLARATION

6.01 ASSIGNOR hereby declares:

- (a) The SPECIFIC APPLICATION was made or authorized to be made by me.
- (b) I believe that I am the original inventor or an original joint inventor of a claimed invention in the SPECIFIC APPLICATION.
- (c) I have reviewed and understand the contents of the specification, including the claims, of the SPECIFIC APPLICATION.
- (d) I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability of the SPECIFIC APPLICATION as defined in 37 C.F.R. § 1.56.
- (e) I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five years or both, and that such willful false statements may jeopardize the validity of the SPECIFIC APPLICATION or any patent issued thereon.

ASSIGNOR evidences THIS AGREEMENT by execution as follows:

	하는 사람들은 사람들이 하라고 있다면 모양을 받는다. - 이 상황 중사용하는데 이렇게 맛들은 때 하는데 하는데 이번 이 사람
Signature of First Inventor:	Mylen
Here is a record of T^{rec} . The state of T^{rec}	
Date: Ocember 14, 2017 (Please spe	ages placed was the second sec
Printed Name of First Inventor: Francesca R. Salipur	n sie mane va tre manny
Address of First Inventor: <u>2406 Woodmont Drive. Louis</u>	wille. Kentucky 10220
1160 WELCH MOAD, APT	#631, PALO ACTO, CA 94304
나는 이동이 있는 학생들은 사용하는 이번 이 이름 사용한	
On this 14th day of December, 2011, before	e me, a Notary Public in
and for the County of Senta Clara and State of Co	difornia personally
appeared the above-named inventor, personally known to	me, and acknowledged the
execution of THIS AGREEMENT as his/her free act and	deed for the purpose herein set
forth.	
Signature of Notary:	
Printed Name of Notary: A Schroeder	
"我们就是一个人,我们就是这个事情,我们就是这个人,我们就是这个人,我们就是一个人的。"	
My Commission expires on: AUGUST 7, 20	
요리가 하시다고 하기 회사에 하는데 🔾 그 얼룩을 하면 하다	
. [Seal] 	A notary public or other officer completing this certificate verifies only the identity of the indi-
	vidual who signed the document to which this certificate is attached, and not the truthfulness.
A. SCHROEDER	accuracy, or validity of that document
Commission No. 2122509 8	
NOTARY PUBLIC-CALIFORNIA 12 SAN MATEO COUNTY	
My Comm Expires AUGUST 7, 2019	[레마스트] - 이동양과 얼른사동이 얼음하면 고양을 하고 있다고 있다.

Signature of Second Inventor: Law J. Batt
Date: 21 April 2010 (Please spell the name of the month) Printed Name of Second Inventor: Paula J. Bates Address of Second Inventor: 5516 Hempstead Road, Louisville, Kentucky 40207
On this <u>21</u> day of <u>April</u> , 20 <u>14</u> before me, a Notary Public in
and for the County of <u>Jefferson</u> and State of <u>Lenhare</u> , personally appeared the above-named inventor, personally known to me, and acknowledged the execution of THIS AGREEMENT as his/her free act and deed for the purpose herein set forth.
Signature of Notary: <u>C'O QUU</u>
Printed Name of Notary: Corin O. Hindenach
My Commission expires on: 13, July 2019
[Seal]
CORIN C. HINDENACH Notery Public - State at Large KENTUCKY - Notery ID # 446822

Signature of Third Inventor: 1
Date: <u> </u>
On this 3184 day of MATO, 2019, before me, a Notary Public in and for the County of RMA and State of AVIZOVA, personally
and for the County of <u>FRYICA</u> and State of <u>FRYICA</u> , personally appeared the above-named inventor, personally known to me, and acknowledged the execution of the THIS AGREEMENT as his/her free act and deed for the purpose herein set forth.
Signature of Notary:
Printed Name of Notary: Finally Legy Commission expires on: 100 6.05, 2019
[Seal] EMILY LEYVA Notary Public - Arizona Pima County My Comm., Expires Dec 3, 2018

Signature of Fourth Inventor:	
	spell the name of the month)
Printed Name of Fourth Inventor: <u>Bo Xu</u> Address of Fourth Inventor: <u>2908 Reamin</u> B	12 Lu - 278 202
Shanghai 201628 Witnessed By:	
Guara Chang Liu	October-13-2016
Signature (Witness 1)	Date
Guarg Charg Liu Printed Name	v
Printed Name	
lei Xu	October - 13 - 2016
Signature (Witness 2)	Date
Let Xu	·

Attorney Docket No.: 35783.04057
Signature of Fifth Inventor:
Date: 3/23/16 (Please spell the name of the month)
Date: (Please spell the name of the month) Printed Name of Fifth Inventor: Gerald B. Hammond
Address of Fifth Inventor: 172 Hebron Road, Shelbyville, Kentucky 40065
On this day of, 2019 before me, a Notary Public in
and for the County of and State of personally appeared the above-named inventor, personally known to me, and acknowledged the execution of the THIS AGREEMENT as his/her free act and deed for the purpose herein
set forth.
~ ~ ~ (1) / h
Signature of Notary: <u>()</u>
Printed Name of Notary: Covin O. Hinderach
My Commission expires on:
[Seal]
CORIN O. HINDENACH
Notary Public - State at Large KENTUCKY - Notary ID # 446822
My Conunission Expires July 13, 2019

ASSIGNEE evidences THIS AGREEMENT by execution on its behalf by its duly authorized representative, as follows:

Signature of duly authorized representative:
Date: April 2016 Printed Name: Eric M. Castlen (Please spell the name of the month) Title: Technology Manager - Office of Technology Transfer
On this Z/ day of April , 2019 before me, a Notary Public in
and for the County of fellers and State of Kerhacks, personally appeared the above-named authorized representative, personally known to me, and acknowledged the execution of THIS AGREEMENT as his/her free act and deed for the purpose herein set forth. Signature of Notary:
Printed Name of Notary: Corin O. Hindenach
My Commission expires on: 7/13/2019
[Seal]
CORIN O. HINDENACH Notary Public - State at Large KENTUCKY - Notary ID # 446822 My Commission Expires July 13, 2019

Page 10 of 10

RECORDED: 12/15/2017