#### 505927438 02/20/2020

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ALEX GREGORY WATERSON	05/08/2019
PLAMEN CHRISTOV	05/07/2019
SOMNATH JANA	05/07/2019
KWANGHO KIM	05/07/2019
GARY ALLEN SULIKOWSKI	05/07/2019

#### **RECEIVING PARTY DATA**

Name:	VANDERBILT UNIVERSITY
Street Address:	2201 WEST END AVENUE
Internal Address:	305 KIRKLAND HALL
City:	NASHVILLE
State/Country:	TENNESSEE
Postal Code:	37240

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16313727

#### **CORRESPONDENCE DATA**

Fax Number: (860)286-0115

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.

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**Correspondent Name:** CANTOR COLBURN LLP 20 CHURCH STREET Address Line 1:

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ATTORNEY DOCKET NUMBER:	BER: VBU0004US2	
NAME OF SUBMITTER:	LESLIE-ANNE MAXWELL, PH.D.	
SIGNATURE: /Leslie-Anne Maxwell/		
DATE SIGNED:	02/20/2020	

Total Attachments: 8	
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#### WHEREAS, I/WE,

 Alex Gregory Waterson, Plamen Christov, Somnath Jana, Kwangho Kim and Gary Allen Sulikowski all of 305 Kirkland Hall, 2201 West End Avenue, Nashville, Tennessee 37240

each an employee of **Vanderbilt University**, organized and existing under the laws of the state of Tennessee, and having an office for the transaction of business at 305 Kirkland Hall, 2201 West End Avenue, Nashville, Tennessee 37240, (collectively, hereinafter referred to as the "VANDERBILT UNIVERSITY INVENTORS"), and

1. David J. Maloney, Ganesha Rai Bantukallu, Kyle Ryan Brimacombe, Matthew Hall, Xin Hu, Ajit Jadhav, William J. Moore, Brian T. Mott, Leonard M. Neckers, Anton Simeonov, Daniel Jason Urban and Shyh Ming Yang all of 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, Maryland 20892-7660

each an employee of the National Institutes of Health, a component of the United States Department of Health and Human Services having an address at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660, and

1. Victor M. Darley-Usmar of 701 20<sup>th</sup> Street South, 770 Administrative Building, Birmingham, Alabama 35294-0107

each an employee of The UAB Research Foundation, organized and existing under the laws of Alabama, and having an office for the transaction of business at 701 20<sup>th</sup> Street South, 770 Administrative Building, Birmingham, Alabama 35294-0107, and

1. Chi Van Dang of 3160 Chestnut Street, Suite 200, Philadelphia, Pennsylvania 19104

each an employee of The Trustees of the University of Pennsylvania, organized and existing under the laws of Pennsylvania, and having an office for the transaction of business at 3160 Chestnut Street, Suite 200, Philadelphia, Pennsylvania 19104,

have made certain inventions as described and claimed in:

- 1. U.S. Nonprovisional Application No. 16/313,727 filed December 27, 2018, and which is entitled "1 H-PYRAZOL-1-YL-THIAZOLES AS INHIBITORS OF LACTATE DEHYDROGENASE AND METHODS OF USE THEREOF",
- 2. International Application No. PCT/US2017/040021, filed June 29, 2017, and which is entitled "1 H-PYRAZOL-1-YL-THIAZOLES AS INHIBITORS OF LACTATE DEHYDROGENASE AND METHODS OF USE THEREOF", and
- 3. U.S. Provisional Application No. 62/356,065 filed June 29, 2016, entitled "SMALL MOLECULE INHIBITORS OF LACTATE DEHYDROGENASE AND METHODS OF USE THEREOF".

collectively, hereinafter referred to as the "INVENTIONS",

AND WHEREAS, Vanderbilt University (hereinafter referred to as "ASSIGNEE"), a corporation organized and existing under the laws of the State of Tennessee, having a place of

business at 305 Kirkland Hall, 2201 West End Avenue, Nashville, Tennessee 37240, is desirous of acquiring an interest in the United States and all foreign countries, in and to the said inventions and Letters Patent to be obtained therefore:

NOW THEREFORE, for good and valuable consideration, as described in the Policy on Technology and Literary and Artistic Works, published in the 1993-1994 Vanderbilt Faculty Manual, as such policy is amended from time to time, the sufficiency and adequacy and the receipt of which is hereby acknowledged, We, the said VANDERBILT UNIVERSITY INVENTORS agree to assign and transfer, and hereby assign and transfer unto the said ASSIGNEE, the entire right, title and interest in and to said inventions in the United States and in all foreign countries, including priority rights, as fully set forth and described in said application; and We do hereby authorize and request the Commissioner of Patents to issue said Letters Patent on said application, and any and all Letters Patent that may be issued upon any and all revivals, refilings, continuations, continuations-in-part, divisions and reissues thereof, to the said ASSIGNEE, an assignee of the entire right, title and interest in and to the same, for the sole use and behoof of ASSIGNEE, its successors and assigns; and We do hereby agree that the said ASSIGNEE, may apply for foreign Letters Patent on said inventions and that We will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by the said ASSIGNEE, its successors or assigns, and that We will, at the cost and expense of the said ASSIGNEE fully assist and cooperate in all matters in connection with the United States and foreign applications and patents issuing thereon.

The undersigned declare that all statements made herein of their 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 by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: <u>5 / 8 /</u> %/7	_ Aly Valee	
	Álex Gregory Waterson	
Date:	Plamen Christov	L.S.
Date:	Somnath Jana	L.S.

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Date: 05-07-2019	Plamen Christov	L.S.
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Date:		Blanco Chalatan	L.S.
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	05/07/2019	Somnath Jama	
Date:	$\frac{\sqrt{3}/\sqrt{1/2}}{\sqrt{1/2}}$	Somnath Jana	L.S.

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Date: 05-07-19	1////// L
	Kwangho Kim
	Q $Q$
Date: 5-7-19	Gary Allen Sulikowski

PATENT REEL: 051880 FRAME: 0181

**RECORDED: 02/20/2020**