### 504445925 07/06/2017

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JAVIER DE VICENTE FIDALGO	07/29/2015
CHENG HU	07/28/2015
XIAOLIN LI	07/28/2015
PEICHAO LU	07/28/2015
WOSENU MERGO	07/28/2015
DANIEL MUTNICK	07/28/2015
FOLKERT RECK	07/28/2015
ALEXEY RIVKIN	07/28/2015
COLIN KEITH SKEPPER	07/29/2015
XIAOJING MICHAEL WANG	07/28/2015
YONGJIN XU	07/28/2015

#### **RECEIVING PARTY DATA**

Name:	NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.	
Street Address:	250 MASSACHUSETTS AVENUE	
City:	CAMBRIDGE	
State/Country:	MASSACHUSETTS	
Postal Code:	02139	

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

Property Type	Number
Application Number:	15500870

## **CORRESPONDENCE DATA**

Fax Number:

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.

**Phone:** (510) 879-9719

Email: lisa.nash@novartis.com

Correspondent Name: NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.

Address Line 1: 5300 CHIRON WAY

Address Line 4: EMERYVILLE, CALIFORNIA 94608

PATENT REEL: 042927 FRAME: 0262

ATTORNEY DOCKET NUMBER:	PAT056269-US-PCT02
NAME OF SUBMITTER:	LISA NASH
SIGNATURE:	/lisa nash/
DATE SIGNED:	07/06/2017

#### **Total Attachments: 18**

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# **ASSIGNMENT**

This Assignment Agreement is entered into by and between

Javier de Vicente	citizen of United States of	Novartis Institutes for BioMedical
FIDALGO	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
		United States of America
Cheng HU	citizen of China	Novartis Institutes for BioMedical
		Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
		United States of America
Xiaolin LI	citizen of China	Novartis Institutes for BioMedical
7 Huomi Ei	ortizon or cinna	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
		United States of America
Peichao LU	citizen of China	Novartis Institutes for BioMedical
1 Cicilao LO	Citizen of Cilila	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
Wosenu MERGO	citizen of United States of	United States of America
wosenu MERGO		Novartis Institutes for BioMedical
	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
D ' 1 MILITARIOR	CYL : 1 C	United States of America
Daniel MUTNICK	citizen of United States of	Novartis Institutes for BioMedical
	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
T II PROV		United States of America
Folkert RECK	citizen of Germany and	Novartis Institutes for BioMedical
	United States of America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
		United States of America
Alexey RIVKIN	citizen of United States of	Novartis Institutes for BioMedical
	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
		United States of America

Colin Keith SKEPPER	citizen of Australia	Novartis Institutes for BioMedical Research Inc. 5300 Chiron Way Emeryville, CA 94608 United States of America
Xiaojing Michael WANG	citizen of United States of America	Novartis Institutes for BioMedical Research Inc. 5300 Chiron Way Emeryville, CA 94608 United States of America
Yongjin XU	citizen of United States of America	Novartis Vaccines and Diagnostics, Inc. 4560 Horton Street Emeryville, CA 94608-2916 USA

(hereinafter "Inventor(s)"), and **NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.**, 250 Massachusetts Ave, Cambridge, MA 02139, USA, a company organized under the laws of Delaware.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC. is the true and lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Institutes for Biomedical Research Inc. and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

## QUINOLONE DERIVATIVES AS ANTIBACTERIALS

## [Patent Application Reference No. PAT056269-WO-PCT02

and filed in the to be determined Office on to be determined and accorded A	Application
Number to be determined and/or filed as a PCT International Application on Aug	ust 6, 2014
and accorded International Patent Application Number PCT/CN2014/083811	and PCT
International Application on August 3, 2015 and accorded International Patent A	
Number PCT/IB2015/055899; and/or filed in the United States Patent and Trademark	k Office on
, 2015 and accorded Application Number	.; ;

- (2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);
- (3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);
- (4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);
- (5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;
- (6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

- (7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;
- (8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of the state of Delaware.

This Assignment is effective as from the earliest priority date as stated above. Executed this \_\_\_\_\_ day of \_\_\_\_\_\_\_, 2015 BY \_\_\_\_\_\_\_
Javier de Vicente FIDALGO Witnessed by: Name: Name: Address: Address: Executed this \_\_\_\_\_\_, day of \_\_\_\_\_\_\_, 2015 BY Cheng HU Witnessed by: WCJGCSEROK 300 Chiron W Lisa Nash 5300 Chiron Way 5300 Chiron Way Emeryville, CA 94608 Emeryville, CA 94608

Executed this 22 day of	, 2015
BY Xiaolin LI	
Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	5300 Chiron Way Emeryville, CA 94608
Executed this 28th day of July	, 2015
BY Peichao LU	Manuary
Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	HELLO GO SERFO 5300 Chiron Way Emeryville, CA 94608
Executed this 28 day of 524	, 2015
BY Wosenu MERGO	
Witnessed by:	
Lisa Nash 5300 Chiron Way	HEGO O SERPA 5300 Chiron Way
Emeryville, CA 94608	Emeryville, CA 94608

Executed this day of Daniel MUTNICK	, 2015
Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	**EAC & SETENS 5300 Chiron Way Emeryville, CA 94608
Executed this 28 day of July  BY FAST LEE	, 2015
Folkert RECK Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	HELLO & SERVA 5300 Chiron Way Emeryville, CA 94608
Executed this 28 day of 334	, 2015
Alexey RIVKIN Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	5300 Chiron Way Emeryville, CA 94608

Executed this 29 day of 3044	, 2015
BYColin Keith SKEPPER	······································
Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	5300 Chiron Way Emeryville, CA 94608
Executed this $\frac{29}{}$ day of $\frac{\text{July}}{}$	, 2015
BY Xiaojing Michael WANG Witnessed by:	
Lisa Nash 5300 Chiron Way	HELLO GO SETE PA 5300 Chiron Way
Emeryville, CA 94608	Emeryville, CA 94608
Executed this 28 day of July	, 2015
BY Yongjin XU	
Witnessed by:	
Lisa Nash 5300 Chiron Way Emeryville, CA 94608	5300 Chiron Way Emeryville, CA 94608

## NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.

Executed this 29+4 day of  $\frac{1}{2}$   $\mu$ , 2015

Name:

Title: Authorized Signatory

Witnessed by:

Lisa Nash

5300 Chiron Way

Emeryville, CA 94608

JAMES L. GRANT

5300 Chiron Way

Emeryville, CA 94608

# ASSIGNMENT

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Javier de Vicente	citizen of United States of	Novartis Institutes for BioMedical
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Peichao LU	citizen of China	Novartis Institutes for BioMedical
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		Emeryville, CA 94608 United States of America
Wosenu MERGO	citizen of United States of	
WOSCHU WIERCO	America	Novartis Institutes for BioMedical
	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
David MITTAILOR	CTT 1 1 Ct 1 C	United States of America
Daniel MUTNICK	citizen of United States of	Novartis Institutes for BioMedical
	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
E II + DECK		United States of America
Folkert RECK	citizen of Germany and	Novartis Institutes for BioMedical
	United States of America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
11 7777777		United States of America
Alexey RIVKIN	citizen of United States of	Novartis Institutes for BioMedical
	America	Research Inc.
		5300 Chiron Way
		Emeryville, CA 94608
		United States of America

Colin Keith SKEPPER	citizen of Australia	Novartis Institutes for BioMedical Research Inc. 5300 Chiron Way Emeryville, CA 94608 United States of America
Xiaojing Michael WANG	citizen of United States of America	Novartis Institutes for BioMedical Research Inc. 5300 Chiron Way Emeryville, CA 94608 United States of America
Yongjin XU	citizen of United States of America	Novartis Vaccines and Diagnostics, Inc. 4560 Horton Street Emeryville, CA 94608-2916 USA

(hereinafter "Inventor(s)"), and **NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.**, 250 Massachusetts Ave, Cambridge, MA 02139, USA, a company organized under the laws of Delaware.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC. is the true and lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Institutes for Biomedical Research Inc. and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

#### QUINOLONE DERIVATIVES AS ANTIBACTERIALS

# [Patent Application Reference No. PAT056269-WO-PCT02

and filed in the to be determined Office on to be determined and accorded Applica	ition
Number to be determined and/or filed as a PCT International Application on August 6, 2	2014
and accorded International Patent Application Number PCT/CN2014/083811 and	PCT
International Application on August 3, 2015 and accorded International Patent Applica	
Number PCT/IB2015/055899; and/or filed in the United States Patent and Trademark Offic	e on
, 2015 and accorded Application Number;	

- (2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);
- (3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);
- (4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);
- (5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;
- (6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

- (7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;
- (8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect. The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of the state of Delaware.

This Assignment is effective as from the earliest priority date as stated above.

Executed this day of	<u></u> , 2015
BY	
Witnessed by:	
	2.7eg
Name: MAN SCUNTH Address: Me & Lawrey St Sou Francisco, CO99133	Name: JW Feng Address: 1816 Canyon 0416 CT San Made CA 94402
Executed this day of	, 2015
BY Cheng HU	
Witnessed by:	
Lisa Nash 5300 Chiron Way	5300 Chiron Way
Emeryville, CA 94608	Emeryville, CA 94608

Executed this day of	, 2015	
BY		
BYXiaolin LI		
Witnessed by:		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	
Executed this day of	2015	
auj or	, 2013	
BYPeichao LU	<del></del>	
Pelchao LU		
Witnessed by:		
·		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	
Everyted this day of	2015	
Executed this day of	, 2015	
BY		
Wosenu MERGO		
Witnessed by:		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	

Executed this day of	, 2015	
BY		
Daniel MUTNICK		
Witnessed by:		
, in the second system of the		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	
Executed this day of	, 2015	
BYFolkert RECK		
Witnessed have		
Witnessed by:		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	
Executed this day of	. 2015	
and of	, 2010	
BY		
Alexey RIVKIN		
Witnessed by:		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	

Executed this day of	, 2015	
BY		
BYColin Keith SKEPPER		
Witnessed by		
Witnessed by:		
Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	
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BYXiaojing Michael WANG		
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Lisa Nash		
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	
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Executed this day of	, 2015	
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BYYongjin XU		
Tongjin AO		
Witnessed by:		
Lisa Nash		_
5300 Chiron Way	5300 Chiron Way	
Emeryville, CA 94608	Emeryville, CA 94608	

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# NOVARTIS INSTITUTES FOR BIOMEDICAL RESEARCH INC.

Executed this 30 Ray of 4 /y

Name: Michael G. Smith Title: Authorized Signatory

Witnessed by:

Lisa Nash
5300 Chiron Way

Emeryville, CA 94608

Helio Serpa

5300 Chiron Way

Emeryville, CA 94608