## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2812403

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
ANDREW ANTONY CALABRESE	04/08/2014
BRANDON JEFFY	04/02/2014
DALE ROBINSON	04/02/2014
DAN ZHU	03/27/2014
DEHUA HUANG	03/27/2014
JAN ELSNER	04/02/2014
JOHN BOYLAN	04/02/2014
LIDA TEHRANI	04/01/2014
MARK A. NAGY	03/28/2014
RAJ KUMAR RAHEJA	03/28/2014
PAUL ERDMAN	04/02/2014
RAMA K. NARLA	04/02/2014
ROY L. HARRIS	04/02/2014
TAM MINH TRAN	04/02/2014
JENNIFER RIGGS	04/02/2014
YUHONG NING	04/02/2014
SHUICHAN XU	03/27/2014

## **RECEIVING PARTY DATA**

Name:	Signal Pharmaceuticals LLC	
Street Address:	10300 Campus Point Drive	
Internal Address:	Suite 100	
City:	San Diego	
State/Country:	CALIFORNIA	
Postal Code:	92121	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14155485

## **CORRESPONDENCE DATA**

**Fax Number:** (404)581-8330

PATENT

502765807 REEL: 032664 FRAME: 0302

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

**Phone:** (404) 581-8614

Email: mjbruner@jonesday.com
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Address Line 1: 1420 PEACHTREE STREET, NE

Address Line 2: SUITE 800

Address Line 4: ATLANTA, GEORGIA 30309

ATTORNEY DOCKET NUMBER:	10624-310-999
NAME OF SUBMITTER:	MICHAEL J. BRUNER
SIGNATURE:	/Michael J. Bruner/
DATE SIGNED:	04/14/2014
	This document serves as an Oath/Declaration (37 CFR 1.63).

#### **Total Attachments: 20**

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> PATENT REEL: 032664 FRAME: 0303

#### DECLARATION AND ASSIGNMENT

WHEREAS, WE, ANDREW ANTONY CALABRESE, citizen of the United Kingdom, having a mailing address of 563 Seeforever Dr., San Diego, California, 92078, the United States of America residing at San Diego, California, the United States of America; BRANDON JEFFY, citizen of the United States of America, having a mailing address of 13043 Alora Point, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; DALE ROBINSON, citizen of the United States of America, having a mailing address of 7772 Corte Promenade, Carlsbad, California, 92009, the United States of America residing at Carlsbad, California, the United States of America; DAN ZHU, citizen of the United States of America, having a mailing address of 4432 Calle Mar De Armonia, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; DEHUA HUANG, citizen of the United States of America, having a mailing address of 4505 Shorepointe Way, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; JAN ELSNER, citizen of the United States of America, having a mailing address of 7597 Charmant Dr. # 902, San Diego, California, 92122, the United States of America residing at San Diego, California, the United States of America; JOHN BOYLAN, citizen of the United States of America, having a mailing address of 4 Desiree Ct., Bedminster, New Jersey, 07921, the United States of America residing at Bedminster, New Jersey, the United States of America; LIDA TEHRANI, citizen of the United States of America, having a mailing address of 11471 Caminito Garcia, San Diego, California, 92131, the United States of America residing at San Diego, California, the United States of America; MARK A. NAGY, citizen of the United States of America, having a mailing address of 2123 Sea Village Circle, Carlsbad, California, 92007, the United States of America residing at Carlsbad, California, the United States of America; RAJ KUMAR RAHEJA, citizen of the United States of America, having a mailing address of 12739 Beeler Creek Trail, Poway, California, 92064, the United States of America residing at Poway, California, the United States of America; PAUL ERDMAN, citizen of the United States of America, having a mailing address of 8570 Ivory Coast Drive, San Diego, California, 92126, the United States of America residing at San Diego, California, the United States of America; RAMA K. NARLA, citizen of the United States of America, having a mailing address of 5157 Great Meadow Drive, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; ROY L. HARRIS, citizen of the United States of America. having a mailing address of 1075 Chalcedony St. Apt. A, San Diego, California, 92109, the United States of America residing at San Diego, California, the United States of America; TAM MINH TRAN, citizen of the United States of America, having a mailing address of 8953 Libra Dr., San Diego, California, 92126, the United States of America residing at San Diego, California, the United States of America; JENNIFER RIGGS, citizen of the United States of America, having a mailing address of 2136 Wales Dr., Cardiff, California, 92007, the United States of America residing at Cardiff, California, the United States of America; YUHONG NING, citizen of the United States of America, having a mailing address of 5157 Great Meadow Drive, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; and SHUICHAN XU, citizen of the United States of America, having a mailing address of 9650 Deer Trail Place, San Diego, California, 92127, the United States of America residing at San Diego, California, the United States of America, ASSIGNORS, are the inventors of the invention in SUBSTITUTED PYRROLOPYRIMIDINE COMPOUNDS, COMPOSITIONS THEREOF, AND METHODS OF TREATMENT THEREWITH, for which an application for a patent of the United States has been filed,

which is identified by Jones Day docket no. 10624-310-999
which was filed on January 15, 2014, Application No. 14/155,485
We hereby authorize and request attorney(s) at Jones Day, to insert here in parentheses (Application number, filed) the filing date and application number of said application when known.
s above-named inventors, each of us hereby declares that:
This declaration is directed to:
☑ The attached application,
OR
☐ United States Application Number or PCT international number filed on
The above-identified application was made or authorized to be made by me.
I believe I am an original joint inventor of a claimed invention in the application.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization to Permit Access to Application by Participating Office

☑ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified patent application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified patent application is filed to have access to the above-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the above-identified patent application with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application; and 3) any U.S. application-as-filed from which benefit is sought in the above-identified application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

and WHEREAS, SIGNAL PHARMACEUTICALS LLC, a corporation organized and existing under the laws of the state of California, and having an office for the transaction of business at 10300 Campus Point Drive, Suite 100, San Diego, California, 92121, the United States of America, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement;

AND WE HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date		, 2014	ANDREW ANTONY CALABRESE	L.S
Date _	4/2	, 2014	BRANYON JEFFY	L.S
Date _	4/2	, 2014	DALE ROBINSON	L.S
Date _	3/27	, 2014	DAN ZHU	L.S.
Date _	03/27/2014	, 2014	DEHUA HUANG	L.S.
Date _	4/2	, 2014	Jan CCS	_ L.S.

U.S. Patent Application No. 1		ones Day docket no. 10624-310-999	
Date 4 2/14	, 2014	JOHN BOYLAN	L.S.
Date $04/01/201$	<del>/</del> ,2014	LIDA TEHRANI	L.S.
Date <u>3/28</u>	, 2014	Mark A. NAGY	_ L.S.
Date 3/3&	, 2014	RAJ KUMAR RAHEJA	_ L.S.
f		PAUL ERDMAN	
		RAMAK. NARLA	_ L.S.
Date 4/2/2014	, 2014	ROY L. HARRIS	_ L.S.
Date 64/02/14		TAM MINH TRAN	_ L.S.
Date 4/2/14	, 2014	JENNIEER RIGGS	_ L.S.
Date 4/2/14	, 2014	YUHONG NING	_ L.S.
Date March 27	,2014	Shuichan Xu	_ L.S.

STATE OF CALIFORNIA	)
COUNTY OF	)
On	
WITNESS my hand and official seal.	
Signature	_(Seal)
with proved to the on the busis of satisfactory evidence to be	)  ACKER , Notary Public, personally appeared BRANDON JEFFY, the person(s) whose name(s) is/arc subscribed to the within instrument and per/their authorized capacity(ies), and that by his/her/their signature(s) on the on(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State WITNESS my hand and official seal. Signature	SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017
who proved to me on the basis of satisfactory evidence to be	of California that the foregoing paragraph is true and correct.  SHOLITA PACKER Commission # 2003587 Notary Public - California
	San Diego County My Comm. Expires Feb 7, 2017

or the entity upon behalf of which the person(s) acted, executed t	the instrument.	Notary Public, personally appeared DAN ZHU, wie(s) is/are subscribed to the within instrument and acknowledged and that by his/her/their signature(s) on the instrument the person(s)
I certify under PENALTY OF PERJURY under the laws of the S WITNESS my hand and official seal. Signature	State of California	SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017
STATE OF CALIFORNIA  COUNTY OF San Diece  On March 27, 2014 before me, the carried who proved to me on the basis of satisfactory evidence to be acknowledged to me that he/sho/thpy executed the same in he instrument the person(s), or the entity upon behalf of which the person of the St.  I certify under PENALTY OF PERJURY under the laws of the St.  WITNESS my hand and official seal.	erson(s) acted, ex	ecuted the instrument.
STATE OF CALIFORNIA  COUNTY OF STATE OF CALIFORNIA  On April 2, 2014 before me, Stolia  proved to me on the basis of satisfactory evidence to be the person  me that he/ske/they executed the same in his/her/the/ir authorized for the entity upon behalf of which the person(s) acted, executed the  I certify under PENALTY OF PERJURY under the laws of the State  WITNESS my hand and official seal.	n(s) whose <u>name</u> , capacity(jes), and e instrument.	(s) is/are subscribed to the within instrument and acknowledged to that by his/her/their signature(s) on the instrument the person(s)

Page 5 of 10

U.S. Patent Application No. 14/155,485; Jones Day docket no. 10624-310-999
STATE OF (ALIFORNIA)  SS.:  COUNTY OF San Diece)  On April 2, 2014 before me, Italian Artical, Notary Public, personally appeared JOHN BOYLAI personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument an acknowledged to me that he/she/they executed the same in his/hor/their authorized capacity(ies), and that by his/hor/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
Signature (Seal)  SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017
STATE OF CALIFORNIA  On Archella Dieco  On Archella Dieco  On Archella Dieco  On the basis of satisfactory evidence to be the person(s) whose name(s) is/ase subscribed to the within instrument an acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.  WITNESS my hand and official seal.  SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017
STATE OF CALIFORNIA  On March 28, 2014 before me, Hours Arche Notary Public, personally appeared MARK A. NAGY who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/arc subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.  I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
Signature (Seal)  SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017

U.S. Patent Application No. 14/155,485; Jones Day docket no. 10624-310-999
STATE OF CALIFORNIA )
On MANCH 28, 2014 before me, Stolers of Acken, Notary Public, personally appeared RAJ KUMAR
On 1/1/1/14 KS 2014 before me, 1/10/1/14 (ACKEA), Notary Public, personally appeared RAJ KUMAR RAHEJA, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.  SHOLITA PACKER Commission # 2003587
Signature (Seal)  Notary Public - California San Diego County My Comm. Expires Feb 7, 2017
STATE OF CALIFORNIA )
COUNTY OF SAN DIEGO
On April 2, 2014 before me, Stronger Arken, Notary Public, personally appeared PAUL ERDMAN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/age subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(les), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.  SHOLITA PACKER Commission # 2003587
Signature (Seal) Notary Public - California San Disgo County My Comm. Expires Feb 7, 2017

STATE OF CALIFORNIA  COUNTY OF Saw Dicas  On Apric 2, 2014 before me, Strong who proved to me on the basis of satisfactory evidence to acknowledged to me that he/spe/they executed the same in instrument the person(s), or the entity upon behalf of which the	o LITA ACICE to be the person(s) of his/per/thoir authorice person(s) acted, execution	Notary Public, personally appeared RAMA K. NARLA whose name(s) is/arc subscribed to the within instrument an ized capacity(iss), and that by his/her/their signature(s) on the cuted the instrument.
I certify under PENALTY OF PERJURY under the laws of the WITNESS my hand and official seal.  Signature		
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STATE OF CALIFORNIA  COUNTY OF SAN DIECO  On ARIC 2, 2014 before me, SHOC  who proved to me on the basis of satisfactory evidence to acknowledged to me that he/she/they executed the same in I instrument the person(s), or the entity upon behalf of which the person(s).	be the person(s) wh	Notary Public, personally appeared TAM MINH TRAN, hose name(s) is/are subscribed to the within instrument and ted capacity(jest, and that by his/her/their signature(s) on the

Page 8 of 10

STATE OF CALIFORNIA	)			
COUNTY OF SAN DIEGO	)			
On Alas 1, 2014 before me Sitter	ITA PACKE	A Notory Dubli	a narranally annound HANNIE	en nico
who proved to me on the basis of satisfactory evidence to acknowledged to me that balloufther executed the same in h	be the person(s)	whose name(s) is/a	subscribed to the within inst	trument ar
acknowledged to me that he/she/they executed the same in h instrument the person(s), or the entity upon behalf of which the p	as helymen authori	zeu cabachynies). a	ing that by rus/her/thear signami	re(s) on the
I certify under PENALTY OF PERJURY under the laws of the S	tate of California th	at the foregoing par	agraph is true and correct.	
WITNESS my hand and official seal.		****	SHOLITA PACKER	
			Commission # 2003587	
Signature Fur Jo	(Seal)	N. C.	Notary Public - California San Diego County	
		M	y Comm. Expires Feb 7, 2017	
			**************************************	
STATE OF CALIFORNIA	)			
COUNTY OF SAN DIEGO	`			
	' A			
On APRIL 2, 2014 before me, Stoll who proved to me on the basis of satisfactory evidence to be	ITA PACKE	Notary Publ	ic, personally appeared YUHO	NG NING
acknowledged to me that he/she/they executed the same in bi	S/her/their authoriz	ed canacity(ies) as	subscribed to the within instruction subscribed to the within instruction of the subscribed to the within instruction and that by bis/her/their signature.	ument an e(s) on th
instrument the person(s), or the entity upon behalf of which the pe	7		and the same of th	
I certify under PENALTY OF PERJURY under the laws of the Sta	ate of California tha	nt the foregoing para	graph is true and correct.	
WITNESS my hand and official seal.			SHOLITA PACKER Commission # 2003587	
Signature Aut Mal	(G. 1)		Notary Public - California	
oignature	(Seal)	M	San Diego County Comm. Expires Feb 7, 2017	
		) <del>+++++</del>		
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STATE OF CALIFORNIA	)			
COUNTY OF SAN VIEWS	)			
	1			
On Manust 27, 2014 before me, Stoling proved to me on the basis of satisfactory evidence to be the person me that he she they executed the same in his hearth of out to be the person.	PACKER	, Notary Public,	personally appeared SHUICHAN	XU, who
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or the entity upon behalf of which the person(s) acted, executed the	instrument.		-	
certify under PENALTY OF PERJURY under the laws of the State	te of California that	the foregoing parag	raph is true and correct.	
WITNESS my hand and official seal.		Total Control	SHOLITA PACKER	¥
Signature Alt Tolk	<i>(</i> 0 <i>(</i> 1)		Commission # 2003587 Notary Public - California	Ż
Signature he he	(Seal)		San Diego County	Z A
		1	My Comm. Expires Feb 7, 2017	

Page 9 of 10

ACCEPTED AND AGREED TO BY ASSIGNEE, SIGNAL PHARMACEL	JTICALS LLC:
Signature Colon	Date: 4/11/14
Printed name GREG RULES	
Title SR. VP Drug DISCOVERY	

#### DECLARATION AND ASSIGNMENT

WHEREAS, WE, ANDREW ANTONY CALABRESE, citizen of the United Kingdom, having a mailing address of 563 Seeforever Dr., San Diego, California, 92078, the United States of America residing at San Diego, California, the United States of America; BRANDON JEFFY, citizen of the United States of America, having a mailing address of 13043 Alora Point, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; DALE ROBINSON, citizen of the United States of America, having a mailing address of 7772 Corte Promenade, Carlsbad, California, 92009, the United States of America residing at Carlsbad, California, the United States of America; DAN ZHU, citizen of the United States of America, having a mailing address of 4432 Calle Mar De Armonia, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; DEHUA HUANG, citizen of the United States of America, having a mailing address of 4505 Shorepointe Way, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; JAN ELSNER, citizen of the United States of America, having a mailing address of 7597 Charmant Dr. # 902, San Diego, California, 92122, the United States of America residing at San Diego, California, the United States of America; JOHN BOYLAN, citizen of the United States of America, having a mailing address of 4 Desiree Ct., Bedminster, New Jersey, 07921, the United States of America residing at Bedminster, New Jersey, the United States of America; LIDA TEHRANI, citizen of the United States of America, having a mailing address of 11471 Caminito Garcia, San Diego, California, 92131, the United States of America residing at San Diego, California, the United States of America; MARK A. NAGY, citizen of the United States of America, having a mailing address of 2123 Sea Village Circle, Carlsbad, California, 92007, the United States of America residing at Carlsbad, California, the United States of America; RAJ KUMAR RAHEJA, citizen of the United States of America, having a mailing address of 12739 Beeler Creek Trail, Poway, California, 92064, the United States of America residing at Poway, California, the United States of America; PAUL ERDMAN, citizen of the United States of America, having a mailing address of 8570 Ivory Coast Drive, San Diego, California, 92126, the United States of America residing at San Diego, California, the United States of America; RAMA K. NARLA, citizen of the United States of America, having a mailing address of 5157 Great Meadow Drive, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; ROY L. HARRIS, citizen of the United States of America, having a mailing address of 1075 Chalcedony St. Apt. A, San Diego, California, 92109, the United States of America residing at San Diego, California, the United States of America; TAM MINH TRAN, citizen of the United States of America, having a mailing address of 8953 Libra Dr., San Diego, California, 92126, the United States of America residing at San Diego, California, the United States of America; JENNIFER RIGGS, citizen of the United States of America, having a mailing address of 2136 Wales Dr., Cardiff, California, 92007, the United States of America residing at Cardiff, California, the United States of America; YUHONG NING, citizen of the United States of America, having a mailing address of 5157 Great Meadow Drive, San Diego, California, 92130, the United States of America residing at San Diego, California, the United States of America; and SHUICHAN XU, citizen of the United States of America, having a mailing address of 9650 Deer Trail Place, San Diego, California, 92127, the United States of America residing at San Diego, California, the United States of America, ASSIGNORS, are the inventors of the invention in SUBSTITUTED PYRROLOPYRIMIDINE COMPOUNDS, COMPOSITIONS THEREOF, AND METHODS OF TREATMENT THEREWITH, for which an application for a patent of the United States has been filed,

☑ which is identified by Jones Day docket no. 10624-310-999
☐ We hereby authorize and request attorney(s) at Jones Day, to insert here in parentheses (Application number, filed) the filing date and application number of said application when known.
As above-named inventors, each of us hereby declares that:
This declaration is directed to:
☑ The attached application,
OR
☐ United States Application Number or PCT international number filed on
The above-identified application was made or authorized to be made by me.
I believe I am an original joint inventor of a claimed invention in the application,
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization to Permit Access to Application by Participating Office

☑ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified patent application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified patent application is filed to have access to the above-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the above-identified patent application with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application; and 3) any U.S. application-as-filed from which benefit is sought in the above-identified application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

and WHEREAS, SIGNAL PHARMACEUTICALS LLC, a corporation organized and existing under the laws of the state of California, and having an office for the transaction of business at 10300 Campus Point Drive, Suite 100, San Diego, California, 92121, the United States of America, ASSIGNEE, is desirous of obtaining our entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and all right to sue for infringement including past infringement;

AND WE HEREBY authorize and request the Commissioner for Patents and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

IN TESTIMONY WHEREOF, We hereunto set our hands and seals the day and year set opposite our respective signatures.

Date4[8	, 2014	ACOLUL ANDREW ANTONY CALABRESE	L.S
Date	, 2014	BRANDON JEFFY	L.S.
Date	,2014	DALE ROBINSON	L.S.
Date	,2014	DAN ZHU	L.S.
Date	, 2014	DEHUA HUANG	L.S.
Date	, 2014	JAN ELSNER	L.S.

U.S.	. Patent Application No. 14/1 $e \leftarrow \frac{4}{2} \frac{1}{2} \frac{1}{2}$	. 2014	ones Day docket no. 10624-310-999  JOHN BOYLAN	7 9
	<u> </u>	,	JOHN BOYLAN (	_ 5.5.
Date	·04/01/2014	,2014	LIDA TEHRANI	_ L.S.
Date	= _3/28	_ ,2014	Mark A. NAGY Wagy	_ L.S.
Date	3/28	_ ,2014	RAJ KUASAR RAHEJA	L.S.
	/ '		PAUL ERDMAN	_ L.S.
Date	4/2/2014	_ , 2014	RAMA'K. NARLA	_ L.S.
Date	4/2/2014	,2014	ROY L. HARRIS	_ L.S.
	64/02/14		TAM MINH TRAN	_ L. <b>S</b> .
Date	4/2/14	, 2014	JENNIEER RIGGS	L.S.
Date	4/2/14	, 2014	YUHONG NING	L.S.
Date	March 27	, 2014	Shuichan Xu	L.S.

U.S. Patent Application No.	14/155,485; Jones Da	y dock	et no. 10624-310-999
STATE OF CALIFORNIA Many lax	nd.	)	
COUNTY OF Ballimor		)	
CALABRESE, who proved to me on and acknowledged to me that he/she/instrument the person(s), or the entity	they executed the same in h	ris/her/the	Notary Public, personally appeared ANDREW ANTON be the person(s) whose name(s) is/are subscribed to the within instrument authorized capacity(ies), and that by his/her/their signature(s) on the d, executed the instrument.
I certify under PENALTY OF PERJUI	RY under the laws of the Stat	te of Cali	fornia that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.	12 ,		
Signature		_(Seal)	JAMES WILLIAM HOUCK, IV NOTARY PUBLIC - MARYLAND BALTIMORE COUNTY My commission expires September 27, 2017
STATE OF CALIFORNIA		)	
COUNTY OF		)	
acknowledged to me that he/she/they instrument the person(s), or the entity u	executed the same in his/ upon behalf of which the pers	her/their on(s) acte	, Notary Public, personally appeared BRANDON JEFFY on(s) whose name(s) is/are subscribed to the within instrument and authorized capacity(ies), and that by his/her/their signature(s) on the cd, executed the instrument.
WITNESS my hand and official seal.			
Signature		_(Seal)	
STATE OF CALIFORNIA		)	
COUNTY OF		)	
On who proved to me on the basis of sacknowledged to me that he/she/they instrument the person(s), or the entity up	executed the same in his/h	er/their a	Notary Public, personally appeared DALE ROBINSON, on(s) whose name(s) is/are subscribed to the within instrument and authorized capacity(ies), and that by his/her/their signature(s) on the d, executed the instrument.
certify under PENALTY OF PERJURY	Y under the laws of the State	of Califo	rnia that the foregoing paragraph is true and correct.
WITNESS my hand and official seal.			
Signature		_(Seal)	

Page 4 of 10

STATE OF CALIFORNIA  COUNTY OF Saw Dieces  On March 27, 2014 before me, She proved to me on the basis of satisfactory evidence to be the perso me that be/she/the/ executed the same in bis/her/their authorized or the entity upon behalf of which the persons acted, executed the I certify under PENALTY OF PERJURY under the laws of the St	capacity(1e8), and the instrument.	that by Mis/her/their signature(s) on the instrument the person(s
WITNESS my hand and official seal.  Signature	(Seal)	SHOLITA PACKER Commission # 2003587 Notary Public - Callfornia San Diego County My Comm. Expires Feb 7, 2017
STATE OF CALIFORNIA  COUNTY OF San Dieces  On March 27, 2014 before me, Sholin  who proved to me on the basis of satisfactory evidence to be acknowledged to me that he/sho/they executed the same in his instrument the person(s), or the entity upon behalf of which the per I certify under PENALTY OF PERJURY under the laws of the State WITNESS my hand and official seal.  Signature	raon(s) acted, execu	act the institution.
STATE OF CALIFORNIA  COUNTY OF Sow Die Co  On April 2, 2014 before me, Stolit  proved to me on the basis of satisfactory evidence to be the person me that he/ske/they executed the same in his/her/their authorized cor the entity upon behalf of which the person of acted, executed the I certify under PENALTY OF PERJURY under the laws of the Stat WITNESS my hand and official seal.  Signature	(s) whose <u>name(s)</u> apacity(jes), and the instrument.	at by his/her/their signature(s) on the instrument the person(s),

Page 5 of 10

STATE OF CACHOANIA)	
On April 2, 2014 before me, Stolita Archer, Notary Public, personally appeared JOHN B personally known to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instru	OYLAN
acknowledged to me that he/she/they executed the same in his/hor/their authorized capacity(ies), and that by his/hor/their signature instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.	ment and syon the
WITNESS my hand and official seal  Signature	
Signature (Seal)  Notary Public - California San Diego County My Comm. Expires Feb 7, 2017	
STATE OF CALIFORNIA )	
COUNTY OF SAN DIECO,	
On Archer, Notary Public, personally appeared LIDA TE who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrum acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.	nant and
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.	
WITNESS my hand and official seal.  SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017	
STATE OF CALIFORNIA	
COUNTY OF San Dieco	
On Mariett 28, 2014 before me, Hours Areles, Notary Public, personally appeared MARK A. who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrumacknowledged to me that he/she/they executed the same in his/he/their authorized capacity(ies), and that by his/he/their signature(s) instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.	ant and
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.	
WITNESS my hand and official seal.  SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017	

U.S. Patent Application No. 14/155,485; Jones Day docket no. 10624-310-999
STATE OF CALIFORNIA )
On Manch 28, 2014 before me, Stollta Macked, Notary Public, personally appeared RAJ KUMAR RAHEJA, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
Signature (Seal)  SHOLITA PACKER Commission # 2003587 Notary Public - California San Diego County My Comm. Expires Feb 7, 2017
STATE OF CALIFORNIA )
On April 2, 2014 before me, Stolita Parker, Notary Public, personally appeared PAUL ERDMAN, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/aps subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/theif authorized capacity(ies), and that by his/her/theif signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
Signature (Seal)  SHOLITA PACKER Commission # 2003587 Notary Public - California San Disgo County My Comm. Expires Feb 7, 2017

STATE OF CALIFORNIA  COUNTY OF SAN Dicco  On April 2, 2014 before me, Sholl who proved to me on the basis of satisfactory evidence to be acknowledged to me that he/spe/they executed the same in his instrument the person(s), or the entity upon behalf of which the person with the person				,
STATE OF CALIFORNIA	)	M	y Comm. Expires Feb 7, 2	017 \$
On April 2, 2014 before me, who proved to me on the basis of satisfactory evidence to be acknowledged to me that he/she/fibey executed the same in his instrument the person(x), or the entity upon behalf of which the per	the person(s) when the their authorizations.	hose name(s) is/are ed capacity(ies), and	subscribed to the within	n instrument and
I certify under PENALTY OF PERJURY under the laws of the State WITNESS my hand and official seal.  Signature		t the foregoing parag	raph is true and correct.  SHOLITA PACKER Commission # 2003587 Notary Public - Callfornia San Diego County Comm. Expires Feb 7, 20	i i
STATE OF CALIFORNIA  COUNTY OF SAN DIECO  On April 2, 2014 before me, SHOLIT  who proved to me on the basis of satisfactory evidence to be acknowledged to me that he/she/they executed the same in his/ instrument the person(s), or the entity upon behalf of which the person	the person(s) wh her/their authorize	d capacity(ies), and	subscribed to the within	instrument and
I certify under PENALTY OF PERJURY under the laws of the State WITNESS my hand and official seal.  Signature	e of California that	N. N.	shoultA PACKER Commission # 2003587 lotary Public - California San Diego County Comm. Expires Feb 7, 20	NNA 17

Page 8 of 10

STATE OF CALIFORNIA  COUNTY OF SAN DIECO  On Arac 1.2014 before me, Strong who proved to me on the basis of satisfactory evidence to be acknowledged to me that he/she/the/ executed the same in his instrument the person(s), or the entity upon behalf of which the person of the Strong with the person of the Strong with the same in his instrument the person(s), or the entity upon behalf of which the person of the Strong with the same in his instrument the person of the Strong with the same in his instrument the person of the Strong with the same in his instrument the person of the Strong with the same in his instrument the person of the Strong with the same in his instrument the person of the same in his instrument.	se the person(s) wis/her/their authorizerson(s) acted, exec	whose name(s) is/are zed capacity(ies), are uted the instrument.	subscribed to the within at that by his/her/their si	n instrument an
STATE OF CALIFORNIA  COUNTY OF  On April 2, 2014 before me, Hold who proved to me on the basis of satisfactory evidence to be acknowledged to me that he she/they executed the same in his instrument the person(s), or the entity upon behalf of which the person under PENALTY OF PERJURY under the laws of the State WITNESS my hand and official seal.  Signature	e the person(s) with the first suthorize the first state of the first	Notary Publishose name(s) is/are ed capacity(ies), and ted the instrument.	subscribed to the within d that by his/her/their sig	UHONG NING, instrument and mature(s) on the
On Man 27, 2014 before me, Stoling authorized cor the entity upon behalf of which the person(s) acted, executed the same in the laws of the State WITNESS my hand and official seal.	apacity(jes), and the instrument.	at by his/her/their si	gnature(s) on the instrume	nt the person(s),

ACCEPTED AND AGREED TO BY ASSIGNEE, SIGNAL PHARMACEUTIC	CALS LLC:
Signature 6	Date: 4/11/14
Printed name GREG ROUES	. (
Title SR. VP Drug Discovery	·

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**RECORDED: 04/14/2014** 

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