505553455 07/01/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GENOVEFFA FRANCHINI	01/15/2015
MONICA VACCARI	01/15/2015
LUCA SCHIFANELLA	01/15/2015
SHARI GORDON	01/23/2015
MELVIN DOSTER	01/15/2015
NAMAL MALIMBADA LIYANAGE	01/15/2015

RECEIVING PARTY DATA

Name:	The United States of America, as represented by the Secretary, Department of Health and Human Services	
Street Address:	6011 Executive Boulevard, Suite 325, MSC 7660	
Internal Address:	Office of Technology Transfer, National Institutes of Health,	
City:	Bethesda	
State/Country:	MARYLAND	
Postal Code:	20892-7660	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15110400

CORRESPONDENCE DATA

Fax Number: (503)595-5301

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: 503-595-5300

Email: deborah.martin@klarquist.com

Correspondent Name: SUSAN ALPERT SIEGEL, PH.D, KLARQUIST SPARKMAN LLP

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Address Line 2: ONE WORLD TRADE CENTER, SUITE 1600

Address Line 4: PORTLAND, OREGON 97204-2988

ATTORNEY DOCKET NUMBER:	4239-92369-03	
NAME OF SUBMITTER: SUSAN ALPERT SIEGEL, PH.D.		
SIGNATURE: /Susan Alpert Siegel/		

PATENT 505553455 REEL: 049646 FRAME: 0976

DATE SIGNED:	07/01/2019
Total Attachments: 10	
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ASSIGNMENT FOR NIH/FDA/CDC INVENTIONS AIA (NIH OR FDA OR CDC CO-INVENTORS ONLY)

WHEREAS, we, Genoveffa Franchini, Monica Vaccari, Luca Schifanella, Shari Gordon, Melvin Doster, and Namal Malimbada Liyanage, employees of the National Institutes of Health, are each employed by 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 have made with others certain inventions as described and claimed in:

U.S. Provisional Patent Application No. 61/925,154, filed on January 8, 2014, entitled "RAS PATHWAYS AS MARKERS OF PROTECTION AGAINST HIV AND MEANS TO IMPROVE VACCINE EFFICACY," and

PCT Patent Application No. PCT/US2015/010664, filed on January 8, 2015, entitled "RAS PATHWAYS AS MARKERS OF PROTECTION AGAINST HIV AND METHODS TO IMPROVE VACCINE EFFICACY."

both of which applications are collectively referred to herein as "The Patent Application(s)"; and

WHEREAS, we are the inventors named in The Patent Application(s); and

WHEREAS, the inventions described and claimed in The Patent Application(s) were made under conditions such as to entitle THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human Services [hereinafter THE GOVERNMENT] under Executive Order 10096 and its amendments, 35 U.S.C. §§200-201, §§206-207, and §210 and 37 C.F.R. Part 501 to the entire right, title, and interest in such inventions; and

WHEREAS, THE GOVERNMENT is desirous of acquiring all domestic and foreign right, title, and interest in the inventions described and claimed in The Patent Application(s);

NOW, THEREFORE, having the legal obligation to assign our right, title and interest in the inventions described and claimed in **The Patent Application(s)** to **THE GOVERNMENT**, having a place of business at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 and for consideration, the receipt and sufficiency of which are hereby acknowledged, we hereby assign and transfer to **THE GOVERNMENT**:

the entire right, title, and interest in and to any and all inventions described and claimed in **The Patent Application(s)** and any and all Letters Patent which may be granted thereon, and any and all continuations, divisions, reissues or extensions thereof; and

all rights to claim priority on the basis of **The Patent Application(s)** including but not limited to applications filed through the provisions of the Patent Cooperation Treaty ("PCT Applications"); and

ASSIGNMENT - Page 1 of 5

WDN/SAS:clf 4239-92369-02 E-062-2014/0-PCT-02 01/14/15

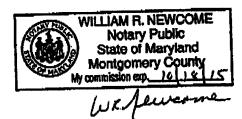
all applications for Letters Patent that may be filed for any and all inventions described and claimed in **The Patent Application(s)** that may be filed in any foreign country and all Letters Patent that may be granted thereon in any foreign country and all extensions, renewals, and reissues thereof; and

any and all such Letters Patent as may be granted in the United States or any foreign country to be held by **THE GOVERNMENT** to the end of the term for which the same would have been held by the inventor(s) had this assignment not been made.

We further agree to make, execute, and deliver to **THE GOVERNMENT**, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist **THE GOVERNMENT** in every way as may be requested in protecting said invention.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

Inventor: Genoveffa Franchini	
Date Jan 15 2015	x <u>leuff</u> free
County of Monty omery	_
State of many land	
Subscribed and sworn to before me this _	15 day of
Seal	
	Notary Signature: Le Leurone
	Notary Public for the State of: Many lund
	My Commission Expires: Lolit 15
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WDN/SAS:cif 4239-92369-02 E-062-2014/0-PCT-02 01/14/15

Inventor: Monica Vaccari	
Date <u>OI (IS (IS</u>	Inventor Signature WILLIAM R. NEWCOME Notary Public State of Maryland
County of Montgomery	Montgomery County My commission exp. 1010 5
State of Man land	- my сонинской еф
Subscribed and sworn to before me this _	15 day of 15 m Day , 2015.
Seal	
-	Notary Signature: We level me
	Notary Public for the State of: Mary Lund
	My Commission Expires: 10/18/15
Inventor: Luca Schifanella	
Date	x Maca Sli Poulle
County of Montgonery State of Many and	Inventor Signature WILLIAM R. NEWCOME Notary Public State of Maryland Montgomery County My commission etc. 10 11 21 15
Subscribed and sworn to before me this _	15 day of January , 2015.
Seal	
	Notary Signature: WK/ Luxuno
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	Notary Public for the State of: Mary and
	Notary Public for the State of: Mary and My Commission Expires: 10/18/15

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PATENT

REEL: 049646 FRAME: 0980

WDN/\$A\$:df 4239-92369-02 E-062-2014/0-PCT-02 01/14/15

Invent	or: Shari Gordon	
Date _	1/23/2015	Inventor Signature
Count	y of Dunam	<u> </u>
State	of NO	<u> </u>
Subsc	ribed and sworn to before me this	23rd day of January , 2015
Seal	SHERINA BEST Notary Public Wake Co., North Carolina My Commission Expires Sept. 10, 2019	Notary Signature: Allew from Notary Public for the State of: NC My Commission Expires: Scpt. 10, 2019
	or: Melvin Doster	XInventor Signature
	y of of	
		day of,
Juan		Notary Signature:
		Notary Public for the State of:
		My Commission Expires:
		-

ASSIGNMENT - Page 4 of 5

WDN/SAS:clf 4239-92369-02 E-062-2014/0-PCT-02 01/14/15

Inventor: Namal Malimbada Liyanage	
Date 01/15/2015	Inventor Signature
County of Mongomery	WILLIAM R. NEWCOME Notary Public State of Maryland Montgomery County
State of May and	My commission exp. 14 1 5 (15
Subscribed and sworn to before me this _	15 day of 1 an u pur , 2015.
Seal	
	Notary Signature: WK Jewsone
	Notary Public for the State of: Wary wil
	My Commission Expires: 10/18/15

ASSIGNMENT - Page 5 of 5

ASSIGNMENT FOR NIH/FDA/CDC INVENTIONS AIA (NIH OR FDA OR CDC CO-INVENTORS ONLY)

WHEREAS, we, Genoveffa Franchini, Monica Vaccari, Luca Schifanella, Shari Gordon, Melvin Doster, and Namal Malimbada Liyanage, employees of the National Institutes of Health, are each employed by 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 have made with others certain inventions as described and claimed in:

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both of which applications are collectively referred to herein as "The Patent Application(s)"; and

WHEREAS, we are the inventors named in The Patent Application(s); and

WHEREAS, the inventions described and claimed in The Patent Application(s) were made under conditions such as to entitle THE UNITED STATES OF AMERICA, as represented by the Secretary, Department of Health and Human Services [hereinafter THE GOVERNMENT] under Executive Order 10096 and its amendments, 35 U.S.C. §§200-201, §§206-207, and §210 and 37 C.F.R. Part 501 to the entire right, title, and interest in such inventions; and

WHEREAS, THE GOVERNMENT is desirous of acquiring all domestic and foreign right, title, and interest in the inventions described and claimed in The Patent Application(s);

NOW, THEREFORE, having the legal obligation to assign our right, title and interest in the inventions described and claimed in **The Patent Application(s)** to **THE GOVERNMENT**, having a place of business at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, MSC 7660, Bethesda, MD 20892-7660 and for consideration, the receipt and sufficiency of which are hereby acknowledged, we hereby assign and transfer to **THE GOVERNMENT**:

the entire right, title, and interest in and to any and all inventions described and claimed in **The Patent Application(s)** and any and all Letters Patent which may be granted thereon, and any and all continuations, divisions, reissues or extensions thereof; and

all rights to claim priority on the basis of **The Patent Application(s)** including but not limited to applications filed through the provisions of the Patent Cooperation Treaty ("PCT Applications"); and

ASSIGNMENT - Page 1 of 5

all applications for Letters Patent that may be filed for any and all inventions described and claimed in **The Patent Application(s)** that may be filed in any foreign country and all Letters Patent that may be granted thereon in any foreign country and all extensions, renewals, and reissues thereof; and

any and all such Letters Patent as may be granted in the United States or any foreign country to be held by **THE GOVERNMENT** to the end of the term for which the same would have been held by the inventor(s) had this assignment not been made.

We further agree to make, execute, and deliver to **THE GOVERNMENT**, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist **THE GOVERNMENT** in every way as may be requested in protecting said invention.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

Inventor: Genoveffa Franchini	
Date	XInventor Signature
County of	
State of	
Subscribed and sworn to before me this	day of
Seal	
	Notary Signature:
	Notary Public for the State of:
	My Commission Expires:

Inventor: Monica Vaccari	
Date	X
	X Inventor Signature
County of	
State of	
Subscribed and sworn to before me this	day of
Seal	,
	Notony Signature:
	Notary Signature:
	Notary Public for the State of:
	My Commission Expires:
Inventor: Luca Schifanella	
Date	x
	X Inventor Signature
County of	
State of	
	day of
Seal	,
ocai	N. A. C.
	Notary Signature:
	Notary Public for the State of:
	My Commission Expires:

ASSIGNMENT - Page 3 of 5

WDN/SAS:cif 4239-92369-02 E-062-2014/0-PCT-02 01/14/15

Inventor: Shari Gordon	
Date	xInventor Signature
County of	·
State of	
Subscribed and sworn to before me this	day of
Seal	
	Notary Signature:
	Notary Public for the State of:
	My Commission Expires:
	(
Inventor: Melvin Doster	,
Date _ 1/15/2015	Inventor Signature WILLIAM R. NEWCOME
County of Montgomery	State of Maryland
State of Many land	
Subscribed and sworn to before me this!	5 day of January , 2015.
Seal	•
	Notary Signature: WK/ ewww
	Notary Signature: Luk Jewanne Notary Public for the State of: May land
	My Commission Expires: 10/15/15

ASSIGNMENT - Page 4 of 5

Inventor: Namal Malimbada Liyanage	
Date	X Inventor Signature
County of	
State of	
Subscribed and sworn to before me this	day of
Seal	
	Notary Signature:
	Notary Public for the State of:
	My Commission Expires:

ASSIGNMENT - Page 5 of 5

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