

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5684633

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
REBEKAH A DREZEK	06/26/2018
RICHARD G BARANIUK	06/06/2018
AMIRALI AGHAZADEH	03/11/2019
MONA SHEIKH	06/28/2018
ADAM Y LIN	06/26/2018
ALLEN L CHEN	06/09/2018
PALLAVI BUGGA	06/27/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WILLIAM MARSH RICE UNIVERSITY
<b>Street Address:</b>	6100 MAIN STREET
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77005
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15944586
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Email:</b>	wkelley@phiplaw.com
<b>Correspondent Name:</b>	PARKER HIGHLANDER PLLC
<b>Address Line 1:</b>	1120 S. CAPITAL OF TEXAS HIGHWAY
<b>Address Line 2:</b>	BUILDING 1, SUITE 200
<b>Address Line 4:</b>	AUSTIN, TEXAS 78746
<b>ATTORNEY DOCKET NUMBER:</b>	RICE.P0021US
<b>NAME OF SUBMITTER:</b>	WILLIAM KELLEY
<b>SIGNATURE:</b>	/William Kelley/
<b>DATE SIGNED:</b>	08/23/2019

**Total Attachments: 10**

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## ASSIGNMENT

This Patent Assignment (“Assignment”) is made and entered into by and between, Rebekah A. DREZEK, Richard G. BARANIUK, Amirali AGHAZADEH, Mona SHEIKH, Adam Y. LIN, Allen L. CHEN, and Pallavi BUGGA (the “Assignor(s)”) and WILLIAM MARSH RICE UNIVERSITY, a Texas non-profit corporation, having a place of business at 6100 Main Street, Houston, Texas 77005, US (the “Assignee”).

WHEREAS, Assignor(s) has agreed to assign and transfer to Assignee, and Assignee has agreed to acquire and accept from Assignor(s), Assignor(s)’s rights in the following patent application (the “Assigned Patents”):

United States Letters Patent Serial No. 15/944,586 filed on April 3, 2018 and entitled “**UNIVERSAL MICROBIAL DIAGNOSTICS USING RANDOM DNA PROBES,**” which claims priority to U.S. Provisional Application No. 62/480,808 filed on April 3, 2017.

NOW, THEREFORE, in consideration of the premises, mutual covenants and provisions herein contained, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the parties hereto agree to execute this Assignment, as follows:

**1.0 Assignment.** The Assignor(s) has assigned and/or by these presents does hereby assign, transfer and convey unto Assignee, the Assignor(s)’s whole and entire right, title and interest for the United States and all other countries throughout the world (i) in and to the inventions claimed or disclosed in the Assigned Patents, including all patents granting from the Assigned Patents or any continuation, continuation-in-part, division, renewal, substitute, reexamination or reissue thereof, including any patents in the United States and in all other countries throughout the world obtained based upon a claim of priority to any said Assigned Patents as provided for by United States law, the Patent Cooperation Treaty, the European Patent Convention, the Paris Convention, or other applicable law, as well as the right to claim priority to any said Assigned Patents as provided for by United States law, the Patent Cooperation Treaty, the European Patent Convention, the Paris Convention, or other applicable law, and (ii) in and to all rights to sue for and collect damages resulting from past, present and future infringement of said patents and patent applications in (i).

**2.0 Enjoyment.** The patents and patent applications subject to Paragraph 1 shall be held and enjoyed by Assignee, for Assignee’s use and benefit, and for Assignee’s legal representatives and assigns, to the full end of the term or terms for which same may be granted, as fully and entirely as the same would have been held by Assignee had this assignment and transfer not been made.

**3.0 Authorize and Request.** Assignor(s) authorizes and requests the issuing authority to issue any and all United States and foreign patents granted on such patents and patent applications in 1.0(i) to the Assignee.

**4.0 Warrant and Covenant.** Assignor(s) warrants and covenants that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been

or will be made to others by the Assignor(s), and that the full right to convey the same as herein expressed is possessed by the Assignor(s).

**5.0 Assistance.** The parties to this Assignment shall use commercially reasonable efforts to take, or cause to be taken, all actions, and to do, or cause to be done, all things, necessary or advisable to consummate the transactions contemplated by this Assignment. Without limiting the foregoing, each of Assignor(s) and Assignee shall cooperate with the other without any further consideration to execute and deliver, or use commercially reasonable efforts to cause to be executed and delivered, all documents as may reasonably be necessary to secure the vesting in Assignee of all rights assigned to Assignee by this Assignment, including without limitation any documents required to record this Assignment with local patent offices, and all rightful oaths, declarations, and other papers.

**6.0 Binding.** The Assignment is binding on the heirs, assigns, representatives and successors of the Assignor(s) and extends to the successors, assigns and nominees of the Assignee.

**7.0 Effectiveness.** The assignment of said inventions is or was effective as of the earlier of (1) the date of execution of the Assignor(s) indicated below or (2) the filing date of the first filed of the patent applications of the Assigned Patents.

(Signature page follows)

IN WITNESS WHEREOF, Rebekah A. DREZEK has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

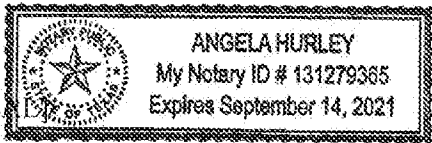
Rebekah A. DREZEK

Signature: Rebekah DrezeK

Date: 6-26-18

STATE OF TEXAS  
COUNTY OF HUNT

BEFORE ME, the undersigned authority, on this 26 day of JUNE, 2018 personally appeared Rebekah A. DREZEK, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.



[SEAL]

Angela Hurley  
Notary, Consular Officer or Witness

IN WITNESS WHEREOF, Richard G. BARANIUK has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Richard G. BARANIUK

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, 2018 personally appeared Richard G. BARANIUK, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]

IN WITNESS WHEREOF, Rebekah A. DREZEK has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Rebekah A. DREZEK

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2018 personally appeared Rebekah A. DREZEK, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]

IN WITNESS WHEREOF, Richard G. BARANIUK has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Richard G. BARANIUK

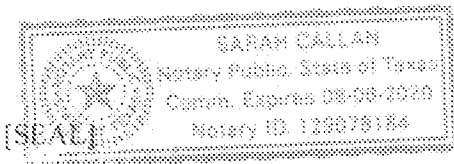
Signature: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF Texas  
COUNTY OF Harris

BEFORE ME, the undersigned authority, on this 6 day of June, 2018 personally appeared Richard G. BARANIUK, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness



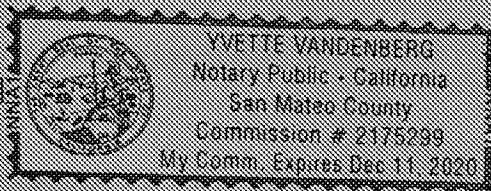
WITNESS WHEREOF, Amirali AGHAZADEH has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Amirali AGHAZADEH

Signature: [Handwritten Signature]  
Date: 3/11/19

STATE OF California  
COUNTY OF San Mateo

BEFORE ME, the undersigned authority, on this 11 day of March, 2019 personally appeared Amirali AGHAZADEH, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.



[Handwritten Signature]  
Notary, Consular Officer or Witness

IN WITNESS WHEREOF, Mona SHEIKH has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Mona SHEIKH

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2018 personally appeared Mona SHEIKH, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]

WITNESS WHEREOF, Amirali AGHAZADEH has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Amirali AGHAZADEH

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_\_ day of \_\_\_\_\_, 2018 personally appeared Amirali AGHAZADEH, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]

IN WITNESS WHEREOF, Mona SHEIKH has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Mona SHEIKH

Signature: Mona Sheikh

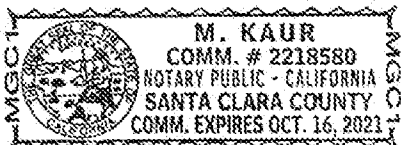
Date: June 28 2018

STATE OF California  
COUNTY OF Santa Clara

BEFORE ME, the undersigned authority, on this 28 day of June, 2018 personally appeared Mona SHEIKH, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

M. Kaur  
\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]





IN WITNESS WHEREOF, Adam Y. LIN has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Adam Y. LIN

Signature: [Handwritten Signature]  
Date: 6/26/18

STATE OF ILLINOIS  
COUNTY OF COOK

BEFORE ME, the undersigned authority, on this 26<sup>th</sup> day of JUNE, 2018 personally appeared Adam Y. LIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

[Handwritten Signature]  
Notary, Consular Officer or Witness



IN WITNESS WHEREOF, Allen L. CHEN has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Allen L. CHEN

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, 2018 personally appeared Allen L. CHEN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]

IN WITNESS WHEREOF, Adam Y. LIN has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Adam Y. LIN

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this \_\_\_\_ day of \_\_\_\_\_, 2018 personally appeared Adam Y. LIN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL]

IN WITNESS WHEREOF, Allen L. CHEN has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

Allen L. CHEN

Signature: Allen L. Chen  
Date: \_\_\_\_\_

STATE OF Maryland  
COUNTY OF Prince George's

BEFORE ME, the undersigned authority, on this 9<sup>th</sup> day of June, 2018 personally appeared Allen L. CHEN, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

[Signature]  
\_\_\_\_\_  
Notary, Consular Officer or Witness

[SEAL] CAROLIN X. LIMANOR  
NOTARY PUBLIC  
PRINCE GEORGE'S COUNTY  
MARYLAND  
MY COMMISSION EXPIRES 11/29/2019

IN WITNESS WHEREOF, Pallavi BUGGA has executed this Patent Assignment, or has caused this Patent Assignment to be executed on his/her behalf by a representative duly authorized, all as of the date set forth below.

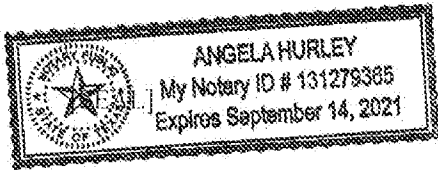
Pallavi BUGGA

Signature: *Pallavi Bugga*

Date: 06/27/18

STATE OF Texas  
COUNTY OF TARRANT

BEFORE ME, the undersigned authority, on this 27<sup>th</sup> day of June, 2018 personally appeared Pallavi BUGGA, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.



*Attorney*  
Notary, Consular Officer or Witness

RICE.P0021US  
RICE TECH ID 2017-05802

IN WITNESS WHEREOF, Assignee has executed this Patent Assignment, or has caused this Patent Assignment to be executed on its behalf by a representative duly authorized

WILLIAM MARSH RICE UNIVERSITY

By: [Signature]

Name: Asha Rajagopal

Title: Director-OTT

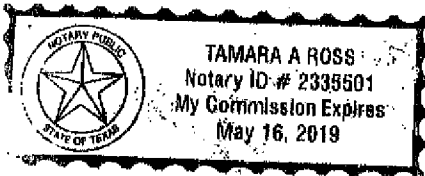
Date: 1-24-19

STATE OF TEXAS  
COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this 24 day of January, 2019 personally appeared Asha Rajagopal, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes and consideration therein expressed.

[Signature]  
Notary, Consular Officer or Witness

[SEAL]



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