

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT																						
NATURE OF CONVEYANCE:	ASSIGNMENT																						
CONVEYING PARTY DATA																							
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>BERT VOGELSTEIN</td> <td>06/07/2013</td> </tr> <tr> <td>KENNETH W. KINZLER</td> <td>06/07/2013</td> </tr> <tr> <td>NICKOLAS PAPADOPOULOS</td> <td>06/17/2013</td> </tr> <tr> <td>D. WILLIAMS PARSONS</td> <td>06/10/2013</td> </tr> <tr> <td>REBECCA J. LEARY</td> <td>06/13/2013</td> </tr> <tr> <td>MENG LI</td> <td>06/11/2013</td> </tr> <tr> <td>XIAOSONG ZHANG</td> <td>06/07/2013</td> </tr> <tr> <td>SIAN JONES</td> <td>06/07/2013</td> </tr> <tr> <td>GREGORY RIGGINS</td> <td>09/25/2013</td> </tr> <tr> <td>VICTOR VELCULESCU</td> <td>06/07/2013</td> </tr> </tbody> </table>		Name	Execution Date	BERT VOGELSTEIN	06/07/2013	KENNETH W. KINZLER	06/07/2013	NICKOLAS PAPADOPOULOS	06/17/2013	D. WILLIAMS PARSONS	06/10/2013	REBECCA J. LEARY	06/13/2013	MENG LI	06/11/2013	XIAOSONG ZHANG	06/07/2013	SIAN JONES	06/07/2013	GREGORY RIGGINS	09/25/2013	VICTOR VELCULESCU	06/07/2013
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Application Number:	13884154																						
CORRESPONDENCE DATA																							
Fax Number:	(202)824-3001																						
Phone:	202-824-3000																						
Email:	jhazard@bannerwitcoff.com, BWPTOPAT@bannerwitcoff.com																						
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>																							
Correspondent Name:	BANNER & WITCOFF, LTD.																						
Address Line 1:	1100 13TH STREET, NW																						

CH \$40.00 13884154

Address Line 2: SUITE 1200
Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20005

ATTORNEY DOCKET NUMBER: 001107.00978

NAME OF SUBMITTER: SARAH A. KAGAN

Signature: /Sarah A. Kagan/

Date: 10/16/2013

Total Attachments: 32

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ASSIGNMENT

WHEREAS, we,

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THERAPEUTICS***

which application

[X] was filed on May 8, 2013 and as U.S. Application Serial Number 13/884,154

and WHEREAS

**THE JOHNS HOPKINS UNIVERSITY
3400 N. Charles Street
Baltimore, Maryland 21218
United States of America**

ASSIGNEE, desires to acquire our entire right, title and interest in and to the said application, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged,

We hereby assign, to the above named ASSIGNEE, its successors, assign and legal representatives (NOMINEES) our entire right, title and interest in and to said application, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).




And we covenant that we have full right to convey our entire interest herein assigned, and that we have not executed and will not execute any agreement or do anything in conflict herewith;

And we further covenant and agree that we will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said application, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and we agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting said application, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE

or its NOMINEES to obtain and enforce for their own benefit patent protection for said application, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

And we authorize the ASSIGNEE or its NOMINEES to file in our names or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said application, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date: <u>6/7/13</u>	Inventor: <u></u> Bert VOGELSTEIN
Date: <u>6/7/13</u>	Inventor: <u></u> Kenneth W. KINZLER
Date: <u>6/17/13</u>	Inventor: <u></u> Nicholas PAPADOPOULOS
Date: _____	Inventor: _____ D. Williams PARSONS
Date: _____	Inventor: _____ Rebecca J. LEARY
Date: _____	Inventor: _____ Meng LI
Date: _____	Inventor: _____ Xiaosong ZHANG
Date: _____	Inventor: _____ Sian JONES

Date: _____ Inventor: _____
Gregory RIGGINS

Date: _____ Inventor: _____
Victor VELCULESCU

Note: No legalization or other witness required.

LAW OFFICES
BANNER & WITCOFF, LTD.
1100 13th STREET, N.W.
WASHINGTON, D.C. 20005-4051
(202) 824-3000

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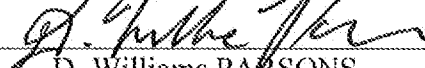
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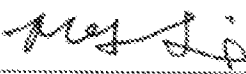
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Victor VELCULESCU, a citizen of the United States of America, with mailing address at 14064 Big Branch Drive, Dayton, Maryland 21036 (US);

along with

Darrell BIGNER, a citizen of the United States of America, with mailing address at 513 Corbett Ridge Road, Mebane, North Carolina 27302 (US) and

Hai YAN, a citizen of the United States of America, with mailing address at 108 Sully Court, Chapel Hill, North Carolina 27514 (US) and

are the inventors of certain inventions and improvements described in a U.S. patent application identified by having the title:

***MEDULLOBLASTOMA GENES AS TARGETS FOR DIAGNOSIS AND
THERAPEUTICS***

which application

[X] was filed on May 8, 2013 and as U.S. Application Serial Number 13/884,154

and WHEREAS

**THE JOHNS HOPKINS UNIVERSITY
3400 N. Charles Street
Baltimore, Maryland 21218
United States of America**

ASSIGNEE, desires to acquire our entire right, title and interest in and to the said application, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged,

We hereby assign, to the above named ASSIGNEE, its successors, assign and legal representatives (NOMINEES) our entire right, title and interest in and to said application, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).

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And we further covenant and agree that we will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said application, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and we agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting said application, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE

or its NOMINEES to obtain and enforce for their own benefit patent protection for said application, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

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And we hereby grant our attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to identify the patent application to which this assignment pertains.

Date: _____ Inventor: _____
Bert VOGELSTEIN

Date: _____ Inventor: _____
Kenneth W. KINZLER

Date: _____ Inventor: _____
Nickolas PAPADOPOULOS

Date: _____ Inventor: _____
D. Williams PARSONS

Date: _____ Inventor: _____
Rebecca J. LEARY

Date: _____ Inventor: _____
Meng LI

Date: 6/7/2013 Inventor: Xiaosong Zhang
Xiaosong ZHANG

Date: _____ Inventor: _____
Sian JONES

Date: _____ Inventor: _____
Gregory RIGGINS

Date: _____ Inventor: _____
Victor VELCULESCU

Note: No legalization or other witness required.

LAW OFFICES
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1100 13th STREET, N.W.
WASHINGTON, D.C. 20005-4051
(202) 824-3000

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Date: _____	Inventor: _____ Kenneth W. KINZLER
Date: _____	Inventor: _____ Nickolas PAPADOPOULOS
Date: _____	Inventor: _____ D. Williams PARSONS
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Date: _____	Inventor: _____ Meng LI
Date: _____	Inventor: _____ Xiaosong ZHANG
Date: <u>6/7/13</u>	Inventor: <u>S. Jones</u> Sian JONES

Date: _____ Inventor: _____
Gregory RIGGINS

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Victor VELCULESCU

Note: No legalization or other witness required.

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Xiaosong ZHANG

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Sian JONES

Date: 25 Sept 2013 Inventor: 
Gregory RIGGINS

Date: _____ Inventor: _____
Victor VELCULESCU

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Date: 6/7/13

Inventor: _____


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