

PATENT ASSIGNMENT

Electronic Version v1.1
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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>Jef D. Boeke</td> <td>12/27/2011</td> </tr> <tr> <td>Min Li</td> <td>10/04/2011</td> </tr> <tr> <td>Heng Zhu</td> <td>12/27/2011</td> </tr> <tr> <td>Shunyou Long</td> <td>12/13/2011</td> </tr> </tbody> </table>		Name	Execution Date	Jef D. Boeke	12/27/2011	Min Li	10/04/2011	Heng Zhu	12/27/2011	Shunyou Long	12/13/2011
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<table border="1"> <tr> <td>Name:</td> <td>The Johns Hopkins University</td> </tr> <tr> <td>Street Address:</td> <td>3400 N. Charles Street</td> </tr> <tr> <td>City:</td> <td>Baltimore</td> </tr> <tr> <td>State/Country:</td> <td>MARYLAND</td> </tr> <tr> <td>Postal Code:</td> <td>21218</td> </tr> </table>		Name:	The Johns Hopkins University	Street Address:	3400 N. Charles Street	City:	Baltimore	State/Country:	MARYLAND	Postal Code:	21218
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: (617)227-4420 Phone: (617) 239-0100 Email: patent@edwardswildman.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: EDWARDS WILDMAN PALMER LLP Address Line 1: P.O. BOX 55874 Address Line 4: BOSTON, MASSACHUSETTS 02205</p>											
ATTORNEY DOCKET NUMBER:	67287 (71699)										
NAME OF SUBMITTER:	Melissa Hunter-Ensor, Ph.D., Esq.										
Total Attachments: 7											

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ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT, made by Jef D. Boeke; Min Li; Heng Zhu; and Shunyou Long (hereinafter referred to as Assignors), residing at 835 W. University Parkway, Baltimore, Maryland 21210; 8610 Northfield Circle, Lutherville, Maryland 21093; 6821C Blenheim Road, Baltimore, Maryland 21212; and 217 Rogers Forge Road, Apt. A, Baltimore, Maryland, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in SYSTEM AND METHODS FOR SAMPLING MATERIALS, set forth in a Patent Application No. 12/223,885 that was filed on August 12, 2008, which application claims the benefit of International Application No. PCT/US2007/004139, filed February 13, 2007 and U.S. Provisional Application No. 60/772,767, filed February 13, 2006; and

WHEREAS, The Johns Hopkins University, having a place of business at 3400 N. Charles Street, Baltimore, Maryland 21218 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term

or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

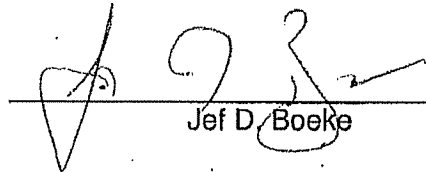
AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

EDWARDS ANGELL PALMER & DODGE LLP

All practitioners at Customer Number 49383

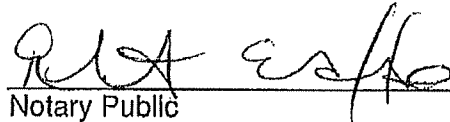
AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.


Jef D. Boeke


Date: 27 Dec 2011

United States of America)
State of Maryland) ss.:
County of Baltimore)

On this 27th day of December, 2011, before me
personally came Jef D. Boeke, to me known to be the individual
described in and who executed the foregoing Instrument, and acknowledged execution
of the same.


Notary Public

Michael B. Amey
Associate Dean
Research Administration


Min Li

Date: OCTOBER 4, 2011

United States of America)
State of MARYLAND) ss.:
County of BALTIMORE CITY)

On this 4th day of OCTOBER, 2011, before me
personally came Min Li, to me known to be the individual
described in and who executed the foregoing instrument, and acknowledged execution
of the same.


Notary Public

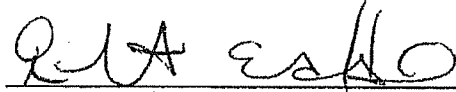
MY COMMISSION EXPIRES
10/25/13


Heng Zhu

Date: Dec. 27, 2011

United States of America)
State of Maryland ss.:
County of Baltimore

On this 27th day of December, 2011, before me
personally came Heng Zhu, to me known to be the individual
described in and who executed the foregoing instrument, and acknowledged execution
of the same.


Notary Public

Michael B. Arney
Associate Dean
Research Administration

Long Shunyou
Shunyou Long

Date: 12/13/2011

United States of America
State of Maryland) ss.:
County of Baltimore City

On this 13th day of DECEMBER, 2011, before me
personally came Shunyou Long, to me known to be the individual
described in and who executed the foregoing instrument, and acknowledged execution
of the same.

[Signature]
Notary Public

MY COMMISSION
EXPIRES 10/25/13