

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Sanford D. Markowitz	06/19/2013
RECEIVING PARTY DATA	
Name:	Howard Hughes Medical Institute
Street Address:	4000 Jones Bridge Road
City:	Chevy Chase
State/Country:	MARYLAND
Postal Code:	20815-6789
PROPERTY NUMBERS Total: 2	
Property Type	Number
Patent Number:	8415100
Application Number:	13670155
CORRESPONDENCE DATA	
Fax Number:	6172359492
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	617-951-7000
Email:	ginny.blundell@ropesgray.com
Correspondent Name:	Ropes & Gray LLP
Address Line 1:	Prudential Tower
Address Line 2:	800 Boylston Street
Address Line 4:	Boston, MASSACHUSETTS 02199-3600
ATTORNEY DOCKET NUMBER:	CWRU-P06-020
NAME OF SUBMITTER:	Ginny Blundell
Signature:	/Ginny Blundell/
Date:	07/18/2013
Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif	

CH \$80.00 8415100

ASSIGNMENT

WHEREAS, I, Sanford D. Markowitz, have invented, alone or with others, a certain improvement in METHODS AND COMPOSITIONS FOR DETECTING GASTROINTESTINAL AND OTHER CANCERS described in applications for Letters Patent, the specifications of which:

- [x] was filed on June 23, 2011 as Application No. 13/167,670, and issued as Patent No. 8,415,100 on April 9, 2013
- [x] was filed on November 6, 2012 as Application No. 13/670,155
- [x] was filed on June 22, 2012 as Application No. PCT/US2012/043834

WHEREAS, on September 30, 2011, I executed an Assignment of the Patent Applications, naming Case Western Reserve University as the assignee, which was subsequently recorded with the U.S. Patent Office in error on January 4, 2012 at Reel 027475/0155;

WHEREAS, I was an employee of the Howard Hughes Medical Institute, a Delaware corporation (the "Institute"), and, as a condition of my employment, had previously signed on February 2, 1998 the Agreement appended to the Institute's Policy on Intellectual Property (the "Intellectual Property Agreement");

WHEREAS, pursuant to the Intellectual Property Agreement, I agreed (a) to assign and did assign to the Institute all rights I may acquire or acquired in any invention, discovery, improvement, or other intellectual property, whether or not patentable or copyrightable, developed directly or indirectly as a result of a program of research financed by Institute funds or funds under the control of the Institute (each a "Subject Property") and (b) to execute any agreements that may be desired by the Institute in connection with such assignment;


NOW THEREFORE, to all whom it may concern be it known I confirm that, effective February 2, 1998 and in accordance with the terms of the Intellectual Property Agreement, I intended to and did assign, sell and transfer, *nunc pro tunc*, to the Institute, its successors, assigns and legal representatives, for and in consideration of said Intellectual Property Agreement and of other good and valuable consideration, the receipt of which is hereby acknowledged, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said applications, together with my entire right, title and interest in and to said applications and such Letters Patent as may issue thereon, and any reissue, continuation, divisional and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said applications; said invention, application and Letters Patent to be held and enjoyed by the Institute for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would

have been held by me had this assignment not been made; I conveyed all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention, carries with it the right in the Institute to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of the Institute's selection and the right to procure the grant of all such Letters Patent to the Institute for its own name as assignee of the entire right, title and interest therein;

AND, I further agreed for me and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said the Institute, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

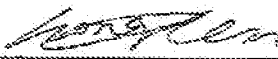
AND, I did authorize and request the competent authorities to grant and to issue any and all such Letters Patent in any country throughout the world to the Institute as the assignee of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by the Institute had the assignment, sale and transfer not been made.

This *nunc pro tunc* assignment voids the previous assignment made on September 30, 2011 only with respect to the assignment by me to Case Western Reserve University.

Inventor 
Sanford D. Markowitz

Date: 6/19/13

Address 28950 Bolingbrook Road
Pepper Pike, OH 44124

Witness  Hongman Chen Date: 6/19/13

Address Technology Transfer office Room 666, Sears Building
10900 Euclid Ave. Cleveland, OH 44106

