PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT			
CONVEYING PART	TY DATA		·		
		N	lame	Execution Date	
Herman O. Sintim				07/11/2012	
William E. Bentley				07/11/2012	
Varnika Roy				08/10/2012	
Jacqueline Smith				07/18/2012	
	Y DATA				
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City:		College Park			
State/Country:		MARYLAND			
Postal Code:	20742				
Fusial Code.	20742				
PROPERTY NUMB	BERS Total: 1				
Property Type		Number			
Application Number:		13430000			
CORRESPONDEN	CE DATA				
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Correspondent Nar	ne: Rachel	S. Wat	t		
Address Line 1: Hodgson Russ LLP					
Address Line 2: 140 Pearl Street					
Address Line 4:	Buffalo,	NEW`	YORK 14202-4040		
ATTORNEY DOCKET NUMBER:			070919.00004		
NAME OF SUBMITTER:			Rachel S. Watt		
			JL	PATENT	
502021522	1			REEL: 028766 FRAME: 0639	

Total Attachments: 4 source=070919_00004_Assignment#page1.tif source=070919_00004_Assignment#page2.tif source=070919_00004_Assignment#page3.tif source=070919_00004_Assignment#page4.tif

THIS AGREEMENT by and between: Herman O. Sintim, an individual having a principal residence at 2808 Federal Lane, Bowle, MD 20715 (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. LS-2010-005 and Attorney Docket No 070919,0004 entitled "Phosphorylated and Branched Dihydroxy-Pentane-Dione (DPD) Analogs as Quorum Sensing Inhibitors in Bacteria" and further described in US provisional patent application number 61/467228 filed March 24, 2011 and application for Letters Patent in the United States serial number 13/430000 filed March 26, 2012 and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the <u>University of Marvland Policy on Intellectual Property</u>, as approved by the Board of Regents of the University of Marvland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged. Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including to copyright ownership, for the longest period of protection accorded to such interests under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the <u>University of Maryland Policy on Intellectual Property</u> as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royally income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR Agreed to by:

Date:

Printed Name: Herman O. Sintim, Inventor

ASSIGNEE (University of Maryland) Acknowledged and Agreed to by:

Printed Name: Gayatri Varma, Executive Director

Date: August 10, 2012

PATENT REEL: 028766 FRAME: 0641

July 11 2012

THIS AGREEMENT by and between: **William E. Bentley**, an individual having a principal residence at **909 White Marlin Way**, **Annapolis**, **MD 21401-5754** (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. LS-2010-005 and Attorney Docket No 070919.0004 entitled "Phosphorylated and Branched Dihydroxy-Pentane-Dione (DPD) Analogs as Quorum Sensing Inhibitors in Bacteria" and further described in US provisional patent application number 61/467228 filed March 24, 2011 and application for Letters Patent in the United States serial number 13/430000 filed March 26, 2012 and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the <u>University of Maryland Policy on Intellectual Property</u>, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interests under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the <u>University of Maryland Policy on Intellectual Property</u> as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR Agreed to by:

Printed Name: William E. Bentley, Inventor

ASSIGNEE (University of Maryland) Acknowledged and Agreed to by:

Printed Name: Gayatri Varma, Executive Director

Date: August 10, 2012

Date:

11/2012

PATENT REEL: 028766 FRAME: 0642

THIS AGREEMENT by and between: Varnika Roy, an individual having a principal residence at 7401 Crestberry Lane Bethesda MD 20817 (hereinafter referred to as "Assigner"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. LS-2010-005 and Attorney Docket No 070919.0004 entitled "Phosphorylated and Branched Dihydroxy-Pentane-Dione (DPD) Analogs as Quorum Sensing Inhibitors in Bacteria" and further described in US provisional patent application number 61/467228 filed March 24, 2011 and application for Letters Patent in the United States serial number 13/430000 filed March 26, 2012 and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the <u>University of Maryland Policy on Intellectual Proserty</u>, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of registration, publication, renewal, and all other works incident to copyright ownership, for the longest period of protection accorded to such interest under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the <u>University of Maryland Policy on Intellectual Proverty</u> as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR Agreed to by:

Printed Name: Varnika Roy, Inventor

Date:

08/10/2012

ASSIGNEE (University of Marvland) Acknowledged and Agreed to by:

Printed Name: Gayatri Varma, Executive Director

Date: August 10, 2012



THIS AGREEMENT by and between: Jacqueline Smith, an individual having a principal residence at 3503 Easton Drive Bowie MD 20716 (hereinafter referred to as "Assignor"), and the University of Maryland, College Park (hereinafter referred to as "Assignee").

WITNESSETH:

WHEREAS, Assignor has created and developed certain inventions, improvements, discoveries, software, or other intellectual property, as described in Assignee Invention Disclosure No. LS-2010-005 and Attorney Docket No 070919.0004 entitled "Phosphorylated and Branched Dihydroxy-Pentane-Dione (DPD) Analogs as Quorum Sensing Inhibitors in Bacteria" and further described in US provisional patent application number 61/467228 filed March 24, 2011 and application for Letters Patent in the United States serial number 13/430000 filed March 26, 2012 and for any and all application(s) for Letters Patent in the United States of America and throughout the world, and all divisional, continuation, continuation-in-part, substitutions, renewals, reissues, extensions and other applications pertaining to the foregoing which have or shall be filed in the United States, any foreign country and other jurisdictions (hereinafter collectively referred to as the "Works"); and

WHEREAS, Assignor agrees that, to the extent the Works are, by operation of law or otherwise, not deemed to be works made for hire within the meaning of the Copyright Act, (Title 17, U.S.C. Section 101, et seq.), Assignor agrees to assign all of his/her right, title and interest in and to the Works to Assignee, and further agrees to take such further actions and to execute such further instruments that Assignee might find reasonable or necessary to perfect or to evidence more clearly its right and claim to exclusive ownership of all of Assignor's worldwide intellectual property interests respecting the Works; and

WHEREAS, Assignor and Assignee now wish to perfect and to evidence more clearly the right and claim of Assignee to exclusive ownership of all of Assignor's intellectual property interests respecting the Works.

NOW, THEREFORE, in consideration of the rights granted to Assignor under the <u>University of Maryland Policy on Intellectual Property</u>, as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time, and other good and valuable consideration furnished by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee, intending to be legally bound, do hereby covenant and agree as follows:

Section 1. Assignment of the Works.

Assignor hereby assigns, transfers and conveys to Assignee, its successors, assigns or other legal representatives, without the necessity of any consideration in addition to that recited herein, all of Assignor's right, title and interest in and to the Works. This assignment shall be operative with respect to all intellectual property rights in and to the Works, including (without limitation), (i) all copyrights in the United States and elsewhere, including all rights of registration, publication, renewal, rights to create derivative works and all other rights incident to copyright ownership, for the residue now unexpired of the present term of any and all such copyrights and any term thereafter granted during which the Works are entitled to copyright; (ii) all trade secrets, inventions, know-how, ideas and confidential information embodied or reflected in the Works, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent rights in the United States and elsewhere, including all rights of the united States and elsewhere, including any shop rights, for the longest period of protection accorded to such interest under applicable law; and (iii) all patent to copyright ownership, for the longest period of protection accorded to such interests under applicable law.

Section 2. University of Maryland Copyright and Patent Policies.

The assignment of rights perfected hereunder shall be governed by the <u>University of Maryland Policy on Intellectual Property</u> as approved by the Board of Regents of the University of Maryland, and as amended by them from time to time. Royalty income shall be allocated as set forth in those policies.

Section 3. Warranty.

Assignor warrants and covenants that he/she is an author or inventor of the Works and that as of the date of this Assignment, has taken no action respecting the Works which purports or attempts to transfer or encumber any right, title or interest in or to the Works to any other party; and covenants not to take such action in the future.

Section 4. Jurisdiction.

The validity, interpretation, and effect of this agreement shall be governed by the laws of the State of Maryland and of the United States of America. Any legal proceedings involving claims or disputes regarding this agreement shall be brought in the appropriate court in the State of Maryland.

WHEREAS, the parties have caused this Assignment to be executed on the dates below.

ASSIGNOR
Agreed to by:
Printed Name: Jacqueline Smith, Inventor
on the l

7/16/12

Date:

ASSIGNEE (University of Maryland) Acknowledged and Agreed to by:

Printed Name: Gayatri Varma, Executive Director

Date: August 10, 2012

PATENT REEL: 028766 FRAME: 0644

RECORDED: 08/10/2012