

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5205286

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	LICENSE	
CONVEYING PARTY DATA		
	Name	Execution Date
	CARIS MPI, INC.	06/30/2010
RECEIVING PARTY DATA		
Name:	CARIS LIFE SCIENCES LUXEMBOURG HOLDINGS S.A.R.L.	
Street Address:	102 RUE DE MARAICHERS	
Internal Address:	L2124 LUXEMBOURG	
City:	GRAND-DUCHE DE LUXEMBOURG	
State/Country:	LUXEMBOURG	
PROPERTY NUMBERS Total: 6		
Property Type	Number	
Application Number:	60951812	
Application Number:	61050438	
Application Number:	12524462	
Application Number:	12711499	
Application Number:	13489686	
Application Number:	15381668	
CORRESPONDENCE DATA		
Fax Number:	(336)721-3660	
<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>		
Phone:	4048727000	
Email:	KAYLA.FISHER@WBD-US.COM	
Correspondent Name:	WOMBLE BOND DICKINSON (US) LLP	
Address Line 1:	ATTN: IP DOCKETING	
Address Line 2:	P.O. BOX 7037	
Address Line 4:	ATLANTA, GEORGIA 30357	
NAME OF SUBMITTER:	KAYLA FISHER	
SIGNATURE:	/kayla fisher/	
DATE SIGNED:	10/25/2018	
Total Attachments: 18		

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INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

This **Intellectual Property Assignment Agreement** (hereinafter "Assignment") is made and entered into as of March 31, 2010 (the "Effective Date"), by and between Caris Life Sciences, Inc., a Delaware corporation located at 6655 North MacArthur Blvd, Irving, Texas 75039 ("Life Sciences"), Caris MPI, a Delaware corporation located at 4610 South 44th Place, Phoenix, Arizona 85040 ("MPI"), ImmunoTheragnostics, Inc., a Delaware corporation and wholly-owned subsidiary of MPI located at 4610 South 44th Place, Phoenix, Arizona 85040 ("ITI") (each of Life Sciences, MPI and ITI, "Assignor"), and Caris Life Sciences Luxembourg Holdings S.a.r.l., a Luxembourg corporation located at 102 Rue de Maraichers, L2124 Luxembourg, Grand-Duché de Luxembourg ("Assignee"). Each may be individually referred to as a Party and collectively may be referred to as the Parties.

WHEREAS, each Assignor desires to sell, assign and transfer, and Assignee desires to purchase and acquire, all right, title and interest in and to certain intellectual property license agreements and patent properties, including the right to sue and collect damages for any and all past, present and future infringement, thus, conveying to Assignee all substantial rights in and to such intellectual property license agreements and patent properties on the terms set forth in this Assignment;

WHEREAS, it is the intent of the Parties that any and all rights that Assignor has in the intellectual property license agreements and patent properties be transferred from Assignor to Assignee subject to any existing rights Assignor may have granted prior to the Effective Date;

NOW, THEREFORE, in consideration of the foregoing, and of the mutual promises, covenants, and representations contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

SECTION 1 DEFINITIONS

1.1 "Affiliate" means, with respect to any entity or person, any other entity or person that directly or indirectly controls, is controlled by or is under common control with such entity or person. For purposes of this definition the term "control" of a corporation, company or other entity shall mean to have fifty percent (50%) or more of the outstanding shares or securities representing the right to vote for the election of the board of directors or a similar managing authority or a supervisory board, or otherwise has the power to direct or cause the direction of the management and policies of such company, corporation, or entity, directly or indirectly, whether through ownership of voting securities, by contract, or otherwise

1.2 "Initial Products" means the products and services set forth on *Exhibit D* as such exhibit may be amended by the Parties from time to time, including the Prostate MDX v.1 product and all services associated therewith as described more fully on *Exhibit D*.

1.3 "TTI Patents" means all U.S. and foreign (a) patent applications and letters patents listed on *Exhibit A*, (b) all continuations, divisionals, reissues, and reexaminations thereof (including equivalents, extensions, or substitutions thereof and non-U.S. equivalents of any of the foregoing, including foreign counterparts thereof) and all patents that issue from or claim priority to the foregoing and (c) counterpart patents and patent applications claiming priority to any of the foregoing.

1.4 "Life Sciences Patents" means all U.S. and foreign (a) patent applications and letters patents listed on *Exhibit B*, (b) all continuations, divisionals, reissues, and reexaminations thereof (including equivalents, extensions, or substitutions thereof and non-U.S. equivalents of any of the foregoing, including foreign counterparts thereof) and all patents that issue from or claim priority to the foregoing and (c) counterpart patents and patent applications claiming priority to any of the foregoing.

1.5 "Licensed Patents" means all U.S. and foreign patent applications and letters patents under which license rights are granted by ULRF pursuant to the terms of the ULRF License or under which license rights are granted by OSU pursuant to the terms of the OSU License.

1.6 "Licensed Product" means a product that, but for a license or assignment hereunder, the manufacture, use or sale of which would infringe a Valid Claim of one or more Patents in the country in which such product is sold.

1.7 "Licensed Service" means a service that, but for a license or assignment hereunder, the performance of which would infringe a Valid Claim of one or more Patents in the country in which such service is performed.

1.8 "MPI Patents" means all U.S. and foreign (a) patent applications and letters patents listed on *Exhibit C*, (b) all continuations, divisionals, reissues, and reexaminations thereof (including equivalents, extensions, or substitutions thereof and non-U.S. equivalents of any of the foregoing, including foreign counterparts thereof) and all patents that issue from or claim priority to the foregoing and (c) counterpart patents and patent applications claiming priority to any of the foregoing.

1.9 "Net Revenue" means the gross amounts charged by or under the authority of MPI or Assignee for all sales of the Initial Products, the manufacture, use or sale of which would, but for the license granted to MPI hereunder infringe a Valid Claim of one or more Patents, to any customer/patient/payor in the Territory less: (a) rebates/contractual discounts and chargebacks (including government mandated rebates/discounts, payor negotiated contractual discounts and any other quantity and/or cash discounts) allowed in amounts customary in the trade; (b) certain discounts or allowances negotiated with and/or provided to customers or patients resulting in charges

not billed; (c) amounts allowed or credited on returns; and (d) any other reasonable reduction of gross charges as defined by Generally Accepted Accounting Principles or with respect to Assignee, reasonable and customary accounting principles consistently applied. No deductions shall be made for cost of collections or for commissions paid to individuals whether they are with independent sales agencies or regularly employed by the licensee and on its payroll.

1.10 "Patents" means the ITI Patents, Life Sciences Patents, MPI Patents, and the Licensed Patents collectively.

1.11 "Technology" means all data, know-how, technology and other information owned or controlled by the Assignors reasonably necessary for Assignee to practice the Patents.

1.12 "Territory" means the United States of America, its territories, and possessions.

1.13 "ULRF License" means Exclusive License Agreement, dated January 31, 2008, by and between the University of Louisville Research Foundation, Inc. ("ULRF") and ITI.

1.14 "Valid Claim" means a claim of an issued patent within the Patents that has not expired or been held unenforceable, unpatentable or invalid by an agency or a court of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer or otherwise.

SECTION 2 ASSIGNMENT AND ASSUMPTION

2.1 ITI hereby sells, transfers, assigns, conveys, and delivers to Assignee, and Assignee hereby purchases and accepts from ITI, all of ITI's worldwide right, title, and interest in and to:

- (i) the ITI Patents,
- (ii) all claims and causes of action now in existence or arising in the future resulting from past, present, or future infringement of any or all of the ITI Patents, including, without limitation, the sole and exclusive right to sue in its own name and recover damages for past, present, and future infringement of any of the ITI Patents, and
- (iii) the ULRF License (and Assignee hereby assumes all of ITI's obligations thereunder and agrees to be bound thereby).

2.2 Life Sciences hereby sells, transfers, assigns, conveys, and delivers to Assignee, and Assignee hereby purchases and accepts from Life Sciences, all of Life Sciences' worldwide right, title, and interest in and to:

- (i) the Life Sciences Patents,
- (ii) all claims and causes of action now in existence or arising in the future resulting from past, present, or future infringement of any or all of the Life Sciences Patents, including, without limitation, the sole and exclusive right to sue in its own name and recover damages for past, present, and future infringement of any of the Life Sciences Patents, and

2.3 MPI hereby sells, transfers, assigns, conveys, and delivers to Assignee, and Assignee hereby purchases and accepts from MPI, all of MPI's worldwide right, title, and interest in and to:

- (i) the MPI Patents, and
- (ii) all claims and causes of action now in existence or arising in the future resulting from past, present, or future infringement of any or all of the MPI Patents, including, without limitation, the sole and exclusive right to sue in its own name and recover damages for past, present, and future infringement of any of the MPI Patents.

2.4 Each of ITI, Life Sciences and MPI hereby grant to Assignee a nonexclusive, perpetual, fully paid-up license, with the right to grant and authorize sublicenses, under the Technology to make, have made, use, sell, have sold, offer for sale, import and otherwise dispose of or practice the Licensed Products and Licensed Services outside the Territory.

2.5 In consideration for the assignments granted in this Article 2, Assignee shall pay to Life Sciences an aggregate amount of USD [REDACTED] no later than thirty (30) business days following the Effective Date.

2.6 Assignee shall further pay to Life Sciences royalties in the aggregate amount of [REDACTED] percent of all Net Revenues by or under authority of Assignee for the sale of any Licensed Product or Licensed Service, on an annual basis no later than ninety (90) days following each anniversary of the Effective Date or on a more frequent basis as may be mutually determined between the Assignee and Assignors. Life Sciences shall have the right to audit and verify the royalties to be paid under this Section.

SECTION 3 CONDITIONS AND COVENANTS

3.1 Notwithstanding anything else to the contrary in this Assignment, Assignee purchases, acquires, and takes the rights granted under Section 2 to the Patents, including the right to sue and recover for past, present, and future infringement of any of the Patents, subject to all existing licenses, license rights, and covenants not to assert that Assignor or its Affiliates (including those entities that previously would have been deemed an Affiliate at the time of entering into a third party agreement but no longer meet the definition of an Affiliate as of the Effective Date) may have granted prior to the Effective Date.

3.2 Upon the Effective Date, Assignee assumes all of Assignor's responsibility for the prosecution and payment of all fees associated with maintaining the Patents as well as Assignor's responsibility for preparing all paperwork, and for paying all expenses necessary to perfect and record the assignments of the Patents.

3.3 Assignee agrees to use all reasonable commercial efforts to maintain the ULRF License in full force and effect for the duration of the terms thereof.

3.4 Assignee agrees and covenants that prior to Assignee's sale, conveyance of title to, transfer, or assignment of any of the Patents, or the right to enforce any of the Patents, to a third party, Assignee shall obtain the prior written consent of the Assignors and such sale, conveyance, transfer or assignment will be made subject to the encumbrances and licenses set forth in Sections 3.1 (existing licenses) and 4 (Licenses).

SECTION 4 LICENSES

4.1 Assignee hereby grants to MPI an exclusive, transferable, sublicensable (including the right to grant and authorize sublicenses), irrevocable, perpetual license (or sublicense, as applicable) under the Patents to import, make, have made, use, sell, offer for sale, have sold, import lease, distribute, have distributed, or otherwise dispose of the Initial Products in the Territory. For clarity with respect to Assignee's grant of a sublicense under the Licensed Patents pursuant to the ULRF License, such sublicense shall be subject to the relevant and applicable terms and conditions of the ULRF License.

4.2 As partial consideration of the licenses granted to MPI hereunder, MPI shall pay to Assignee royalties equal to the corresponding percentage of Net Revenue made by MPI or its sublicensees, for each Initial Product as set forth on Exhibit D. MPI shall make payment to Assignee for such royalties on an annual basis no later than ninety (90) days following each anniversary of the Effective Date or on a more frequent basis as may be mutually determined between the Assignee and MPI. Assignee shall have the right to audit and verify the royalties to be paid under this Section.

SECTION 5 TERM AND TERMINATION OF AGREEMENT

5.1 This Assignment shall be effective beginning on the Effective Date, and shall expire upon the expiration of last of the Patents to expire.

5.2 Sections 2, (Assignment and Assumption), 3 (Conditions and Covenants), 4 (Licenses) 5 (Term & Termination) and 6 (Miscellaneous) survive any expiration or termination of this Assignment.

SECTION 6 MISCELLANEOUS

6.1 Compliance With Laws. The obligations of the Parties with respect to the consummation of the transactions contemplated by this Assignment shall be subject to all laws, present and future, of any government having jurisdiction over the Parties and this transaction, and to orders, regulations, directions or requests of any such government.

6.3 Governing Law; Venue/Jurisdiction. This Assignment will be interpreted, construed, and enforced in all respects in accordance with the laws of the State of Delaware, without reference to its choice of law principles. Neither any Assignor nor Assignee will commence or prosecute any action, suit, proceeding or claim arising under or by reason of this Assignment other than in the state or federal courts located in the State of Delaware. Assignor and Assignee irrevocably consent to the jurisdiction and venue of the courts identified in the preceding sentence in connection with any action, suit, proceeding, or claim arising under or by reason of this Assignment.

6.4 Notices. All notices and other communications required or contemplated hereunder shall be in writing and transmitted to the address shown below by: (i) personal delivery, (ii) expedited messenger service, (iii) registered or certified mail, postage prepaid and return receipt requested, (iv) electronic facsimile with confirmed answer back, or (v) electronic mail with confirmed answer back. Notice given in any other manner will be deemed to have been given only if and when received at the address of the person to be notified. Either Party may from time to time change its address for notices under this Assignment by giving the other Party written notice of such change in accordance with this Section. Notices are effective upon the date of delivery or at the time presented, if delivery to the address below is refused by the addressee:

If to ITI: 4610 South 44th Place
Phoenix, Arizona 85040

If to Life Sciences: 6655 N. MacArthur Blvd.
Irving, Texas 75039

If to MPI: 4610 South 44th Place
Phoenix, Arizona 85040

If to Assignee: 102 Rue de Maraichers,
L-2124 Luxembourg

6.6 Severability. If any provision of this Assignment is found to be invalid or unenforceable, then the remainder of this Assignment will have full force and effect, and the invalid provision will be modified, or partially enforced, to the maximum extent permitted to effectuate the original objective.

6.7 Waiver. Failure by either Party to enforce any term of this Assignment will not be deemed a waiver of future enforcement of that or any other term in this Assignment or any other agreement that may be in place between the Parties.

6.8 Further Assurances. Each Party agrees to execute and deliver such other instruments and documents and to take all such actions as the other Party, its successors, assigns or other legal representatives may reasonably request to effect the terms of this Assignment and the execution and delivery of any and all affidavits, testimonies, declarations, oaths, samples, exhibits, specimens and other documentation as may be reasonably required.

6.9 Miscellaneous. This Assignment, including its exhibits, constitutes the entire agreement between the Parties with respect to the subject matter hereof and merges and supersedes all prior and contemporaneous agreements, undertakings, understandings, negotiations, and discussions, oral and written. No Party will be bound by any conditions, definitions, warranties, understandings, or representations with respect to the subject matter hereof other than as expressly provided herein. The section headings contained in this Assignment are for reference purposes only and will not affect in any way the meaning or interpretation of this Assignment. Words in the singular shall be held to include the plural and vice versa as the context requires. This Assignment is not intended to confer any right or benefit on any third party (including, but not limited to, any employee or beneficiary of any Party), and no action may be commenced or prosecuted against a Party by any third party claiming as a third-party beneficiary of this Assignment or any of the transactions contemplated by this Assignment. No oral explanation or oral information by a Party hereto will alter the meaning or interpretation of this Assignment. No amendments or modifications will be effective unless in writing signed by authorized representatives of each of the Parties. The terms and conditions of this Assignment will prevail notwithstanding any different, conflicting or additional terms and conditions that may appear on any letter, email or other communication or other writing not expressly incorporated into this Assignment. The following exhibits are attached hereto and incorporated herein: *Exhibit A*, *Exhibit B*, *Exhibit C*, and *Exhibit D*.

6.9 The Parties expressly acknowledge and agree that rescission of this Assignment shall not be an appropriate remedy for any breach of this Assignment, and Assignee hereby expressly waives any right to seek or obtain rescission of this Assignment; provided, however, that the foregoing shall not in any way limit any other rights or remedies that either Party may have hereunder or under applicable law.

IN WITNESS WHEREOF, intending to be legally bound, the Parties have executed this Assignment as of the Effective Date by their duly authorized representatives.

Caris Life Sciences, Inc.

By: [Signature]

Name: Gerard Martino

Title: Treasurer

Date: 6/30/10

ImmunoTheragnostics, Inc.

By: [Signature]

Name: Russ Farr

Title: Secretary

Date: 6/30/10

Caris MPI

By: [Signature]

Name: Gerard Martino

Title: Treasurer

Date: 6/30/10

Caris Life Sciences Luxembourg Holdings S.a.r.l.

By: [Signature]

Name: Gerard Martino

Title: Agent

Date: 6/30/10

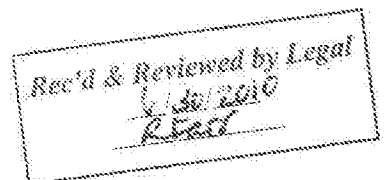


Exhibit A- ITI Patents

ITI *Subject to waiver by UL of advance notice provision by for sublicense by assignee to Caris MPI

WSGR Ref. No.	Case Type	Country	Application No.	Filing Date	(Pub.) / Patent No.	PubDate	Title	Inventors	Assignee
717.601	ORD	Patent Cooperation Treaty	US2008/52205	28-Jan-2008	08/092153	31-Jul-08	MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.611	PCT	European Patent Convention	8728400.6	28-Jan-2008	2117305	18-Nov-2009	MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.661	PCT	Australia	2008207735	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.681	PCT	Brazil	P0806438-9	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.701	PCT	Canada	2676143	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.711	PCT	China (People's Republic)	86009058.6	28-Jan-2008		(22/03/10)	MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.731	PCT	Israel	200027	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.741	PCT	India	5484/DELNP/09	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.761	PCT	Japan	2008547455	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.791	PCT	New Zealand	578546	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.831	PCT	United States of America	12/524,432	24-Jul-2009	(10/0092524)	(04/15/10)	MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
717.841	PCT	South Africa	Not yet Assigned	28-Jan-2008			MODIFICATION OF EXOSOMAL COMPONENTS FOR USE AS A VACCINE	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.601	ORD	Patent Cooperation Treaty	US2008/52223	28-Jan-2008	08/092164	31-Jul-08	METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.

718.511	PCT	European Patent Convention	8708416.8	28-Jan-2008	2111550	28-Oct-2009	METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.681	PCT	Australia	8207746	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.691	PCT	Brazil	PI0606437-7	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.701	PCT	Canada	2676148	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.711	PCT	China (People's Republic)	88009098	28-Jan-2008	(10165719A)	(02/24/10)	METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.731	PCT	Israel	200026	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.

718.741	PCT	India	5423/DELNP/09	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.761	PCT	Japan	2008547458	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.791	PCT	New Zealand	578547	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.831	PCT	United States of America	12/524,398	24-Jul-2008	(10/0055794)	(03/04/10)	METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.841	PCT	South Africa	2008/08604	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.301	CON	United States of America	12/711,889	24-Feb-2010			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.601	IPRD	Patent Cooperation Treaty	US2008/71235	25-Jul-2008	09/018357	28-Jan-08	EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.611	PCT	European Patent Convention	8796696	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.641	PCT	United Kingdom	9144429	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.681	PCT	Australia	8279016	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.691	PCT	Brazil	Not yet Assigned	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.701	PCT	Canada	2678113	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.711	PCT	China (People's Republic)	880265224	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.

718.731	PCT	Israel	200026	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.741	PCT	India	5483/DELNP.09	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.761	PCT	Japan	2009547458	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.791	PCT	New Zealand	578547	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.831	PCT	United States of America	12/524,398	24-Jul-2009	(10/0655724)	(03/04/10)	METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
718.841	PCT	South Africa	2009/05004	28-Jan-2008			METHODS OF DETECTING AUTOANTIBODIES FOR DIAGNOSING AND CHARACTERIZING DISORDERS	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.301	CON	United States of America	12/711,499	24-Feb-2010			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.601	ORD	Patent Cooperation Treaty	US2008/71295	05-Jul-2008	09/015397	29-Jan-09	EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.611	PCT	European Patent Convention	8796556	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.641	PCT	United Kingdom	9144429	28-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.

719.661	PCT	Australia	6279016	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.691	PCT	Brazil	Not yet Assigned	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.701	PCT	Canada	2676113	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.711	PCT	China (People's Republic)	660025224	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.731	PCT	Israel	200026	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.741	PCT	India	1310/DELNP/10	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.761	PCT	Japan	616421	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.791	PCT	New Zealand	578550	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.831	PCT	United States of America	12/524,452	03-Aug-2009			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
719.841	PCT	South Africa	Not yet Assigned	25-Jul-2008			EXOSOME-ASSOCIATED MICRORNA AS A DIAGNOSTIC MARKER	TAYLOR, DOUGLAS D.; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.
720.101	PRO	United States of America	61/295,607	15-Jan-2010			ISOLATION OF CIRCULATING EXOSOMES	TAYLOR, DOUGLAS ZACHARIAS; GERCEL-TAYLOR, CICEK	University of Louisville research Foundation, Inc.

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Exhibit B- Life Sciences Patents

CARIS LIFE SCIENCES

WSGR Ref. No.	Case Type	Country	Application No.	Filing Date	Title	Inventors	Assignee	Notes
706.103	PRO	United States of America	61/278,049	02-Oct-2009	MICRORNA PROFILES IN EXOSOMES DERIVED FROM PROSTATE ADENOCARCINOMAS	KUSLICH, CHRISTINE	Assignment executed to CLS but not recorded	
706.106	PRO	United States of America	61/332,174	06-May-2010	METHODS AND SYSTEMS OF USING VESICLES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D	Assignment executed to CLS (Halbert missing) but not recorded	
706.301	COR	United States of America	12/858,452	5-Feb-2010	METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.	Assignment executed to CLS	
757.101	PRO	United States of America	61/250,454	29-Oct-2009	ANALYSIS OF TUMOR TYPES	KUSLICH, CHRISTINE; JARIWALA, UNNATI; DEJEZA-JAMANILA, LIZA; ARNOLD, KEELY; MCGINNIS, MATTHEW; HOWELL, M.; KIMBROUGH, J.; DENG, T.; CONRAD, A.; ELLIS, P.; KENNEDY, P.; TINDER, T.; ESMAY, P.; MANEY, T.	Assignment executed to CLS (Howell missing) but not recorded	
761.101	PRO	United States of America	61/266,937	4-Dec-2009	METHODS AND SYSTEMS FOR ISOLATING, STORING, AND ANALYZING EXOSOMES	KUSLICH, CHRISTINE; KLASS, MICHAEL R.	Assignment executed to CLS but not recorded	
765.101	PRO	United States of America	61/265,350	30-Nov-2009	IDENTIFICATION AND CHARACTERIZATION OF SUBPOPULATIONS OF EXOSOMES	PAWLOWSKI, TRACI; SPETZLER, DAVID; TINDER, TERESA; ESMAY, PAULA; CONRAD, AMBER; ELLIS, PHIL; KENNEDY, PATRICK; TYRELL, ANNEMARIE; JARIWALA, UNNATI; KUSLICH, CHRISTINE	Assignment executed to CLS but not recorded	
766.101	PRO	United States of America	61/265,343	30-Nov-2009	EXOSOMES AS A BIOSIGNATURE FOR PROSTATE CANCER	KUSLICH, CHRISTINE; PAWLOWSKI, TRACI; KIMBROUGH, JEFF; DENG, TA; TINDER, TERESA; KIM, JOON; SPETZLER, DAVID	Assignment executed to CLS but not recorded	
767.101	PRO	United States of America	61/265,348	30-Nov-2009	EXOSOME-BASED BIOSIGNATURES FOR EARLY DIAGNOSIS OF COLORECTAL CANCER	SPETZLER, DAVID; PAWLOWSKI, TRACI; KIMBROUGH, JEFF; DENG, TA; TINDER, TERESA; KIM, JOON; KUSLICH, CHRISTINE	Assignment executed to CLS but not recorded	
767.102	PRO	United States of America	61/321,392	6-Apr-2010	VESICLE-BASED BIOSIGNATURES FOR EARLY DIAGNOSIS OF COLORECTAL CANCER	SPETZLER, DAVID; PAWLOWSKI, TRACI; KIMBROUGH, JEFF; DENG, TA; TINDER, TERESA; KIM, JOON; KUSLICH, CHRISTINE	Assignment executed to CLS but not recorded	

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Exhibit C- MPI Patents

CARIS MPI

WSGR Ref. No.	Case Type	Country	Application No.	Filing Date	(Pub.) / Patent No.	PubDate	Title	Inventors	Assignee
703.101	PRO	United States of America	61/114,045	11/12/2008			METHODS FOR DIAGNOSIS, PROGNOSIS, MONITORING, DETECTING AND TREATMENT OF EPITHELIAL CANCERS	KLASS, MICHAEL R.; LOESCH, DAVID M.	No assignment executed
703.201	ORD	United States of America	12/608,847	10/30/2009	2010-0113296-A1	5/6/2010	METHODS FOR ASSESSING RNA PATTERNS	KLASS, MICHAEL R.; KUSLICH, CHRISTINE; POSTE, GEORGE	Assignment executed to MPI
703.601	ORD	Patent Cooperation Treaty	US2009/62880	10/30/2009			METHODS FOR ASSESSING RNA PATTERNS	KLASS, MICHAEL R.; KUSLICH, CHRISTINE; LOESCH, DAVID M.	No assignment executed
703.641	ORD	United Kingdom	920030.4	10/30/2009			METHODS FOR ASSESSING RNA PATTERNS	KLASS, MICHAEL R.; KUSLICH, CHRISTINE; POSTE, GEORGE	No assignment executed
704.101	PRO	United States of America	61/114,056	11/12/2008			METHODS FOR ASSESSING RNA PATTERNS	KLASS, MICHAEL R.	No assignment executed
704.102	PRO	United States of America	61/109,742	10/30/2008			METHODS FOR DIAGNOSIS, PROGNOSIS, MONITORING AND TREATMENT OF PROSTATE CANCER UTILIZING MIR-141	KLASS, MICHAEL R.	No assignment executed
704.103	PRO	United States of America	61/112,571	11/7/2008			METHODS FOR DIAGNOSIS, PROGNOSIS, MONITORING AND TREATMENT OF PROSTATE CANCER UTILIZING MIR-370	KLASS, MICHAEL R.	No assignment executed
706.101	PRO	United States of America	61/114,065	11/13/2008			EXOSOMES FOR USE AS A DIAGNOSTIC, PROGNOSTIC OR THERAPY RELATED MARKERS AND IN PROFILING OF PHYSIOLOGICAL STATES	KUSLICH, CHRISTINE; POSTE, GEORGE	No assignment executed
706.102	PRO	United States of America	61/151,183	2/3/2009			BIDMARKER COMBINATIONS	KUSLICH, CHRISTINE; POSTE, GEORGE	No assignment executed
706.104	PRO	United States of America	61/253,027	10/19/2009			FUSION GENE DETECTION IN EXOSOMES	KUSLICH, CHRISTINE; KLASS, MICHAEL R.; JAFI WALA, UNNATI	No assignment executed
706.105	PRO	United States of America	61/274,194	3/1/2010			METHODS AND SYSTEMS OF USING VESICLES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D.	No assignment executed
706.107	PRO	United States of America	61/348,214	5/25/2010			METHODS AND SYSTEMS OF USING VESICLES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D.	No assignment executed

706.106	PRO	United States of America	61/348,665	5/26/2010			METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D.	No assignment executed
706.108	PRO	United States of America	61/354,125	6/11/2010			METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D.	No assignment executed
706.110	PRO	United States of America	61/355,367	6/16/2010			METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D.	No assignment executed
706.110A	PRO	United States of America	61/355,518	6/16/2010			METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.; SPETZLER, DAVID; PAWLOWSKI, TRACI; HALBERT, DAVID D.	No assignment executed
706.201	ORD	United States of America	12/591,226	11/12/2009			METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE	Assignment executed to MPI
706.601	ORD	Patent Cooperation Treaty	US2009/06095	11/12/2009			METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE; KLASS, MICHAEL R.	Assignment executed to MPI
706.641	PCT	United Kingdom	921348.9	11/12/2009	GB2463401	3/17/2010	METHODS AND SYSTEMS OF USING EXOSOMES FOR DETERMINING PHENOTYPES	KUSLICH, CHRISTINE; POSTE, GEORGE	Assignment executed to MPI
771.101	PRO	United States of America	61/294,819	1/19/2010			DETECTION OF GI CANCERS	KUSLICH, CHRISTINE; PAWLOWSKI, TRACI	No assignment executed
771.102	PRO	United States of America	61/322,690	4/9/2010			DETECTION OF GI CANCERS	KUSLICH, CHRISTINE; PAWLOWSKI, TRACI; SPETZLER, DAVID	No assignment executed
771.103	PRO	United States of America	61/334,547	5/13/2010			DETECTION OF GI CANCERS	KUSLICH, CHRISTINE; PAWLOWSKI, TRACI; SPETZLER, DAVID	No assignment executed
773.101	PRO	United States of America	61/305,517	3/17/2010			METHODS AND SYSTEMS FOR ISOLATING MICROVESICLES	KUSLICH, CHRISTINE; SPETZLER, DAVID	No assignment executed
781.101	PRO	United States of America	61/321,407	4/6/2010			BIOMARKERS FOR BPH AND PROSTATE CANCER	PAWLOWSKI, TRACI; KUSLICH, CHRISTINE; SPETZLER, DAVID	No assignment executed
781.102	PRO	United States of America	61/356,974	6/21/2010			BIOMARKERS FOR BPH AND PROSTATE CANCER	PAWLOWSKI, TRACI; KUSLICH, CHRISTINE; SPETZLER, DAVID	No assignment executed
799.101	PRO	United States of America	61/357,517	6/22/2010			MEMBRANE VESICLE ANTIGENS	PAWLOWSKI, TRACI; KUSLICH, CHRISTINE; SPETZLER, DAVID	No assignment executed

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Exhibit D- Initial Products

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<i>Product or Service</i>	<i>Royalty Rate</i>
<p><u>The Carisome Prostate MDx Test.</u> This test provides a multiplexed protein immunoassay that provides a diagnostic readout for normal versus prostate cancer (PCa) for a sample assayed. The assay comprises the following general steps:</p> <ol style="list-style-type: none"> 1. Concentration: <ol style="list-style-type: none"> a. Plasma separated from whole blood from a subject; and b. Filtration based on size to concentrate membrane vesicles (e.g., exosomes) present in the plasma. 2. Characterization <ol style="list-style-type: none"> a. Exosomes are mixed with beads coated with various exosome-specific antibodies to capture the targeted exosomes and separate them from the normal population (Capture antibodies used are specific for PSMA, PCSA and B7H3); b. A cocktail of fluorescent detector antibodies are then added to detect the presence of exosomes on the beads (detector antibodies are specific to CD9, CD63 and CD81); c. Using a liquid flow and fluorescence detector, exosomes are then identified and characterized. 3. Readout: A sample is identified as being normal or PCa based on the characterization above. 	3%

The State of Texas

County of Dallas

I, Summer Keywook, swear that the attached is a true and complete copy of the document which it purports to represent, and that, to best of my knowledge, the photocopied document is neither a public record nor a publicly recordable document, certified copies of which are available from an official source other than a notary public.

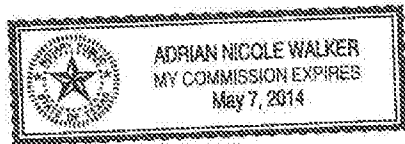
Sworn to and subscribed before me this 19th day of September, 2011, by _____

Summer Keywook

☒ Personally known

☐ Produced Identification

Type of ID: _____



(PERSONALIZED SEAL)

Adrian Nicole Walker

Notary Public, State of Texas

Adrian Nicole Walker

(Print name of Notary Public here)

My commission expires the 19th day of SEPTEMBER, 2011