

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Kurt Vagle</td> <td>06/20/2013</td> </tr> <tr> <td>William S. Marshall</td> <td>06/20/2013</td> </tr> <tr> <td>Christina Dalby</td> <td>06/20/2013</td> </tr> </tbody> </table>		Name	Execution Date	Kurt Vagle	06/20/2013	William S. Marshall	06/20/2013	Christina Dalby	06/20/2013
Name	Execution Date								
Kurt Vagle	06/20/2013								
William S. Marshall	06/20/2013								
Christina Dalby	06/20/2013								
RECEIVING PARTY DATA									
Name:	Miragen Therapeutics								
Street Address:	6200 Lookout Road								
City:	Boulder								
State/Country:	COLORADO								
Postal Code:	80301								
PROPERTY NUMBERS Total: 2									
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13883363</td> </tr> <tr> <td>PCT Number:</td> <td>US2011059588</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13883363	PCT Number:	US2011059588		
Property Type	Number								
Application Number:	13883363								
PCT Number:	US2011059588								
CORRESPONDENCE DATA									
Fax Number:	2028427899								
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
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ATTORNEY DOCKET NUMBER:	308934-2329 308934-2179								
NAME OF SUBMITTER:	Mark L. Hayman								
Signature:	/Mark L. Hayman/								

CH \$80.00 13883363

Date:

07/23/2013

**Total Attachments: 5**

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ASSIGNMENT

Kurt VAGLE, of Boulder, Colorado, Christina DALBY of Boulder, Colorado and William S. MARSHALL, of Boulder Colorado and (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled **BASE MODIFIED OLIGONUCLEOTIDES**, and which is a:

- (1)  provisional application
  - (a)  to be filed herewith; or
  - (b)  bearing Application No. \_\_\_\_\_, and filed on \_\_\_\_\_ or \_\_\_\_\_
- (2)  non-provisional application
  - (a)  to be filed herewith; or
  - (b)  bearing Application No. 13/883,363, and filed on May 3, 2013; or \_\_\_\_\_
- (3)  PCT application
  - (a)  bearing Application No. PCT/US2011/059588, and filed on November 7, 2011.

**WHEREAS, MIRAGEN THERAPEUTICS**, having its principal place of business at 6200 Lookout Road, Boulder, CO 80301 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention; the application for patent identified in paragraph (1), (2) and/or (3); the right to file applications for patent of the United States or other countries on the Invention; any application for patent of the United States or other countries claiming priority to these application; any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent of the United States or other countries that may be granted therefor or thereon.

**NOW, THEREFORE**, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified in paragraph (1) (2) and/or (3);
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Hague Convention, the

Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;

(d) any application(s) for patent of the United States or other countries claiming the Invention(s);

(e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified in paragraph (1), (2), or (3) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and

(f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and

(g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) - (e), including any reissue(s) and extension(s) of said patent(s).


The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignor, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

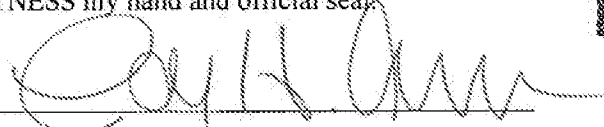
The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

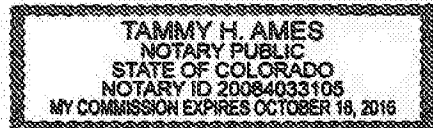
Date: 6/20/2013

By:   
Kurt VAGLE

State of Colorado )  
County of Boulder ) ss.  
On June 20, 2013 before me, Tammy H. Ames Notary  
Public, personally appeared Kurt Vagle, who proved to me  
on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed  
to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the  
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed  
the instrument.

WITNESS my hand and official seal.

  
Signature of Notary Public



Place Notary Seal Above

My Commission Expires: 10/19/2016

Date: 6/20/13

By: *Christina Dalby*  
Christina DALBY

State of Colorado )  
County of Boulder ) ss.

On June 20, 2013, before me, Tammy H. Ames, Notary Public, personally appeared Christina Dalby, who proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

*Tammy H. Ames*  
Signature of Notary Public

Place Notary Seal Above

My Commission Expires: 10/16/2016

TAMMY H. AMES  
NOTARY PUBLIC  
STATE OF COLORADO  
NOTARY ID 20084033105  
MY COMMISSION EXPIRES OCTOBER 16, 2016

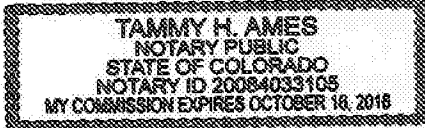
Date: 6/20/13

By: [Signature]  
William S. MARSHALL

State of Colorado )  
County of Boulder ) ss.  
On June 20, 2013, before me, Tammy H. Ames, Notary Public, personally appeared William S. Marshall, who proved to me on the basis of satisfactory evidence, to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

[Signature]  
Signature of Notary Public



Place Notary Seal Above

My Commission Expires: 10/18/2016