

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5110780

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
EMILY LAW	07/26/2018
REUBEN S. HARRIS	07/06/2018
WILLIAM BROWN	07/26/2018
MICHAEL CARPENTER	07/26/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	REGENTS OF THE UNIVERSITY OF MINNESOTA
<b>Street Address:</b>	600 MCNAMARA ALUMNI CENTER
<b>Internal Address:</b>	200 OAK STREET
<b>City:</b>	MINNEAPOLIS
<b>State/Country:</b>	MINNESOTA
<b>Postal Code:</b>	55455-2020
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15738664
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)305-1228
<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>	
<b>Phone:</b>	6123051220
<b>Email:</b>	cberling@mrgiplaw.com
<b>Correspondent Name:</b>	MUETING, RAASCH & GEBHARDT, P.A.
<b>Address Line 1:</b>	111 THIRD AVENUE SOUTH - SUITE 350
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55401
<b>ATTORNEY DOCKET NUMBER:</b>	110.04890101
<b>NAME OF SUBMITTER:</b>	CHRISTOPHER D. GRAM
<b>SIGNATURE:</b>	/Christopher D. Gram/
<b>DATE SIGNED:</b>	08/27/2018
<b>Total Attachments: 12</b>	
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## UNIVERSITY OF MINNESOTA

### ASSIGNMENT

WHEREAS, I, Reuben S. Harris, have invented certain new and useful improvements in ANTI-APOBEC3 ANTIBODIES AND METHODS OF MAKING AND USING, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Provisional application no. 62/186,109 on 6/29/2015; PCT/US2016/040011 on 6/29/2016; and Utility application no. 15/738,664 on 12/21/2017 (the "Application(s)");

Whereas, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including my rights under the Paris Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns 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 and enjoyed by me had this assignment and sale not been made.


I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of the provisions of the Paris Convention.

Attorney Docket Number 110.04890101  
UM Case No. 20150261

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 6<sup>th</sup> day of July, 2018.

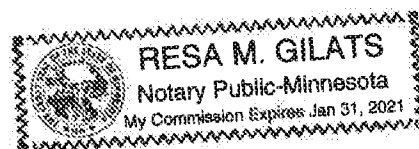
  
Reuben S. Harris

STATE OF Minnesota )  
COUNTY OF Hennepin )

On this 6<sup>th</sup> day of July, 2018, before me personally appeared Reuben S. Harris, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

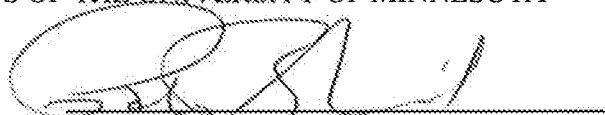
  
Notary Public



Attorney Docket Number 110.04890101  
UM Case No. 20150261

IN WITNESS WHEREOF, I have hereunto set my hand on this 6<sup>th</sup> day of July, 2018, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

REGENTS OF THE UNIVERSITY OF MINNESOTA


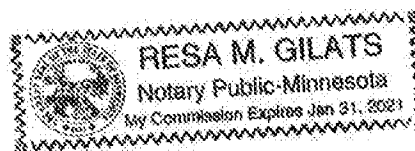


Paul B. Savereide  
Senior Associate General Counsel  
per Presidential Delegation DA\_028016

STATE OF MINNESOTA       )  
  )  
COUNTY OF HENNEPIN     )

On this 6<sup>th</sup> day of July, 2018, before me personally appeared Paul B. Savereide, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

  
Notary Public



UNIVERSITY OF MINNESOTA  
ASSIGNMENT

WHEREAS, I, William Brown, have invented certain new and useful improvements in ANTI-APOBEC3 ANTIBODIES AND METHODS OF MAKING AND USING, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Provisional application no. 62/186,109 on 6/29/2015; PCT/US2016/040011 on 6/29/2016; and Utility application no. 15/738,664 on 12/21/2018 (the "Application(s)");

Whereas, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including my rights under the Paris Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns 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 and enjoyed by me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of the provisions of the Paris Convention.

Attorney Docket Number 110.04890101  
UM Case No. 20150261

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 26 day of July, 2018.

William Brown  
William Brown

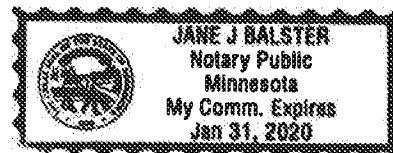
STATE OF MINNESOTA )

COUNTY OF HANCOCK )

On this 26 day of July, 2018, before me personally appeared William Brown, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.


Jane J. Balster  
Notary Public



Attorney Docket Number 110.04890101  
UM Case No. 20150261

IN WITNESS WHEREOF, I have hereunto set my hand on this 31<sup>st</sup> day of July, 2018, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

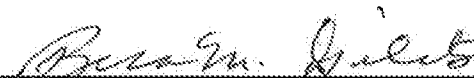
REGENTS OF THE UNIVERSITY OF MINNESOTA

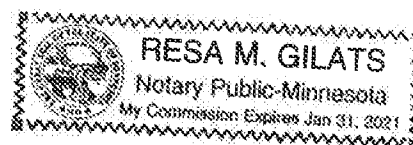
  
Paul B. Savereide  
Senior Associate General Counsel  
per Presidential Delegation DA\_028016

STATE OF MINNESOTA       )  
  )  
COUNTY OF HENNEPIN     )

On this 31<sup>st</sup> day of July, 2018, before me personally appeared Paul B. Savereide, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

  
Notary Public



Attorney Docket Number 110.04890101  
UM Case No. 20150261





UNIVERSITY OF MINNESOTA  
ASSIGNMENT

WHEREAS, I, Michael Carpenter, have invented certain new and useful improvements in ANTI-APOBEC3 ANTIBODIES AND METHODS OF MAKING AND USING, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Provisional application no. 62/186,109 on 6/29/2015; PCT/US2016/040011 on 6/29/2016; and Utility application no. 15/738,664 on 12/21/2018 (the "Application(s)");

Whereas, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including my rights under the Paris Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns 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 and enjoyed by me had this assignment and sale not been made.

I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of the provisions of the Paris Convention.

Attorney Docket Number 110.04890101  
UM Case No. 20150261

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 26 day of July, 2018.

Michael Carpenter  
Michael Carpenter

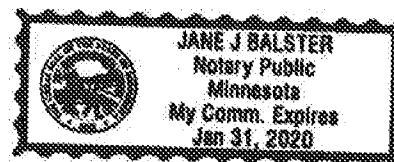
STATE OF Minnesota )

COUNTY OF Hennepin )

On this 26 day of July, 2018, before me personally appeared Michael Carpenter, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

Jane J. Balster  
Notary Public



Attorney Docket Number 110.04890101  
UM Case No. 20150261

IN WITNESS WHEREOF, I have hereunto set my hand on this 31<sup>st</sup> day of July, 2018, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

REGENTS OF THE UNIVERSITY OF MINNESOTA

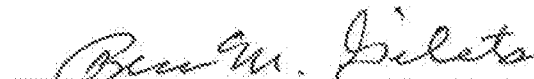
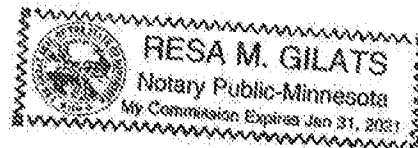


Paul B. Savereide  
Senior Associate General Counsel  
per Presidential Delegation DA\_028016

STATE OF MINNESOTA       )  
  )  
COUNTY OF HENNEPIN     )

On this 31<sup>st</sup> day of July, 2018, before me personally appeared Paul B. Savereide, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

  
Notary Public

Attorney Docket Number 110.04890101  
UM Case No. 20150261



UNIVERSITY OF MINNESOTA  
ASSIGNMENT

WHEREAS, I, Emily Law, have invented certain new and useful improvements in ANTI-APOBEC3 ANTIBODIES AND METHODS OF MAKING AND USING, for which applications for Letters Patents of the United States have been made, said applications being filed as follows: Provisional application no. 62/186,109 on 6/29/2015; PCT/US2016/040011 on 6/29/2016; and Utility application no. 15/738,664 on 12/21/2018 (the "Application(s)");

Whereas, REGENTS OF THE UNIVERSITY OF MINNESOTA ("Assignee"), having offices at 600 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2020, is desirous of documenting the acquisition of the entire right, title and interest in and to said invention, said Application(s) and in, to and under any and all Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, and to the extent that I have not done so already via a prior agreement with the Assignee, or if I have already done so via a prior agreement with the Assignee then in confirmation of said prior agreement, I have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto Assignee, its successors and assigns, the entire right, title and interest in and to the inventions set forth hereinabove and the entire right, title and interest in and to any and all Letters Patent of the United States and any foreign countries which may be granted therefor on the Application(s) including my rights under the Paris Convention for the Protection of Industrial Property, and in and to any and all extensions, divisions, continuations, continuations-in-part or reissues of said Application(s) and Letters Patent that may be granted, including all rights to claim priority therefrom, and specifically including the right to enforce such Letters Patent in the name of Assignee and to recover damages for past infringement of the rights conveyed herein, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns 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 and enjoyed by me had this assignment and sale not been made.

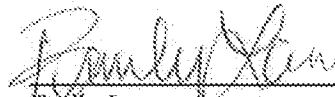
I hereby authorize said Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent, in its own name if desired, in any and all foreign countries, and additionally to claim the filing date of any the Application(s) and/or otherwise take advantage of the provisions of the Paris Convention.

Attorney Docket Number 110.04890101  
UM Case No. 20150261

Upon said consideration I do hereby covenant and agree with said Assignee, its successors and assigns, that I will not execute in writing or do any act whatsoever conflicting with these presents, and that I or my executors or administrators will at any time upon request, without further or additional consideration, but at the expense of said Assignee, its successors and assigns, execute such additional writings and do such additional acts as said Assignee, its successors and assigns, may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, reissues or extended Letters Patent of the United States, or of any and all foreign countries on said invention, and in enforcing any rights occurring as a result of such application or patents, by giving testimony in any proceedings or transactions involving such applications or patents.

I hereby request the Honorable Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this 26 day of July, 2018.

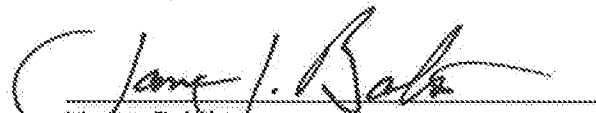
  
Emily Law

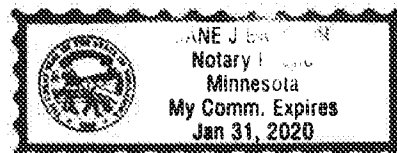
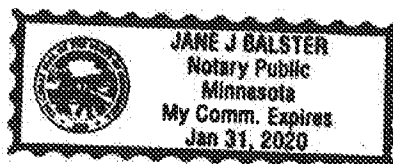
STATE OF Minnesota )

COUNTY OF Hennepin )

On this 26 day of July, 2018, before me personally appeared Emily Law, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

  
Notary Public



Attorney Docket Number 110.04890101  
UM Case No. 20150261

IN WITNESS WHEREOF, I have hereunto set my hand on this 31<sup>st</sup> day of July, 2018, on behalf of Assignee Regents of the University of Minnesota accepting this assignment.

REGENTS OF THE UNIVERSITY OF MINNESOTA


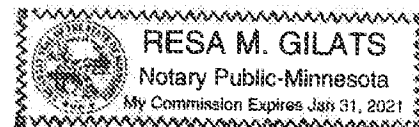


Paul B. Savereide  
Senior Associate General Counsel  
per Presidential Delegation DA\_028016

STATE OF MINNESOTA       )  
  )  
COUNTY OF HENNEPIN     )

On this 31<sup>st</sup> day of July, 2018, before me personally appeared Paul B. Savereide, to me known to be the person described in and who executed the foregoing instrument and acknowledged that s/he executed the same as his/her free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.

  
Notary Public

Attorney Docket Number 110.04890101  
UM Case No. 20150261