

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5144019

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
GEORGE GRANT	12/19/2017
ANGELA MARGARET PATTERSON	12/20/2017
IMKE MULDER	01/11/2018
EMMA RAFTIS	01/11/2018
SEANIN MCCLUSKEY	01/12/2018
RECEIVING PARTY DATA	
Name:	4D PHARMA RESEARCH LIMITED
Street Address:	LIFE SCIENCES INNOVATION BUILDING
Internal Address:	CORNHILL ROAD
City:	ABERDEEN
State/Country:	UNITED KINGDOM
Postal Code:	AB25 2ZS
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16040356
CORRESPONDENCE DATA	
Fax Number:	(650)493-6811
<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:	650-493-9300
Email:	rfairbrother@wsgr.com
Correspondent Name:	WILSON SONSINI GOODRICH & ROSATI
Address Line 1:	650 PAGE MILL ROAD
Address Line 4:	PALO ALTO, CALIFORNIA 94304
ATTORNEY DOCKET NUMBER:	49455-713.302
NAME OF SUBMITTER:	ROBYN FAIRBROTHER
SIGNATURE:	/Robyn Fairbrother/
DATE SIGNED:	09/17/2018
Total Attachments: 8	

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source=49455.713.302 - Assignment (all inventors)#page8.tif

WHEREAS, the undersigned:

- | | | | |
|---|---|--|--|
| 1. George GRANT
Aberdeen, United Kingdom | 2. Angela Margaret PATTERSON
Norwich, United Kingdom | 3. Imke MULDER
Aberdeen, United Kingdom | 4. Seanin MCCLUSKEY
Leeds, United Kingdom |
| 5. Emma RAFTIS
Leeds, United Kingdom | | | |

(hereinafter "Inventor(s)"), have invented certain new and useful improvements in

COMPOSITIONS COMPRISING BACTERIAL STRAINS

- ☐ for which a United States patent application is executed on even date herewith;
- ☒ for which application serial number 15/592,178 was filed on May 10, 2017 in the United States Patent and Trademark Office;
- ☐ for which application serial number _____ was filed on _____ in the U.S. Receiving Office of the Patent Cooperation Treaty;
- ☐ for which application serial number _____ was filed on _____ in the _____ Patent Office; and/or
- ☐ for which an application was filed upon which a United States Patent issued on _____, as U.S. Patent No. _____

(hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s).

WHEREAS, 4D Pharma Research Limited, a company of Scotland, having a place of business at Life Sciences Innovation Building, Cornhill Road, Aberdeen AB25 2ZS United Kingdom, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)").

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; (e) in and to each and every reissue, reexamination, renewal or extension of any kind of any of the foregoing; (f) in and to each and every patent and application filed outside the United States and corresponding to any of the foregoing; and (g) in and to all claims for past, present and future infringement of the Patent(s), including all rights to sue for and to receive and recover for Assignee's own use all past, present, and future lost profits, royalties, and damages of whatever nature recoverable from an infringement of the Patent(s).

2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.

4. Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal representatives and assigns.

6. This instrument will be interpreted and construed in accordance with the laws of the State of California, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement.

IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:

Date: 19 Dec 2017


George GRANT

Date: _____

Angela Margaret PATTERSON

Date: _____

Imke MULDER

Date: _____

Seanin MCCLUSKEY

Date: _____

Emma RAFTIS

PATENT ASSIGNMENT	Docket Number 49455-713.831
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited	
Date: <u>6 JANUARY 2018</u> Signature: 	
Name: Alex Stevenson	
Title: Director, Chief Scientific Officer	

PATENT
REEL: 046890 FRAME: 0005

PATENT ASSIGNMENT	Docket Number 49455-713.831
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited	
Date: <u>6 JANUARY 2018</u> Signature: 	
Name: Alex Stevenson	
Title: Director, Chief Scientific Officer	

PATENT ASSIGNMENT		Docket Number 49455-713.831										
WHEREAS, the undersigned: <table style="width: 100%; border: none;"> <tr> <td style="width: 25%; vertical-align: top;">1. George GRANT Aberdeen, United Kingdom</td> <td style="width: 25%; vertical-align: top;">2. Angela Margaret PATTERSON Norwich, United Kingdom</td> <td style="width: 25%; vertical-align: top;">3. Imke MULDER Aberdeen, United Kingdom</td> <td style="width: 25%; vertical-align: top;">4. Seanin MCCLUSKEY Leeds, United Kingdom</td> </tr> <tr> <td colspan="4" style="vertical-align: top;">5. Emma RAFTIS Leeds, United Kingdom</td> </tr> </table> (hereinafter "Inventor(s)), have invented certain new and useful improvements in COMPOSITIONS COMPRISING BACTERIAL STRAINS ☐ for which a United States patent application is executed on even date herewith; ☒ for which application serial number <u>15/592,178</u> was filed on <u>May 10, 2017</u> in the United States Patent and Trademark Office; ☐ for which application serial number _____ was filed on _____ in the U.S. Receiving Office of the Patent Cooperation Treaty; ☐ for which application serial number _____ was filed on _____ in the _____ Patent Office; and/or ☐ for which an application was filed upon which a United States Patent issued on _____, as U.S. Patent No. _____. (hereinafter, "Application(s)"). The term "Application(s)" also includes all patent applications that share or claim priority to or from the above application(s). WHEREAS, <u>4D Pharma Research Limited</u>, a company of <u>Scotland</u>, having a place of business at <u>Life Sciences Innovation Building, Cornhill Road, Aberdeen AB25 2ZS United Kingdom</u>, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s), and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise (hereinafter "Patent(s)"). NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee: 1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions; (b) in and to said Applications, including the right to claim priority to and from said Application(s); (c) in and to each and every application that is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); (d) in and to said Patent(s) and each and every patent issuing or reissuing from any of the foregoing; (e) in and to each and every reissue, reexamination, renewal or extension of any kind of any of the foregoing; (f) in and to each and every patent and application filed outside the United States and corresponding to any of the foregoing; and (g) in and to all claims for past, present and future infringement of the Patent(s), including all rights to sue for and to receive and recover for Assignee's own use all past, present, and future lost profits, royalties, and damages of whatever nature recoverable from an infringement of the Patent(s). 2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee. 3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns. 4. Said Inventor(s) hereby warrant, represent and covenant that said Inventor(s) have not entered and will not enter into any assignment, contract, or understanding in conflict herewith. 5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal representatives and assigns. 6. This instrument will be interpreted and construed in accordance with the laws of the State of California, without regard to conflict of law principles. If any provision of this instrument is found to be illegal or unenforceable, the other provisions shall remain effective and enforceable to the greatest extent permitted by law. This instrument may be executed in counterparts, each of which is deemed an original, but all of which together constitute one and the same agreement. IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> Date: _____ George GRANT Date: <u>11 January 2018</u> <u>Imke</u> Imke MULDER Date: <u>11 JANUARY 2018</u> <u>Emma Raftis</u> Emma RAFTIS </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> Date: _____ Angela Margaret PATTERSON Date: _____ Seanin MCCLUSKEY </td> </tr> </table>			1. George GRANT Aberdeen, United Kingdom	2. Angela Margaret PATTERSON Norwich, United Kingdom	3. Imke MULDER Aberdeen, United Kingdom	4. Seanin MCCLUSKEY Leeds, United Kingdom	5. Emma RAFTIS Leeds, United Kingdom				Date: _____ George GRANT Date: <u>11 January 2018</u> <u>Imke</u> Imke MULDER Date: <u>11 JANUARY 2018</u> <u>Emma Raftis</u> Emma RAFTIS	Date: _____ Angela Margaret PATTERSON Date: _____ Seanin MCCLUSKEY
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PATENT ASSIGNMENT	Docket Number 49455-713.831
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited Date: <u>6 JANUARY 2018</u> Signature: <u></u> Name: Alex Stevenson Title: Director, Chief Scientific Officer	

PATENT ASSIGNMENT

Docket Number 49455-713.831

WHEREAS, the undersigned:

- | | | | |
|---|---|--|--|
| 1. George GRANT
Aberdeen, United Kingdom | 2. Angela Margaret PATTERSON
Norwich, United Kingdom | 3. Imke MULDER
Aberdeen, United Kingdom | 4. Seanin MCCLUSKEY
Leeds, United Kingdom |
| 5. Emma RAFTIS
Leeds, United Kingdom | | | |

(hereinafter "Inventor(s)"), have invented certain new and useful improvements in

COMPOSITIONS COMPRISING BACTERIAL STRAINS

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- ☒ for which application serial number 15/592,178 was filed on May 10, 2017 in the United States Patent and Trademark Office;
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2. Said Inventor(s) hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any applications covering said Inventions; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Inventions; (d) for filing and prosecuting applications for reissuance of any said Patent(s); (e) for interference or other priority proceedings involving said Inventions; and (f) for legal proceedings involving said Inventions and any applications therefor and any Patent(s) granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that reasonable expenses incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

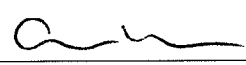
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IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:

Date: _____ George GRANT	Date: _____ Angela Margaret PATTERSON
Date: _____ Imke MULDER	Date: <u>12/1/18</u>  Seanin MCCLUSKEY
Date: _____ Emma RAFTIS	

PATENT ASSIGNMENT	Docket Number 49455-713.831
RECEIVED AND AGREED TO BY ASSIGNEE: 4D Pharma Research Limited Date: <u>6 JANUARY 2018</u> Signature:  Name: Alex Stevenson Title: Director, Chief Scientific Officer	