

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5665616

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|---|---|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                          |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                              |
| <b>CONVEYING PARTY DATA</b>   |   |
| <b>Name</b>   | <b>Execution Date</b>                   |
| MYUNGHA JANG  | 07/16/2019                              |
| SHIRI DORI-HACOHEN  | 06/07/2019                              |
| JAMES ALLAN   | 06/05/2019                              |
| <b>RECEIVING PARTY DATA</b>   |   |
| <b>Name:</b>  | UNIVERSITY OF MASSACHUSETTS             |
| <b>Street Address:</b>  | ONE BEACON STREET                       |
| <b>Internal Address:</b>  | 31ST FLOOR                              |
| <b>City:</b>  | BOSTON                                  |
| <b>State/Country:</b>   | MASSACHUSETTS                           |
| <b>Postal Code:</b>   | 02108                                   |
| <b>PROPERTY NUMBERS Total: 1</b>  |   |
| <b>Property Type</b>  | <b>Number</b>                           |
| Application Number:   | 16367734                                |
| <b>CORRESPONDENCE DATA</b>  |   |
| <b>Fax Number:</b>  | (978)341-0136                           |
| <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>   | 9783410036                              |
| <b>Email:</b>   | Lisa.Puopolo@hbsr.com                   |
| <b>Correspondent Name:</b>  | MARY LOU WAKIMURA, ESQ.                 |
| <b>Address Line 1:</b>  | HAMILTON, BROOK, SMITH & REYNOLDS, P.C. |
| <b>Address Line 2:</b>  | 530 VIRGINIA ROAD, P.O. BOX 9133        |
| <b>Address Line 4:</b>  | CONCORD, MASSACHUSETTS 01742-9133       |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 4682.1009-001 UMA 18-011                |
| <b>NAME OF SUBMITTER:</b>   | LISA PUOPOLO                            |
| <b>SIGNATURE:</b>   | /Lisa Puopolo/                          |
| <b>DATE SIGNED:</b>   | 08/13/2019                              |
| This document serves as an Oath/Declaration (37 CFR 1.63).  |   |
| <b>Total Attachments: 6</b>   |   |

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## DECLARATION AND ASSIGNMENT

Title of Invention: MODELING CONTROVERSY WITHIN POPULATIONS

As a below named inventor, I hereby declare that:

This declaration is directed to:

☐ the attached application (Attorney Docket Number \_\_\_\_\_), or

☒ United States application number 16/367,734 or PCT international number \_\_\_\_\_

The above-identified application was made or authorized to be made by me, and I have reviewed and understand the contents of the application, including the claims.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, each undersigned inventor has made certain inventions, improvements, and discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the "APPLICATION");

Whereas, THE UNIVERSITY OF MASSACHUSETTS, having a business address at One Beacon Street, 31<sup>st</sup> floor, Boston, MA 02108 (herein referred to as "ASSIGNEE"), desires to attain or has attained, and each undersigned inventor desires to grant or has granted to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I, one of the undersigned inventors (herein referred to "ASSIGNOR"), hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in any and all countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents, and further including any right to sue for past infringement. In addition, I hereby authorize and request any official whose duty it is to issue patents, to issue any patent on said improvements or resulting therefrom to said ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and I agree to execute any and all documents, oaths and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

I also hereby grant ASSIGNEE, its successors, legal representatives, and assigns, the right to insert in this Declaration and Assignment any further identification of the APPLICATION (including, but not limited to, patent Application Number and filing date).

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Signature: \_\_\_\_\_  
Legal Name of Inventor: Myungha Jang

Date: July 16, 2019

Witness: Yumees Zhang  
(print name of witness)

Date: 07/16/2019

Witness: Yuya Shiraki  
(print name of witness)

Date: 07/16/2019

Signature: \_\_\_\_\_  
Legal Name of Inventor: Shiri Dori-Hacohen

Date: \_\_\_\_\_

Witness: \_\_\_\_\_  
(print name of witness)

Date: \_\_\_\_\_

Witness: \_\_\_\_\_  
(print name of witness)

Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Legal Name of Inventor: James Allan

Date: \_\_\_\_\_

Witness: \_\_\_\_\_  
(print name of witness)

Date: \_\_\_\_\_

Witness: \_\_\_\_\_  
(print name of witness)

Date: \_\_\_\_\_

PATENT

REEL: 050036 FRAME: 0561

DECLARATION AND ASSIGNMENT

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Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Legal Name of Inventor: Myungha Jang

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

Signature: \_\_\_\_\_ Date: 6/7/19  
Legal Name of Inventor: Shiri Dori-Hacohen

\_\_\_\_\_  
Date: 6/7/19

\_\_\_\_\_  
Date: 6/7/19

Witness: Julia Lustig-Gonzalez  
(print name of witness)

Witness: Samuel Chiburis  
(print name of witness)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Legal Name of Inventor: James Allan

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

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Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Legal Name of Inventor: Myungha Jang

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Legal Name of Inventor: Shiri Dori-Hacohen

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

\_\_\_\_\_  
Date: \_\_\_\_\_  
Witness: \_\_\_\_\_  
(print name of witness)

Signature: \_\_\_\_\_ Date: 6/5/19  
Legal Name of Inventor: James Allan

*Joyce Mazeski*  
Date: 6/5/19  
Witness: *Joyce Mazeski*  
(print name of witness)

*Marian O'Connor*  
Date: 6/5/19  
Witness: *Marian O'Connor*  
(print name of witness)