

## PATENT ASSIGNMENT COVER SHEET

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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>
J. CHRISTOPHER LOVE	12/03/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
<b>Street Address:</b>	77 MASSACHUSETTS AVENUE
<b>City:</b>	CAMBRIDGE
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02139
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>PCT Number:</b>	US2018057170
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(240)359-4879
<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>	
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<b>Address Line 1:</b>	JOHNSON, MARCOU, ISAACS & NIX, LLC
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<b>ATTORNEY DOCKET NUMBER:</b>	BROD-2325WP
<b>NAME OF SUBMITTER:</b>	SUSAN FRATTURA
<b>SIGNATURE:</b>	/Susan Frattura/
<b>DATE SIGNED:</b>	12/03/2020
<b>Total Attachments: 4</b>	
source=BI_10238_signed_Love_Assignment_BROD-2325WP#page1.tif	
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**ASSIGNMENT**

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WHEREAS, we, **TRAVIS HUGHES**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, **MARC H. WADSWORTH, II**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, **ALEXANDER K. SHALEK**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, **TODD M. GIERAHN**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, **J. CHRISTOPHER LOVE**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, and **ANG A. TU**, having a correspondence address of c/o 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, have invented with others certain inventions and improvements disclosed in an International PCT Patent Application entitled "**CALLING GENETIC VARIATION FROM SINGLE-CELL TRANSCRIPTOMES**," filed in the United States Patent and Trademark Office as Receiving Office on October 23, 2018 and assigned PCT International Application No. PCT/US2018/057170; and

WHEREAS, **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, having a principal place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139, is desirous of acquiring an interest in the same; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which we hereby acknowledge, we, **TRAVIS HUGHES, MARC H. WADSWORTH, II, ALEXANDER K. SHALEK, TODD M. GIERAHN, J. CHRISTOPHER LOVE, and ANG A. TU**, *by these presents, do sell, assign, and transfer unto said Assignee, MASSACHUSETTS INSTITUTE OF TECHNOLOGY*, our full, exclusive, and entire right, title, and interest in and to said applications, in and to any divisions, continuations, reexaminations, and reissues thereof, and in and to all inventions and improvements disclosed and described in said applications, preparatory to obtaining Letters Patent of the United States therefor; and we hereby request the Director of the U.S. Patent and Trademark Office to issue any and all Letters Patent of the United States resulting from said applications, or from a division, continuation, reexamination, or reissue thereof, to **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, for its interest and for the use and benefit of **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, as assignees, and its assigns and legal representatives;

For the same consideration, we, by these presents, do sell, assign, and transfer to **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, our full, exclusive, and entire right, title, and interest in and to any foreign application or applications corresponding to said applications, in whole or in part, in countries other than the United States, in and to any Letters Patent and similar protective rights granted on said foreign applications, and in and to the right to claim any applicable priority rights arising from or required for said foreign applications under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of **MASSACHUSETTS INSTITUTE OF TECHNOLOGY**, or its designees insofar as permitted by applicable law;

AND, for the same consideration, we agree to sign all lawful papers, execute all division, continuing, reexamination, reissue, and other applications, make all assignments and rightful oaths, and generally do everything possible to aid **MASSACHUSETTS INSTITUTE OF**

Assignment  
PCT Application No. PCT/US2018/057170  
Hughes, Wadsworth, Shalek, Gierahn, Love, Tu

**TECHNOLOGY**, its successors, assigns, and nominees to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

In testimony whereof, we hereunto set our hands and seals on the dates indicated below.

\_\_\_\_\_  
**TRAVIS HUGHES** DATE

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the aforementioned state, on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared **TRAVIS HUGHES**, who, being duly sworn, signed and acknowledged the foregoing Assignment.

\_\_\_\_\_  
**NOTARY PUBLIC**  
My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
**MARC H. WADSWORTH II** DATE

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the aforementioned state, on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared **MARC H. WADSWORTH II**, who, being duly sworn, signed and acknowledged the foregoing Assignment.

\_\_\_\_\_  
**NOTARY PUBLIC**  
My Commission Expires: \_\_\_\_\_

Assignment  
PCT Application No. PCT/US2018/057170  
Hughes, Wadsworth, Shalek, Gierahn, Love, Tu

\_\_\_\_\_  
**ALEXANDER K. SHALEK**      DATE

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the aforementioned state, on this \_\_\_\_\_ day  
of \_\_\_\_\_, 20\_\_\_\_\_, personally appeared **ALEXANDER K. SHALEK**,  
who, being duly sworn, signed and acknowledged the foregoing Assignment.

\_\_\_\_\_  
**NOTARY PUBLIC**  
My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
**TODD M. GIERAHN**      DATE

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the aforementioned state, on this \_\_\_\_\_ day  
of \_\_\_\_\_, 20\_\_\_\_\_, personally appeared **TODD M. GIERAHN**, who,  
being duly sworn, signed and acknowledged the foregoing Assignment.

\_\_\_\_\_  
**NOTARY PUBLIC**  
My Commission Expires: \_\_\_\_\_

Assignment  
PCT Application No. PCT/US2018/057170  
Hughes, Wadsworth, Shalek, Gierahn, Love, Tu

In testimony whereof, we hereunto set our hands and seals on the dates indicated below.

J. Christopher Love 12/3/2020  
J. CHRISTOPHER LOVE DATE

\_\_\_\_\_  
ANG A. TU DATE

COMMONWEALTH OF MASSACHUSETTS  
COUNTY OF MIDDLESEX

Before me, a Notary Public in and for the aforementioned state, on this \_\_\_\_\_ day  
of \_\_\_\_\_, 20\_\_\_\_\_, personally appeared **ANG A. TU**, who, being duly  
sworn, signed and acknowledged the foregoing Assignment.

\_\_\_\_\_  
**NOTARY PUBLIC**  
My Commission Expires: \_\_\_\_\_