PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FRANK DEROSA	03/09/2018
MICHAEL HEARTLEIN	03/09/2018
JONATHAN ABYSALH	03/09/2018
DANIEL CRAWFORD	03/15/2018
ANUSHA DIAS	03/09/2018
SHRIRANG KARVE	03/09/2018

RECEIVING PARTY DATA

Name:	TRANSLATE BIO MA, INC.
Street Address:	200 SIDNEY STREET
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15907086

CORRESPONDENCE DATA

Fax Number: (617)526-9899

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.

Phone: (617) 526-9706

shynes@proskauer.com Email: PROSKAUER ROSE LLP **Correspondent Name:** Address Line 1: ONE INTERNATIONAL PLACE

Address Line 4: BOSTON, MASSACHUSETTS 02110

ATTORNEY DOCKET NUMBER:	MRT-2002US
NAME OF SUBMITTER:	CHRISTINE G. ESPINO
SIGNATURE:	/Christine G. Espino/
DATE SIGNED:	06/29/2018

Total Attachments: 9

PATENT REEL: 046242 FRAME: 0020

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PATENT REEL: 046242 FRAME: 0021

JOINT ASSIGNMENT

WHEREAS, each of the below-named inventors whose name and residence is set forth in the following Table 1:

Inventor Name	City, State
1. Frank DeRosa	Cambridge, Massachusetts
2. Michael Heartlein	Cambridge, Massachusetts
3. Jonathan Abysalh	Cambridge, Massachusetts
4. Daniel Crawford	Cambridge, Massachusetts
5. Anusha Dias	Cambridge, Massachusetts
6. Shrirang Karve	Cambridge, Massachusetts

Table 1

hereby declares and agrees, on behalf of himself/herself and all of his/her successors and assigns that each is aware of the patent application(s) entitled:

Methods For Purification of Messenger RNA

X ide	entified by United States App	plication Serial No.	15/907,086
	Inited States Patent and Trad		
X ide	entified by International Pate		PCT/US18/19978
led on	February 27, 2018	; and	
X an	d is also aware of the follow	ring priority applicati	ions:
	Serial No.		Filed

WHEREAS Translate Bio MA, Inc. (hereinafter "ASSIGNEE"), having a usual place of business at 200 Sidney Street, Cambridge, MA 02139, desires to acquire or confirm an interest therein;

NOW, THEREFORE, to all whom it may concern be it known that, in consideration of agreements previously and duly entered into between the parties, and/or for other good and valuable consideration, the receipt of which is hereby acknowledged, each of us has sold, assigned, and transferred and/or do hereby sell, assign, and transfer unto said ASSIGNEE, its successors, assigns,

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and legal representatives, my entire right, title, and interest in and throughout the United States of America, its territories and all foreign countries, in and to any and all inventions described in the patent application, and/or any priority applications noted above, including any right of priority thereto; and hereby confirm that my sale, assignment and transfer is and was effective at least as of the filing date of the patent application and/or priority application. Our sale, assignment and transfer applies to the above-referenced patent application, and to any application that is based in whole or in part on the patent application, including any divisional, continuing, substitute, renewal, reissue, reexamination and other applications, for example that claim priority to the patent application. Also, this sale, assignment and transfer pertains to any and all other rights arising under or pursuant to any and all international agreements, treaties, or laws relating to the protection of industrial property, including all rights of priority under the International Convention for the Protection of Industrial Property, and in and to any such patent(s) as may issue thereon including any and all original and reissued patents which have been or shall be issued in the United States and foreign countries; said inventions, applications, and patent(s) to be held and enjoyed by ASSIGNEE for its own use and for its successors, assigns and legal representatives, to the full end of the term for which said patent(s) may be granted as fully and entirely as the same would have been held by each of us had this sale, assignment and transfer not been made;

AND, each of us hereby acknowledges that this Assignment, being of our entire right, title, and interest in and to the inventions, carries with it the right in ASSIGNEE, by attorneys and agents of ASSIGNEE selection, to apply for and receive any and all patent(s) for said inventions in its own name;

AND, each of us hereby further agrees for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the patent(s) to ASSIGNEE, its successors, assignees, and legal representatives, but at its expense and charges, including the execution of application for patents in foreign countries, the execution of substitution, reissue, divisional or continuation applications, and the giving of testimony, preliminary statements, or other statements in any interference or other proceeding in which the inventions or any applications or patents directed to the inventions may be involved by communicating to the ASSIGNEE all facts we know relating to the inventions and their history, and generally by doing everything possible which ASSIGNEE shall consider desirable for aiding in securing and maintaining proper patent protection for the inventions and for vesting title in the inventions and all applications for patent and all patents on the inventions in ASSIGNEE;

AND, each of us further hereby authorizes ASSIGNEE or its attorneys or agents to insert the correct serial number(s) and/or filing date(s) into this assignment document, if appropriate;

AND, each of us hereby appoints ASSIGNEE as my common agent for purposes of prosecuting international patent applications and any national patent applications for which such common agency is recognized;

AND, each of us hereby requests the Commissioner for Patents of the United States Patent and Trademark Office to issue any and all patent(s) as shall be granted upon said application or applications based thereon to ASSIGNEE, its successors, assigns, and legal representatives;

AND, each of us covenants with said ASSIGNEE that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by us, and that full right to convey the same as herein expressed is possessed by us.

others by us, and that full right to con-	vey the same as herein expressed is possessed by us.
	Acknowledged and agreed to by: Translate Bio MA, Inc. By: Name: Pandall Morin Title: Via Presidat Date: Tome 11, 2018
Randall Morine evidence of identity which was Kn	, 20/8, personally appeared , and proved to me through satisfactory our to be the person whose name is ocument, and acknowledged that he/she executed the
KATHLEEN MANZELLA Notary Public COMMONWEALTH OF MASSACHUSETTS My Commission Express March 28, 2019	NOTARY PUBLIC Name: Kather Mangella My Commission Expires: 3 78/19

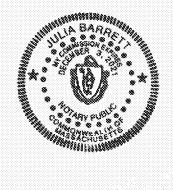
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SIGNED thisday of /	larch , 20 18
	Frank DeRosa
STATE OF Massachusetto ss. county of Middles y	
Before me this day of	id acknowledged that he/she executed the
Name:	RY PUBLIC <u>Kathleen Manylla</u> mmission Expires: 32819
	KATHLEEN MANZELLA Notery Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires

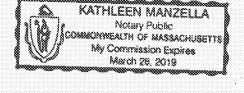
SIGNED this Of day of MAPL. 20 18 Michael Heartlein
state of Massalhusetts ss. county of Middlesex
Before me this day of work, 20 s, personally appeared Michael Heartlein, and proved to me through satisfactory evidence of identity which was work to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.
NOTARY PUBLIC Name: Lutture Villagetta My Commission Expires: 3/28/19
KATHLEEN MANZELLA Notary Public COMMONWEATH OF MASSACHUSETTS My Contribusion Expires March 28, 2019

SIGNED thisday of \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Jonathan Abysalh
STATE OF MASSACHUSTO
SS. COUNTY OF <u>Middlesek</u>
Before me this
NOTARY PUBLIC
Name: VILLUL - MUSHYCLLE My Commission Expires: 3/28/19
KATHLEEN MANZELLA Notery Public COMMONWEALTH OF MASSACHUSETTS My Commission Expires March 28, 2019

SIG	NED this 15th	day of _ _	7arch	<u>, 20 </u>	8	
			Damei	Crawford		
STATE OF	Middlesx (Mesuche	Als	v (
COUNTY OF	Miller	SS. 				
Before me this	<u>} ∑⁴</u> day of Daniel Crawford	Marde		18 personall		
evidence of idea signed on the pa	ntity which was eceding or attached own free will and t	document, ar	vr-Q nd ackno	to be the wledged that	person who	se name is
			RXPUE	and the same	2	
		Name: My Co		n Expires.	* Kune 12	r-3-21



SIGNED	thisday of
	Ausca Dr
	Anusha Dias
STATE OF YVV	ssachuseth
COUNTY OF 4	<u>uddlesex</u>
Before me this	day of ANASCA , 2018, personally appeared
	isha Dias , and proved to me through satisfactory
signed on the preced	which was VADWA to be the person whose name is ng or attached document, and acknowledged that he/she executed the free will and for the purposes set forth.
	NOTARY PUBLIC
	Name: Wthteryamy lea My Commission Expires: 3128 19
	* * mintegriculialand



SIGNED this day of
Shrirang Karve
STATE OF MANAChusetto
country of Wilddlesse
Before me this day of
evidence of identity which was KICWW CO FWC to be the person whose name is signed on the preceding or attached document, and acknowledged that he/she executed the same, of his/her own free will and for the purposes set forth.
NOTARY PUBLIC
Name: Kathlen Manyella My Commission Expires: 37.819

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KATHLEEN MANZELLA
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
March 28, 2019