

Dept. of Virology 3, National Institute of Infectious Diseases
4-7-1 Gakuen, Musashimurayama, Tokyo 208-0011, Japan

Material Transfer Agreement

This Material Transfer Agreement (“Agreement”), effective as of the date of the last authorized signature hereto (“Effective Date”), has been approved for use by the Dept. of Virology 3, National Institute of Infectious Diseases, referred to herein as “NIID” in all transfers of research material (“VeroE6/TMPRSS2”) described below.

Recipient: The Johns Hopkins University
3400 N. Charles Street
Baltimore, MD 21218, USA

Material: VeroE6/TMPRSS2

Biosafety level: BSL1

1. The Material is provided under the understanding that it remains proprietary to NIID and is to be used solely for research purposes, and that the Material will only be used by the Recipient's investigator, Dr. Andrew Pekosz (“Recipient Investigator”), in his laboratory, under appropriate strict containment conditions, and for a particular research project described with specificity below (“Research Project”):

Description of Research Project (attach documents if necessary):

The VeroE6/TMRSS2 cell line is used to isolate and grow SARS-CoV-2, the causative agent of COVID-19. Recipient Investigator will utilize this cell line in his ongoing work to study the replication and disease potential of SARS-CoV-2.

2. The Recipient Investigator will not transfer the Material to any person not under his direct supervision without prior written agreement from NIID. Any request on another party's part (for example for the purpose of replication of experiments) for the Material will be referred back to NIID. The Recipient may not distribute any progeny (unmodified descendant from the Material) or genetically engineered modification which is substantially based on the Material to any other party without express written consent from NIID. NIID reserves the right to distribute the Material to others and to use it for its own purposes, including for possible commercial applications.

3. The Material is provided under the condition that it is used in compliance with all applicable statutes and regulations (including but not limited to those pertaining to the use, transport, storage, breeding and care of live animals, or the use of recombinant DNA). The Material cannot be used in human subjects unless that has been specifically agreed upon by both parties and upon written permission of NIID, and according to all applicable laws and regulations regarding the use of experimental material on human subjects. If the Material is of human origin, it can only be used in accordance with all regulations regarding the use and confidentiality of such Material.
4. NIID extends no warranties of any kind, express or implied, as to the merchantability or fitness for a particular purpose or use of this Material, or that the use of the Material will not infringe any patent, copyright, trademark or other proprietary rights that might previously exist. The Material is provided upon the understanding that it is experimental in nature, and as such, may have hazardous properties. NIID shall have no liability to the Recipient in relation to the Material to the maximum extent permitted under applicable law. NIID is not liable for claims and losses arising from the Recipient's use of the Material in the Research Project, including without limitation those claims and losses arising from injury to the Recipient's employees or any third party, or the infringement of third party intellectual property, except to the extent that such claims or losses are due to the gross negligence or willful misconduct of NIID.
5. Since this Material represents a significant contribution on NIID's part, the Recipient agrees to provide appropriate acknowledgement of the source of the Material in all publications or oral presentations based upon the Recipient's use of the Material. If NIID has given CONFIDENTIAL information to the Recipient (research material stamped CONFIDENTIAL), public disclosure of the CONFIDENTIAL information by the Recipient may only be made after NIID has had appropriate time to review the proposed disclosure (not less than thirty (30) days before submission for publication.) In any case, the Recipient shall send NIID a copy of any reports or publications which describe work carried out using the Material, and NIID shall be entitled to use all such data described in published reports or other publications in order to make them available to third parties. For unpublished data, NIID will only disclose information to third parties following appropriate clearance from the Recipient, or such information will be used for internal purposes only. Furthermore, no rights are granted to the Recipient under any patents, patent application or other proprietary rights of NIID.
6. In the event that the Recipient makes or observes any new discovery, improvement or invention ('Invention') relating to the Material as a direct result of the Recipient's use of the Material in the Research

Project then the Recipient will bring this to the attention of NIID. Inventorship of any invention shall be in accordance with U.S. patent law, with ownership to follow inventorship. If an Invention is created jointly by NIID and the Recipient, the Recipient shall not make or seek to make actual commercial gain from such an Invention, nor make any patent application or secure any other proprietary rights to legally protect any such Invention, except with the prior written consent of NIID. If the Recipient wishes to use the Material for commercial purposes, Recipient agrees to negotiate with NIID to establish the terms of a commercial license under the understanding that NIID is under no obligation to grant any such license and may continue to use the Material for its own purposes. NIID will, at all times, retain the right to use an Invention for non-commercial research purposes.

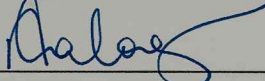
7. When the Research Project is completed or after three (3) years have elapsed (whichever occurs first), the Recipient will cease all use of the Material, unless an extension is agreed to in writing by the authorized representatives of the parties. At NIID's request, the Material will be destroyed by the Recipient, or otherwise disposed of as mutually agreed by NIID and the Recipient. The Recipient agrees that this Agreement may be terminated upon thirty (30) days' written notice by either party, and the Material (and any progeny or unmodified derivative thereof) will be disposed of as described above.
8. Further, while NIID will make a good faith effort to ensure that the Material is exactly as described above, the Recipient expressly acknowledges that errors may occur such that the Material may be different than that described above. The Recipient acknowledges that it is responsible for verifying the identity of the Material upon receipt and to the fullest extent permitted by law waives any and all claims against NIID on account of any errors by the Recipient in failing to correctly identify the Material within thirty (30) days of receipt.
9. The Recipient's Biosafety Official shall be responsible for ensuring the safety of the Research Project and verifying that the Research Project will be performed in accordance with all applicable rules and regulations for handling the Material. If you agree with the above, please sign and return a copy of this letter to NIID for laboratory records, and the Material will be sent to you. The Material is supplied without costs, but the shipping and related costs are the responsibility of the Recipient. As a result, the Material will be shipped only if you provide your Federal Express (or any other appropriate courier service) account number.

AGREED AND ACCEPTED:

Recipient's Authorized Official: Nekeshia M. Maloney, J.D.

Title: Director, Contracts, Johns Hopkins Technology Ventures

Date: April 7, 2020

Signature: 

DS
CRE

Contact address of Authorized Official:

Johns Hopkins Technology Ventures
ATTN: Director, Contracts
The Johns Hopkins University
1812 Ashland Avenue, Suite 110
Baltimore, MD 21205, USA

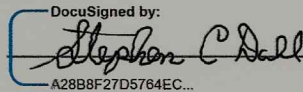
E-mail address of Authorized Official:

mta@jhmi.edu

Recipient's Biosafety Official: Stephen C. Dahl, Ph.D., RBP

Title: Director, Biological Safety and Biosafety Officer

Date: April 6, 2020 | 7:57 PM EDT

Signature: 

Contact address of Biosafety Official:

Johns Hopkins Medicine
Biological Safety Office
2024 E. Monument Street, Suite B-200
Baltimore, MD 21287, USA

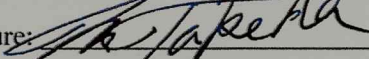
E-mail address of Biosafety Official:

sdahl@jhu.edu

Provider's Authorized Official: Makoto Takeda, M.D., Ph.D.

Title: Director, Dept. of Virology 3, National Institute of Infectious Diseases

Date: 4 April 2020

Signature: 

Contact address of Authorized Official for Provider:

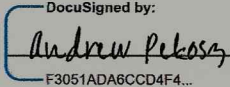
e-mail: mtakeda@nih.gov

Recipient Investigator: *I acknowledge that I have read and understood the terms of this Agreement.*

Name: Andrew Stanley Pekosz, Ph.D.

Title: Professor, Molecular Microbiology and Immunology, JHSPH

Date: April 6, 2020 | 11:56 AM EDT

Signature: 

Contact address for Recipient Investigator:

615 N. Wolfe Street, Room W2116
The Johns Hopkins University School of Public Health
Baltimore, Maryland 21205, USA

E-mail address of Recipient Investigator:

apekosz1@jhu.edu

Courier name and account number:

Truong, Thao

From: Truong, Thao
Sent: Thursday, March 18, 2021 2:08 PM
To: 'Jeremy Minshull'; Scott Boyd
Cc: Oliver Fabian Wirz
Subject: RE: acknowledging ATUM in another paper (EXTERNAL EMAIL)

Hi Jeremy and Scott,

Thank you for your help and contribution to this paper. I will submit this email thread as ATUM's written consent to be acknowledged to the Ebiomedicine editor. Sincerely,

Thao

From: Jeremy Minshull <jminshull@atum.bio>
Sent: Thursday, March 18, 2021 1:33 PM
To: Scott Boyd <sboyd1@stanford.edu>
Cc: Truong, Thao <thtruong@chla.usc.edu>; Oliver Fabian Wirz <owirz@stanford.edu>
Subject: Re: acknowledging ATUM in another paper (EXTERNAL EMAIL)

CAUTION: BE CAREFUL WITH THIS MESSAGE

This email came from outside CHLA. Do not open attachments, click on links, or respond unless you expected this message and recognize the email address: jminshull@atum.bio.

Hi Scott

Thank you for the acknowledgement. I hereby give consent for you to use it in the publication. Delighted to be able to help.

Best wishes

Jeremy

On Thu, Mar 18, 2021 at 1:25 PM Scott Boyd <sboyd1@stanford.edu> wrote:

Hi Jeremy,

We have been involved in another paper with some Covid serology, involving collaborators at UCLA and Children's Hospital Los Angeles, with lead author Thao Truong, cc'd.

I have included an acknowledgement of ATUM for the proteins we used for the serology assays in the study.

The journal requires that any acknowledged parties give their written consent for being acknowledged.

I have attached a version of the manuscript— we are doing some final formatting edits, but the data will be as you see here.

If this seems reasonable to you, could you please send an email reply to all to give consent for this acknowledgement?

Best wishes,
Scott