

MATERIALS TRANSFER AGREEMENT

Provider:

U.S. Environmental Protection Agency (EPA)
Office of Research and Development (ORD)
National Center for Computational Toxicology (NCCT)

Recipient:

Medizinische Universität Innsbruck (MUI),
Innrain 52,
A-6020 Innsbruck Austria

1a. Provider agrees to transfer to Recipient's Investigator named below the following Research Material:

Chemicals and Materials

- A list identifying selected chemicals from the ToxCast chemical library to be tested by Mass Spectrometry.
- A copy of the current ToxCast chemical library, or subset, consisting of chemical samples prepared as solution in dimethyl sulfoxide at a concentration of 20 millimolar. Additional chemicals may be provided in the future concurrent with expansion of the ToxCast chemical library.
- Samples of nanomaterials and characterization data on said materials.

Data and Summary Information

- In vitro assay data derived from the ToxCast Program. This data is derived from chemicals analyzed using a variety of high throughput assay techniques. Below this is referred to as the "ToxCast Data".
- In vivo whole animal toxicology data summary data derived from the EPA Toxicology Reference Database (ToxRefDB). Below this is referred to as the "ToxRefDB Data".
- Summary descriptions of the individual data sets.
- Individual subsets of this data will be delivered to XXX after they have been prepared for use at EPA and cleared for release to XXXX.

1b. The Recipient agrees to inform the EPA Investigator named below about:

- All data or data summaries resulting from chemical screening performed on the ToxCast chemical library.
- Results of any data analyses that include use of provided ToxCast or ToxRef data.
- Relevant data on these chemicals from non-public sources.
- Unique chemicals for the ToxCast chemical library and subsequent testing by EPA.

2. This Research Material may not be used in human subjects. The Research Material will be used only for research purposes by Recipient's investigator in his/her laboratory, for the research project

described below, under suitable containment conditions. This Research Material will not be used for screening, production or sale, for which a commercialization license may be required. Recipient agrees to comply with all Federal rules and regulations applicable to the Research Project and the handling of the Research Material.

EPA ONLY: If the data or material that are being transferred constitute human subjects research, please visit the following intranet site to determine if your project needs review and approval by the HSRRO: <http://intranet.ord.epa.gov/p2/hsr/human-subjects-review>.

- There is no Human Subjects material being used in this research.
- Research Plan reviewed and approval by HSRRO: Name _____
Date __/__/____

3. If the data or material that are being transferred involve life sciences research or more specifically, any of the select agents or toxins listed, and/or the definitions provided in EPA Order 1000.19 *Policy and Procedures for Managing Dual Use Research of Concern*, then Principal Investigators should consult EPA's Institutional Contact for Dual Use Research of Concern (ICDUR) at DURC.epa.gov before completing the following section. If not, then check the first box below.

- This research does not meet any of the definitions of Dual Use Research of Concern (DURC) and no additional review or oversight are required. The PI must report to the ICDUR any results or changes in the research that meet any of the definitions of DURC.
- This research meets one or more definitions of DURC and requires additional oversight under the *USG Policy for Institutional Oversight of DURC*. The parties to this Agreement are required to comply with EPA Order 1000.19, *Policy and Procedures for Managing Dual Use Research of Concern*.

For information about DURC and EPA Order 1000.19, please visit:

<http://intranet.ord.epa.gov/homeland-security/dual-use-research-concern-durc-policies>.

4. This Research Material will be used by Recipient's investigator solely in connection with the following research project ("Research Project") described with specificity as follows:

The Research Material will be used to generate a tandem mass spectral library. Tandem mass spectral libraries are indispensable tools for compound identification in non-target liquid chromatography-mass spectrometry (LC-MS).

The tandem mass spectral library will consist of sets of tandem mass spectral data acquired by using the individual compounds included in the Research Material to generate precursors. Each

set will contain multiple spectra generated by collision-induced dissociation (CID) at various collision energy settings.

Precursors will be produced by electrospray ionization in positive and/or negative ionization mode. Precursors may include molecular ions (e.g., $[M+H]^+$, $[M-H]^-$) as well as the corresponding isotopic peaks and in-source fragments.

Sample introduction into the mass spectrometer will be accomplished by liquid chromatography, direct infusion, flow injection or other suitable techniques.

Tandem mass spectra will be curated before storage in the library. Curation will include multiple stages of filtering, recalibration, and benchmarking.

The final library should be published in open-access spectral collections (e.g., MassBank) as well as the "Wiley Registry of Tandem Mass Spectral Data, MSforID". In this way, the scientific community will get access to the produced library.

5. In all oral presentations or written publications concerning the Research Project, Recipient will acknowledge Provider's contribution of this Research Material unless requested otherwise. To the extent permitted by law, Recipient agrees to treat as confidential, any of Provider's written information about this Research Material that is stamped "CONFIDENTIAL" for a period of three (3) years from the date of its disclosure to recipient. The foregoing shall not apply to information that is or becomes publicly available or which is disclosed to Recipient without a confidentiality obligation. Any oral disclosures from Provider to Recipient, which Provider wishes to be treated as confidential shall be identified as being Confidential at the time of the disclosure and by written notice delivered to Recipient within thirty (30) days after the date of the oral disclosure. Recipient may publish or otherwise publicly disclose the results of the Research Project, but if Provider has given Confidential information to Recipient, such public disclosure may be made only after Provider has had thirty (30) days to review the proposed disclosure to determine if it includes any Confidential information, to the extent such review period is permitted by law.

6. This Research Material represents a significant investment on the part of Provider and is considered proprietary to Provider. Recipient's investigator therefore agrees to retain control over this Research Material and further agrees not to transfer the Research Material to other people not under his/her direct supervision without advance written approval of Provider. Provider reserves the right to distribute the Research Material to others and to use it for its own purposes. When the Research Project is completed, the Research Material will be returned to the Provider or disposed, if directed by Provider.

7. This Research Material is provided as a service to the research community. It is being supplied to Recipient with no warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose. Provider makes no representations that the use of the Research Material will not infringe any patent or proprietary rights of third parties.

8. Recipient shall retain all rights and title to any patent or other intellectual property rights in inventions made by its employees in the course of the Research Project. However, if said inventions contain any portion of the Research Material, are derived from the Research Material, or could not have been produced but for the use of the Research Material, Recipient agrees to contact the Provider to determine what ownership interests, if any, the Provider may have, and, where applicable, to negotiate in good faith the terms of a fair-market commercial license.

9. When Provider is the EPA: Recipient agrees not to claim, infer, or imply endorsement by the Government of the United States of America (hereinafter referred to as "Government") of the Research Project, the institution or personnel conducting the Research Project, or any resulting product(s). Recipient agrees to hold the Government harmless and to indemnify the Government for all liabilities, demands, damages, expenses, and losses arising out of Recipient's use for any purpose of the Research Material.

10. The Parties shall have the right to terminate this Agreement at any time if the other Party breaches any of the terms of this Agreement. Upon termination, Recipient shall return to the Provider all unused portions of the Research Materials.

11. Will EPA develop any products or services from information or materials provided by the Recipient?

Yes – go to item A

No – skip to #12 (next clause)

Item A: The EPA laboratory must coordinate on matters related to Quality Assurance with their QA Specialist.

If necessary, the Laboratory will develop/has developed a Quality Assurance Plan in coordination with the Quality Assurance Specialist.

No QA requirements are needed.

12. All notices pertaining to or required by this Agreement shall be in writing and shall be signed by an authorized representative and shall be delivered by hand (including private courier mail service) or sent by certified mail, return receipt requested, with postage prepaid, addressed as follows.

Provider's Contact Information:

Russell Thomas
U.S. EPA National Center for Computational Toxicology (NCCT)
109 T.W. Alexander (MD-D143-02)

EPA-Medizinische Universität Innsbruck – NCCT MTA # 1251-19

Research Triangle Park, NC 27711
919.541.5776
thomas.russell@epa.gov

With a copy to:
Sandra Roberts
U.S. EPA National Center for Computational Toxicology (NCCT)
109 T.W. Alexander (MD-D143-02)
Research Triangle Park, NC 27711
919.541.3850
roberts.sandra@epa.gov

For commercial courier address use:
4930 Old Page Road
Durham, NC 27703

AND

Kathleen Graham
EPA FTTA Program Coordinator
graham.kathleen@epa.gov
(303.312.6137
FTTA@epa.gov

Recipient's Contact Information:

Assoc. Prof. Dr. Herbert Oberacher
Institute of Legal Medicine and Core Facility Metabolomics
Medizinische Universität Innsbruck (Medical University of Innsbruck)
Muellerstraße 44, A-6020 Innsbruck, Austria
+43 (0)512 9003 70639
herbert.oberacher@i-med.ac.at

With a copy to:
Univ. Professorin Doktorin Christine Bandtlow
Vice Rector for Research and International Relations
Medizinische Universität Innsbruck (Medical University of Innsbruck)
Innrain 80, A-6020 Innsbruck, Austria
+43-512-900370281
vr-forschung@i-med.ac.at

13. Paragraphs 2, 7, and 9 shall survive termination.

14.

15. The undersigned Provider and Recipient expressly certify and affirm that the contents of any statements made herein are truthful and accurate.

16. This agreement shall enter into force as of the date of the last signature of the parties and shall remain in effect for one year from said date.

Any false or misleading statements made, presented, or submitted to the EPA, including any material omissions, under this Agreement and during the course of negotiation of this Agreement are subject to all applicable civil and criminal statutes.

SIGNATURES

FOR THE RECIPIENT:

Principal Investigator

[Redacted Signature]

Herbert Oberacher
Assoz. Prof. Priv.-Doz. Mag. Dr.
herbert.oberacher@i-med.ac.at

18.12.19
Date

Authorized Representative of Institution

[Redacted Signature]

Christine Bandtlow
Univ. Professorin Doktorin
vr-forschung@i-med.ac.at

02.12.19
Date



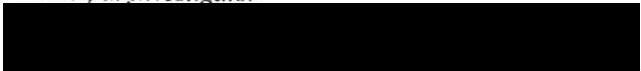
CERTIFICATION OF NO CONFLICT OF INTEREST (EPA ONLY)

I hereby certify that neither I, nor any member of my immediate family, will benefit in any material way from the execution or failure to execute the attached FTTA Cooperative Agreement or Licensing Agreement except to the extent of participation in royalty sharing as authorized by section 13 of the Stevenson-Wydler Technology Innovation Act, as amended by the Federal Technology Transfer Act of 1986 (15 U.S.C. 3710a et seq.).

I further certify that I have no knowledge of any such conflict by any other person who has participated in any material way in the initiation, design, or development of the attached Agreement or who will participate in carrying it out.

FOR THE PROVIDER:

Principal Investigator



Antony J. Williams
Computational Chemist
williams.antony@epa.gov

11/14/19
Date

Authorized Representative of Institution



Russell Thomas, Ph.D.
Director, EPA/ORD/NCCT

~~11/13/19~~ 1/15/2020
Date RT

