



Prize Announcement for Chordoma PDX Mouse Models

Currently, access to valid patient-derived xenograft (PDX) mouse models is a major barrier for chordoma research and treatment development. PDX models, also called tumorgrafts or tumor explants, are grafted directly from patient tumor into immunodeficient mice and propagated from mouse to mouse without being cultured in-vitro. The Chordoma Foundation seeks to create a collection of at least ten well-characterized chordoma PDX mouse models, each of which faithfully represents the biology of the tumor from which it was derived. The Foundation has partnered with South Texas Accelerated Research Therapeutics (“START”) to create a Chordoma Patient-Derived Xenograft (PDX) Repository. In order to help establish the Chordoma Xenograft Collection (“Collection”) at START, the Chordoma Foundation will offer \$10,000 prizes for each xenograft model that is approved by the Chordoma Foundation and deposited into the Collection at START as described below.

SUBMISSION PROCESS

Any investigator who has created a PDX model derived from a chordoma tumor is invited to submit the model for validation and inclusion in the Collection. To achieve standardization among the entire Collection, all validation experiments will be carried out at Vala Sciences.

The process for submission of a PDX model for inclusion in the Collection is as follows:

1. Email the information described in the Xenograft Submission Package (Appendix A) to patty@chordoma.org.
2. Send 6-10 slides of both the original patient tumor and the PDX tumor for the validation to:

Vala
6370 Nancy Ridge Dr, Suite 106
San Diego, CA 92121.
Attention to: Wiem Lassoued

The Chordoma Foundation will provide a FedEx account number on request.

3. Once your Submission Package is approved and your model has been validated, execute the MTA Agreement for Distribution of Tumor Xenograft Lines (“Deposit Agreement”) (Appendix B) to deposit your model in the Collection.
4. When the Agreement is in place:
 - a. START can provide a kit for you to ship fresh tissue from the tumor if available
 - b. If fresh tissue is not available 6-10 cryopreserved PDX tumor fragments can be shipped on dry ice
 - c. Tumor fragments should be between the second and fifth passage

Samples should be shipped to:
Dr. Michael Wick and Melissa Rundle
START
4319 Medical Drive Suite 205
San Antonio, TX 78229
210-593-5296
michael.wick@start.stoh.com

The Chordoma Foundation will provide a FedEx account number on request.

All correspondence regarding the test results and shipments must be copied to michael.wick@start.stoh.com and patty@chordoma.org.

5. Upon validation of the PDX model, the Chordoma Foundation will issue an award letter and payment form offering you an unrestricted prize for scientific and educational purposes in the amount of \$10,000 for the PDX model deposited into the Collection.
6. Once you complete and return the payment form, the Chordoma Foundation will mail a check to the "Fiscal Officer" address indicated on the payment form.

If you have questions about any aspect of this prize or the submission process, please call 919-809-6779, ext. 107 or email patty@chordoma.org.

VALIDATION CRITERIA

The PDX model will be evaluated for inclusion in the Collection based on the following criteria:

1. The tumor from which the PDX model was derived was confirmed to be chordoma based on immunohistochemical staining for brachyury and cytokeratin or EMA.
2. PDX tumors express nuclear brachyury by immunohistochemistry
3. PDX tumors are histopathologically and genotypically similar to the primary tumor from which they were derived. If the originating tumor is not available, then the PDX tumor must at least have a rearranged genome as measured by SNP array.
4. Must be able to maintain growth for greater than two passages in mice

TERMS AND CONDITIONS OF PRIZE

1. AWARD PROCESS

The decision to include a xenograft in the Collection and to award a \$10,000 prize to the xenograft's creator will be made by the Chordoma Foundation Board of Directors based on the recommendation of expert advisors, the availability of funding, and other pertinent factors. The Chordoma Foundation will consider the genetic and biological characteristics of the xenograft, as well as accompanying data regarding the tumor from which it was derived. Investigators will be notified in writing by the Chordoma Foundation whether or not xenograft(s) are selected for inclusion in the Collection. Upon validation, selection for inclusion in the Collection, execution of the Deposit Agreement and deposit of the xenograft at START, the Chordoma Foundation will issue an award letter and payment form offering an unrestricted prize for scientific and educational application in the amount of \$10,000 for the xenograft deposited into the Collection.

2. ACCEPTANCE OF AWARD

A grantee indicates acceptance of an award and will become bound by the terms and conditions attached to the award notification letter by signing the award notification letter and depositing funds disbursed by the Chordoma Foundation. Each prize will be awarded on the terms and conditions outlined herein. Upon acceptance of the award, the Chordoma Foundation will be permitted to publicize the name of the institution and/or creator and the amount of the prize.

3. DISBURSEMENT POLICY

This prize is made to reward the creator of a chordoma PDX model for contributing that xenograft to the Chordoma Xenograft Collection at START. The prize is made as an unrestricted award to the creator's institution to be used at the sole discretion of the creator for scientific and educational application. Payment to the creator's institution will be made by check unless otherwise requested by an authorized institutional official. Checks will be mailed to the "Fiscal Officer" address indicated on the payment form.

4. LIABILITY

Upon acceptance of this award, the creator and the creator's institution will indemnify and hold harmless the Chordoma Foundation, its Board, officers, agents, advisors and constituents from any claim, judgment, award, damage, settlement, liability, negligence or malpractice arising from research or investigation activities related to this award.

Appendix A

Xenograft Submission Package

For a PDX model to be considered for inclusion in the Collection, the following must be submitted:

1. A completely deidentified pathology report from the tumor of origin.
2. A copy of the informed consent form used to collect the tumor from which the model was derived. The informed consent must allow for the use, storage and distribution of the xenograft for all research and development purposes and be clear that no profit from any commercial products derived from the xenograft will be returned to the patient.
3. Information about the tumor from which the model was derived:
 - a. Anatomic location of the chordoma
 - b. Whether the tumor was primary, recurrent, or metastatic
 - c. Date tumor was resected
 - d. Tumor size
 - e. Histological subtype (conventional, chondroid, dedifferentiated)
 - f. Biochemical, cytogenetic, and immunophenotypic data from the tumor, if available
 - g. Indicate if a portion of the tumor was also preserved
4. Information about the patient from which the model was derived (if available):
 - a. Demographics, including: gender, age at diagnosis, race
 - b. Treatment history including: prior surgery, chemotherapy, or radiation
 - c. Patient outcome if known. Is the patient alive or deceased?
5. Data showing brachyury expression and cell morphology consistent with chordoma.

Appendix B

LETTER OF AGREEMENT FOR THE TRANSFER OF MATERIALS ("Agreement")

PARTIES

Provider: _____
Address: _____

Recipient: Chordoma Foundation
Address: P.O. Box 2127
Durham, NC 27702

Provider Investigator: _____

Provider and Recipient are hereinafter referred to individually as the "Party" and collectively as the "Parties".

RECITALS

WHEREAS, Provider Investigator has created a new [*specify type of biological materials*] (the "Materials");

WHEREAS, Recipient [has extended an award to Provider Investigator for the creation of the Materials and] will, on behalf of the Provider and Provider Investigator, [deposit the Materials with an Authorized Distributor for distribution]/[distribute the Materials] to the scientific community; and [*select appropriate bracketed text and delete other bracketed text*]

WHEREAS, the Parties now intend to enter into this Agreement to set forth the terms and conditions that will govern this arrangement;

NOW THEREFORE, in consideration of the mutual promises and covenants contained in this Agreement, the Parties agree to be bound by the Terms and Conditions as they appear below.

TERMS AND CONDITIONS

1. The Materials are the property of Provider and are made available as a service to the research community.
2. Materials shall include any unmodified derivative and unmodified progeny of the Materials, as well as any biological materials (including, without limitation: cells, tissues, fluids, etc.) which contain or incorporate the Materials and are derived directly from the Materials or its unmodified progeny. The Materials shall not include other substances created or developed through use of the Materials.
3. THE MATERIALS ARE NOT FOR USE IN HUMAN SUBJECTS OR FOR DIAGNOSTICS PURPOSES.

4. Recipient may further distribute the Materials either (a) under an agreement substantially in the form of the Simple Letter of Agreement for the Transfer of Materials attached as Exhibit A (the “Distribution MTA”) or (b) for further distribution through an Authorized Distributor. In any Distribution MTA, Provider will be designated as the “INSTITUTION”, and Recipient will include the following citation for reference in Paragraph 5 of the Distribution MTA:

[identify citation reference for specific materials]

The following entities are designated by the Parties as Authorized Distributors:

[identify authorized distributors, if any, such as ATCC or Jackson Labs]

5. The Material is experimental in nature and must be used with prudence and appropriate caution, since not all of its characteristics are known. THE MATERIAL IS PROVIDED WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

6. The Recipient agrees to use the Material in compliance with all applicable statutes and regulations.

7. Recipient assumes all liability for damages, which may arise from Recipient's negligence. Provider (including, but not limited to, its directors, trustees, officers, employees, students, and agents, as applicable) will not be liable to Recipient for any loss, claim or demand made by any other party, due to or arising from Recipient's negligence except to the extent permitted by law when caused by the gross negligence or willful misconduct of Provider.

8. This Agreement shall be governed by the laws of the State of North Carolina, without reference to its choice of law rules. The Parties may not assign or otherwise transfer this Agreement or any rights or obligations under this Agreement, whether by operation of law or otherwise. Any such attempted assignment will be null and void. This Agreement constitutes the entire agreement between the Provider and the Recipient with respect to the Materials and supersedes all previous agreements and representations. This Agreement will remain in full force and effect for as long as the Recipient, any Authorized Distributor, or any recipient under any Distribution Agreement holds any Materials. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original as against any Party whose signature appears thereon, but all of which together shall constitute but one and the same instrument. This Agreement may not be amended or modified except by a writing executed by authorized representatives of both Parties.

[signatures appear on following page]

WHEREFORE, the Parties have caused this Agreement to be executed by their respective duly authorized representatives as of the date of the last signature hereto ("Effective Date").

CHORDOMA FOUNDATION

[INSTITUTION NAME]

Authorized Signature

Authorized Signature

Name:

Name:

Title:

Title:

Date:

Date:

Exhibit A

Simple Letter Agreement for the Transfer of Materials

In response to RECIPIENT'S request for the MATERIAL (defined below), the Chordoma Foundation asks that the RECIPIENT and the RECIPIENT SCIENTIST agree to the following before the RECIPIENT receives the MATERIAL:

1. MATERIAL means: [specify biological materials to be transferred].

The above MATERIAL is the property of the:

[specify name and address of providing institution] ("INSTITUTION")

and is made available through an agreement with the Chordoma Foundation as a service to the research community for the purpose of scientific research and collaborations.

MATERIAL shall include any unmodified derivative and unmodified progeny of the MATERIAL, as well as any biological materials (including, without limitation: cells, tissues, fluids, etc.) which contain or incorporate the MATERIAL and are derived directly from the MATERIAL or its unmodified progeny. The MATERIAL shall not include other substances created or developed through the use of the MATERIAL, and RECIPIENT shall retain all rights in such other substances.

2. THIS MATERIAL IS NOT FOR USE IN HUMAN SUBJECTS OR FOR DIAGNOSTICS PURPOSES.
3. The MATERIAL will be used for teaching or research purposes only.
4. The MATERIAL will not be further distributed to others by the RECIPIENT. The RECIPIENT shall refer any request for the MATERIAL to the Chordoma Foundation.
5. The RECIPIENT agrees to acknowledge the INSTITUTION and the Chordoma Foundation, and cite the appropriate reference as indicated below in any publications reporting use of the MATERIAL.
 - a. [identify citation reference for specific materials]
6. Any MATERIAL delivered pursuant to this Agreement is understood to be experimental in nature and may have hazardous properties. THE CHORDOMA FOUNDATION AND THE INSTITUTION MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIAL WILL NOT

INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS. IN NO EVENT WILL THE CHORDOMA FOUNDATION OR THE INSTITUTION BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, THE MATERIAL OR ANY RELATED INFORMATION (WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE), EVEN IF THE CHORDOMA FOUNDATION OR THE INSTITUTION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL THE CHORDOMA FOUNDATION'S CUMULATIVE LIABILITY EXCEED ANY FEES PAID BY THE RECIPIENT UNDER PARAGRAPH 9 BELOW, EXCEPT IN THE EVENT OF THE CHORDOMA FOUNDATION'S GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD.

7. Indemnity.

If the RECIPIENT is a Federal or State non-profit organization that is prohibited by law from entering into the indemnification obligation set forth in the subsequent paragraph:

The RECIPIENT assumes all liability for any and all claims, losses, expenses and damages (including reasonable attorney's fees) arising out of or relating to the RECIPIENT's or RECIPIENT SCIENTIST's use, receipt, handling, storage, transfer, disposal and other activities relating to the MATERIAL, provided that the RECIPIENT's liability shall be limited to the extent that any such claim arises out of the Chordoma Foundation's gross negligence, willful misconduct or fraud, and provided further that if the RECIPIENT is the U.S. federal government or a state institution or a foreign equivalent organization, the RECIPIENT assumes such liability only to the extent permitted under the Federal Tort Claims Act, 28 U.S.C. §§ 2671 et seq. or under equivalent applicable state or foreign law.

If the RECIPIENT is a for-profit organization or a private non-profit organization:

The RECIPIENT agrees to indemnify and hold harmless the Chordoma Foundation and the INSTITUTION against all claims, losses, expenses and damages (including reasonable attorney's fees) arising out of or relating to the RECIPIENT's or RECIPIENT SCIENTIST's use, receipt, handling, storage, transfer, disposal and other activities relating to the MATERIAL, provided that the RECIPIENT's liability shall be limited to the extent that any such claim arises out of the Chordoma Foundation's gross negligence, willful misconduct or fraud. All non-monetary settlements will be subject to the Chordoma Foundation's and the INSTITUTION's consent.

8. The RECIPIENT and RECIPIENT SCIENTIST agree to use the MATERIAL in compliance with all applicable statutes and regulations.
9. The MATERIAL is provided at no cost, or with an optional transmittal fee solely to reimburse the PROVIDER for its preparation and distribution costs. If a fee is requested, the amount will be indicated here:

10. This Agreement shall be governed by the laws of the State of North Carolina, without reference to its choice of law rules. The RECIPIENT and RECIPIENT SCIENTIST may not assign or otherwise transfer this Agreement or any rights or obligations under this Agreement, whether by operation of law or otherwise. Any such attempted assignment will be null and void. This Agreement constitutes the entire agreement between the Chordoma Foundation and the RECIPIENT and RECIPIENT SCIENTIST with respect to the MATERIAL and supersedes all previous agreements and representations. In the event of any breach of this Agreement by the RECIPIENT or RECIPIENT SCIENTIST, all rights granted hereunder by the Chordoma Foundation shall immediately terminate and the RECIPIENT and RECIPIENT SCIENTIST shall destroy all unused MATERIAL.

11. The Chordoma Foundation, RECIPIENT and RECIPIENT SCIENTIST must sign both copies of this letter and return one signed copy to the Chordoma Foundation. The Chordoma Foundation will then notify the INSTITUTION and send the MATERIAL to the RECIPIENT.

PROVIDER INFORMATION and AUTHORIZED SIGNATURE

Chordoma Foundation
 PO Box 2127
 Durham, NC 27702

Name of Authorized Official: Josh Sommer
 Title of Authorized Official: Executive Director

 Signature of Authorized Official

 Date

RECIPIENT INFORMATION and AUTHORIZED SIGNATURE

Recipient Scientist:
 Recipient Organization:
 Address line 1:
 Address line 2:
 Telephone #:
 Name of Authorized Official: _____
 Title of Authorized Official: _____

Signature of Authorized Official

Date

Certification of Recipient Scientist: I have read and understood the conditions outlined in this Agreement and I agree to abide by them in the receipt and use of the MATERIAL.

Recipient Scientist(s)

Date