

MATERIAL TRANSFER AGREEMENT

THIS MATERIAL TRANSFER AGREEMENT (this "Agreement") is entered into effective as of the date of the last signature below (the "Effective Date") by and between Lexicon Pharmaceuticals, Inc., a Delaware corporation ("Lexicon"), and the university or other not-for-profit academic research institution or government agency specified on the signature page of this Agreement ("Institution"), and is acknowledged by the principal investigator and employee of Institution specified on the signature page of this Agreement ("Principal Investigator").

Recitals

WHEREAS, Lexicon has previously entered into Contract No. HHSN291200555549C (N01-ES-055549) for "Mouse Knockout Lines and Related Phenotypic Data" (the "NIH Agreement") with the United States Government (the "Government"), pursuant to which Lexicon agreed to provide certain knockout mouse materials and related phenotypic data for selected murine genes to the United States National Institutes of Health (the "NIH") in order for the NIH to make such materials available to Academic Institutions;

WHEREAS, Lexicon has made knockout mouse materials and related phenotypic data for the murine gene specified herein available pursuant to the NIH Agreement, but the NIH has not yet requested that Lexicon deliver such knockout mouse materials and phenotypic data in accordance with the terms of the NIH Agreement;

WHEREAS, Principal Investigator would like to obtain such knockout mouse materials and related phenotypic data for use by Principal Investigator and other Institution employees in the Research Field; and

WHEREAS, Lexicon is willing to provide such knockout mouse materials and related phenotypic data to Principal Investigator under the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein, Lexicon and Institution agree as follows:

1 Definitions.

1.1. "Academic Institution" means an academic, non-profit or governmental entity or institution located anywhere in the world.

1.2. "Commercial Entity" means any entity that is not an Academic Institution, including for-profit corporations and commercial "spin-offs" or "spin-outs" from Academic Institutions; *provided*, that any commercial "spin-off" or "spin-out" whose technologies are based on results derived from research conducted by an Academic Institution, but which does not itself possess or use any Knockout Mouse Materials, shall not be considered a Commercial Entity.

1.3. "Contract Research" means any research or development activities involving the use of Knockout Mouse Materials that are conducted by or at an Academic Institution where (a) such activities are directly or indirectly supported financially by a Commercial Entity, (b) the Commercial Entity, rather than the Academic Institution, is primarily responsible for establishing the research plan and goals of such activities, (c) the Commercial Entity obtains material intellectual property rights in the intellectual property (which may include an option to obtain an exclusive license of all commercial rights) resulting from such activities, and (d) the Academic Institution does not retain material commercial rights to exploit such intellectual property

1.4. "Data" means, for any mouse line requested by Institution hereunder, data from such mouse line's production and phenotypic data obtained by testing groups of such mice with the applicable Selected Mutation. Such phenotypic data shall have been obtained by testing homozygous mice, preferably at several stages of the lifespan of such mice; *provided* that such phenotypic data may be obtained by testing heterozygous mice when the homozygous Selected Mutation is lethal during embryonic, fetal or early postnatal stages. Examples of Data

concerning experimental methods and results from the production of such mouse line include, *e.g.*, construct maps and sequences, and PCR/Southern blots demonstrating mutagenesis. Examples of Data concerning phenotypic data include, *e.g.*, results of physical examination, blood tests (*e.g.*, CBC, chemistries), skeletal radiographs, bone densitometry, necropsy with histopathology, marker gene expression in tissues, and fertility, physiological, and neurobehavioral testing. Examples of physiological analyses include cardiovascular, metabolic, and exercise tests. Examples of neurobehavioral analyses include open field, tail suspension, rotarod, pre-pulse inhibition, and hot plate tests.

1.5. “*Field of Use*” means (a) all teaching, research, and development activities conducted by faculty, researchers, students and other employees or individuals associated with the United States Government or any Academic Institution whether or not resulting in patentable inventions and whether or not published; (b) all research and development activities conducted at an Academic Institution pursuant to a United States Government Cooperative Research and Development Agreement (CRADA) or substantially similar agreements under the laws of other countries; and (c) academic research that is conducted at the facilities of an Academic Institution in conjunction with personnel of one or more Commercial Entities, whether or not such Academic Institution is generally financially supported by such Commercial Entities, whether or not personnel from such Commercial Entities participate in such activities and whether or not such Commercial Entities obtain or have the right to obtain ownership or licenses to the resulting intellectual property; *provided*, that the Field of Use excludes all Contract Research.

1.6. “*Knockout Mouse Materials*” means, for any mouse line requested by Institution hereunder, (a) as specified on Exhibit A hereto, either (i) live mice heterozygous at a Selected Mutation (at least 4 outbred mice, including at least one breeding pair) or (ii) frozen embryos (3 straws of approximately 25 frozen (2-8 cell) embryos each) and frozen sperm (2 vials of at least 100 microliters each), each containing a Selected Mutation, (b) frozen embryonic stem cells containing a Selected Mutation (4 vials of approximately 100,000 embryonic stem cells each), and (c) targeting vectors, complete sequences and maps of vectors/alleles and probe sequences for confirming the targeted alleles. When applicable, all Knockout Mouse Materials will be on a uniform genetic background.

1.7. “*Repository*” means any Repository identified in the NIH Agreement which is separately designated by the NIH to receive certain Knockout Mouse Materials and Data from Institution pursuant to Section 2.3.

1.8. “*Selected Mutation*” means a specific mutation in a particular portion of the gene(s) identified on Exhibit A hereto originally introduced by Lexicon in a mouse embryonic stem cell through the use of gene targeting or gene trapping technology.

2 Development and Supply of Knockout Mouse Materials and Data.

2.1 *Request for and Development of Knockout Mouse Materials and Data.* Principal Investigator and Institution hereby request that Lexicon develop and deliver to Institution Knockout Mouse Materials and Data for the murine gene(s) specified in the attached Exhibit A, and Lexicon hereby accepts such request, subject to the terms and conditions of this Agreement, and agrees to use commercially reasonable efforts to complete the development of such Knockout Mouse Materials and Data. Development of a line of Knockout Mouse Materials and Data shall be deemed complete upon Lexicon’s delivery of written notice to Institution that Knockout Mouse Materials and Data from such line are available for shipment to Institution (a “*Development Notice*”).

2.2 *Delivery Terms and Conditions.* Lexicon shall be responsible for making shipping arrangements for all Knockout Mouse Materials and Data shipped to Institution from Lexicon; *provided* that Institution shall be responsible for (a) paying all shipment and delivery charges in connection therewith and (b) obtaining, if desired, and paying for any insurance for Knockout Mouse Materials and Data shipped to Institution from Lexicon. Institution shall also be responsible for complying with all customs, regulations, veterinary handling procedures and protocols, and obtaining any and all permits, forms or permissions that may be required for Institution to accept shipment of Knockout Mouse Materials and Data from Lexicon. Data will be shipped via CD, DVD, and/or other electronic means determined by Institution and/or its designee and Lexicon after reasonable consultation. All

Knockout Mouse Materials and Data will be shipped F.O.B. Lexicon. Following Lexicon's delivery of the Development Notice for a line of Knockout Mouse Materials and Data, Lexicon shall ship such Knockout Mouse Materials and Data promptly following its receipt of written confirmation that Institution is prepared to accept such shipment. If Institution fails to provide such written confirmation within sixty (60) days after Lexicon's delivery to Institution of the Development Notice for a line of Knockout Mouse Materials and Data, Lexicon shall have no further obligation to maintain such Knockout Mouse Materials and Data and may dispose of such Knockout Mouse Materials and Data at its discretion.

2.3 *Delivery of Knockout Mouse Materials and Data by Institution to Repositories.* Promptly after the Effective Date, Institution shall provide the NIH with written notification of its request for Knockout Mouse Materials and Data under this Agreement and shall identify the murine gene for which such Knockout Mouse Materials and Data are requested. Institution and the NIH shall use their commercially reasonable efforts to agree on certain Knockout Mouse Materials and Data to be delivered by Institution to a Repository designated by the NIH and Institution shall deliver such Knockout Mouse Materials and Data to such Repository as soon as reasonably practicable following receipt of such Knockout Mouse Materials and Data from Lexicon.

3 Payments.

3.1 *Payments for Knockout Mouse Materials and Data.* For each line of Knockout Mouse Materials and Data requested by Institution under this Agreement, Institution shall pay to Lexicon a non-refundable fee of Forty Thousand Dollars (U.S.\$40,000). Fifty percent (50%) of such fee shall be due and payable within thirty (30) days after the Effective Date and fifty percent (50%) of such fee, together with all shipment and delivery charges in connection therewith, shall be due and payable upon Lexicon's delivery of the Development Notice for such line of Knockout Mouse Materials and Data.

3.2 *No Withholding Taxes.* All payments due hereunder shall be paid in full, without deduction of taxes or other fees that may be imposed by any government.

3.3 *Interest on Late Payments.* Any payments by Institution to Lexicon that are not paid on or before thirty (30) days after the date such payments are due under this Agreement shall bear interest, to the extent permitted by applicable law, at one and a half percent (1.5%) per month, calculated on the number of days payment is late.

3.4 *Manner of Payment.* Payments to be made by Institution to Lexicon under this Agreement shall be payable in United States dollars and shall be paid by check delivered to Lexicon at its principal office at The Woodlands, Texas or bank wire transfer in immediately available funds to such bank account in the State of Texas as is designated in writing by Lexicon from time to time.

4 Intellectual Property Rights and Licenses.

4.1 *Rights to Use Knockout Mouse Materials.* Subject to the terms of this Agreement, Lexicon hereby grants to the Government, Institution and all other Academic Institutions, with respect to the Knockout Mouse Materials obtained by Institution hereunder, a non-exclusive license under the patents and other intellectual property rights owned or controlled by Lexicon with respect thereto, to use such Knockout Mouse Materials, progeny of such Knockout Mouse Materials, and materials derived from such Knockout Mouse Materials and progeny, in each case in the Field of Use. Without limiting the foregoing, the rights to use such Knockout Mouse Materials, their progeny and derivative materials granted under this license shall extend to breeding of mice, whether within a line or with a line of different strain or genetic background.

4.2 *Rights to Use Data.* Subject to the terms of this Agreement, Lexicon hereby grants to the Government, Institution and all other Academic Institutions, with respect to Data obtained by Institution hereunder, a non-exclusive, perpetual, irrevocable, worldwide, and royalty-free license under all rights, including copyrights, owned or controlled by Lexicon with respect thereto, to (a) publish in other works or media any or all such Data, (b) create derivative works of any or all such Data by extracting and/or reformatting all or any portion of such Data,

whether in its original form or any revised, annotated or modified form, and (c) make the foregoing available to the public without any restrictions whatsoever on its use. There shall be no restriction regarding the reproduction, display, publication, presentation, disclosure, modification and creation of the Data in other works or media or derivative works of such Data by any person and for any purpose. Data obtained under this Agreement shall be usable for all fields of use.

4.3 Rights to Inventions. Institution and all other Academic Institutions shall own and be free to seek patent or other intellectual property protection for any of their respective inventions or discoveries resulting from research using any technology obtained under this license, with no transfer of ownership, licenses, restrictions, or obligations of any kind to Lexicon.

4.4 No Further Rights. No right or license is granted hereunder to or under any patent, patent application or other intellectual property owned by or licensed to Lexicon except as expressly provided herein.

5 Term and Termination.

5.1 Term. The term of this Agreement shall commence on the Effective Date and shall remain in effect until the earlier of either (a) termination of this Agreement pursuant to the terms hereof or (b) the expiration of the last-to-expire valid claim within the patents and other intellectual property rights owned or controlled by Lexicon with respect to the Knockout Mouse Materials and Data delivered to Institution hereunder.

5.2 Events of Default. An event of default (an “Event of Default”) shall have occurred upon the occurrence of a material breach of this Agreement if the breaching party fails to remedy such breach within thirty (30) days after written notice thereof by the non-breaching party (the “Cure Period”).

5.3 Effect of an Event of Default.

(a) Remedies Available to Lexicon. If an Event of Default occurs relating to Institution, and Institution fails to cure such default during the Cure Period, then Lexicon shall have the right, at its option exercisable in its sole discretion, in addition to any other rights or remedies available to it at law or in equity, to terminate this Agreement upon notice thereof to Institution, in which case (i) the licenses granted to the Government, Institution and all other Academic Institutions pursuant to Section 4 shall terminate and (ii) Institution shall return to Lexicon, or, upon Lexicon’s written instruction, destroy all Knockout Mouse Materials and Data delivered to Institution pursuant to this Agreement, together with any progeny of such Knockout Mouse Materials and any materials derived from such Knockout Mouse Materials and progeny.

(b) Remedies Available to Institution. If an Event of Default occurs relating to Lexicon, and Lexicon fails to cure such default during the Cure Period, then Institution shall have the right, at its option exercisable in its sole discretion, in addition to any other rights or remedies available to it at law or in equity and subject to the limitations set forth in Section 6, to terminate this Agreement upon notice thereof to Lexicon, in which case the licenses granted to the Government, Institution and all other Academic Institutions pursuant to Section 4 shall continue, subject to Institution’s compliance with Article 3 and the other provisions of this Agreement.

5.4 Effect of Expiration or Termination of Agreement. The expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. The provisions of Sections 1, 5, 6 and 7 hereof shall survive the expiration or termination of this Agreement.

6 Disclaimer of Warranties and Limitation of Liability.

6.1 Disclaimer of Warranties. THE KNOCKOUT MOUSE MATERIALS AND DATA ARE BEING SUPPLIED TO INSTITUTION AND PRINCIPAL INVESTIGATOR WITH NO WARRANTIES, EXPRESS OR IMPLIED. LEXICON HEREBY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WITHOUT LIMITING THE FOREGOING, LEXICON MAKES NO

WARRANTY OF MUTAGENICITY OF ANY ALLELE OR THAT A MUTANT PHENOTYPE WILL BE OBSERVED IN ANY SUCH KNOCKOUT MOUSE MATERIALS OR MICE OR PROGENY DERIVED THEREFROM. LEXICON MAKES NO REPRESENTATION OR WARRANTY THAT THE USE OF THE KNOCKOUT MOUSE MATERIALS OR DATA OR THE CONDUCT OF RESEARCH WITHIN THE FIELD OF USE HEREUNDER WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF THIRD PARTIES.

6.2 Limitation of Liability; Indemnity. Lexicon shall in no event be liable for any use by the Government, Principal Investigator or Institution, or any other Academic Institution of the Knockout Mouse Materials or Data or any loss, claim, damage or liability, of whatever kind or nature, which may arise from or in connection the use, handling or storage of the Knockout Mouse Materials or Data by the Government, Principal Investigator or Institution, or any other Academic Institution. Further, to the extent permitted by applicable law, and except where Institution is a state-funded Academic Institution or an agency of the U.S. Government, Institution agrees that it will defend, indemnify and hold Lexicon, its officers, directors, employees and agents harmless from any losses, claims, damages, expenses or liabilities of whatever kind or nature (including reasonable attorneys' fees) which may arise from or in connection with the use, handling or storage of the Knockout Mouse Materials or Data by Principal Investigator or Institution. NOTWITHSTANDING ANYTHING ELSE IN THIS AGREEMENT OR OTHERWISE TO THE CONTRARY, LEXICON SHALL NOT BE LIABLE WITH RESPECT TO ANY MATTER ARISING UNDER THIS AGREEMENT UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR (A) ANY PUNITIVE, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS OR (B) COST OF PROCUREMENT OF SUBSTITUTE GOODS, TECHNOLOGY OR SERVICES. LEXICON SHALL NOT, IN ANY EVENT, HAVE ANY LIABILITY WHATSOEVER IN CONNECTION WITH THIS AGREEMENT IN EXCESS OF AN AMOUNT EQUAL TO THE FEES PAID TO LEXICON BY INSTITUTION HEREUNDER.

7 Miscellaneous.

7.1 Entire Agreement. This Agreement, together with the Exhibit attached hereto, contains the entire understanding of the parties with respect to the subject matter hereof. All express or implied agreements and understandings, either oral or written, heretofore made are expressly merged in and made a part of this Agreement.

7.2 Amendment and Waiver. This Agreement may be amended, or any term hereof modified, only by a written instrument duly executed by both parties hereto. The waiver by either party hereto of any right hereunder or the failure to perform or of a breach by the other party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other party whether of a similar nature or otherwise.

7.3 Assignment. This Agreement may not be assigned or otherwise transferred by Institution without the consent of Lexicon. Any purported assignment in violation of the provisions of the foregoing sentence shall be void. Any permitted assignee shall assume all obligations of its assignor under this Agreement.

7.4 Representation of No Conflict. Principal Investigator represents that, to the best of his or her knowledge, his or her execution and delivery of this Agreement, and the performance of his or her duties and obligations hereunder, do not and will not constitute a breach or violation of any other agreement or understanding, written or oral, to which he or she is a party. Institution represents and warrants that its execution and delivery of this Agreement, and the performance of its duties and obligations hereunder, do not and will not constitute a breach or violation of any other agreement or understanding, written or oral, to which it is a party.

7.5 Force Majeure. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any obligation under this Agreement when such failure or delay is caused by or results from causes beyond the reasonable control of the affected party, including but not limited to fire, floods, embargoes, war, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party; *provided, however*, that the party so affected shall use reasonable commercial efforts to avoid or remove such causes of nonperformance, and shall

continue performance hereunder with reasonable dispatch whenever such causes are removed. Either party shall provide the other party with prompt written notice of any delay or failure to perform that occurs by reason of *force majeure*. The parties shall mutually seek a resolution of the delay or the failure to perform as noted above.

7.6 *No Partnership*. It is expressly agreed that the relationship between Lexicon and Institution shall not constitute a partnership, joint venture or agency. Neither Lexicon nor Institution shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other, without the prior written consent of the other party to do so.

7.7 *Notices*. Any notice, consent or other communication under this Agreement shall be given or made in writing, delivered personally or by certified first class mail, return receipt requested, or overnight courier, addressed as indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor, and shall be effective upon receipt by the addressee.

If to Lexicon: Lexicon Pharmaceuticals, Inc.
8800 Technology Forest Place
The Woodlands, Texas 77381
Attention: General Counsel
Telephone: (281) 863-3000
Facsimile: (281) 863-8010

If to Institution:

Attention:
Telephone:
Facsimile:

7.8 *Applicable Law*. This Agreement shall be governed by, construed, and interpreted in accordance with, the laws of the State of Texas, United States of America, without reference to the conflict of laws principles thereof.

7.9 *Dispute Resolution*.

(a) The parties hereby agree that they will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement promptly by negotiations. If a controversy or claim should arise hereunder, the matter shall be referred to an individual designated by the Chief Executive Officer (or the equivalent position) of Lexicon and an individual designated by the Chief Executive Officer (or the equivalent position) of Institution (the "*Representatives*"). If the matter has not been resolved within thirty (30) days of the first meeting of the *Representatives* of the parties (which period may be extended by mutual agreement) concerning such matter, subject to rights to injunctive relief and specific performance, and unless otherwise specifically provided for herein, any controversy or claim arising out of or relating to this Agreement, or the breach thereof, will be settled as set forth in Section 7.9(b), unless Institution is a U.S. Government agency.

(b) All disputes arising in connection with this Agreement which are not resolved pursuant to Section 7.9(a) above shall be finally settled by binding arbitration conducted in Houston, Texas under the Commercial Arbitration Rules of the American Arbitration Association by a single arbitrator appointed in accordance with said Rules. Notwithstanding the above, either party has the right to bring suit in a court of competent jurisdiction against the other party for any infringement of its proprietary rights by the other party. Judgment upon the arbitrator's award may be entered in any court of competent jurisdiction. The award of the arbitrator may include compensatory damages against either party, but under no circumstances will the arbitrator be authorized to, nor shall he, award punitive damages or multiple damages against either party. The parties agree not to institute any litigation or proceedings against each other in connection with this Agreement except as provided in this Section 7.9.

7.10 *Counterparts*. This Agreement may be executed in counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument.

7.11 *Severability*. The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof. The parties shall thereafter in good faith amend this Agreement to provide for an acceptable provision to replace such invalid or unenforceable provision.

IN WITNESS WHEREOF, the parties have caused their duly authorized officer to execute and deliver this Material Transfer Agreement as of the Effective Date.

“Lexicon”

LEXICON PHARMACEUTICALS, INC.

By: _____
(Signature)
Brian P. Zambrowicz, Ph.D.
Executive Vice President and
Chief Scientific Officer

Date: _____

“Institution”

(Name of Institution)

By: _____
(Signature of Authorized Signatory)

Printed Name: _____

Title: _____

Date: _____

“Principal Investigator”

(Signature)

Printed Name: _____

Date: _____

Exhibit A

Murine Gene Name:

Knockout Mouse Materials Requested (check only one):

Live mice _____; or

Frozen embryos and frozen sperm _____