

Memorandum of Understanding

This Memorandum Of Understanding (hereinafter "Agreement"), effective April 25, 2002, by and between The Regents of the University of California having an address at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 ("Recipient") and the WiCell Research Institute, Inc., a Wisconsin nonprofit corporation having an address at 614 Walnut Street, Madison, Wisconsin 53705 ("WiCell"). Institute and WiCell are referred to herein as the "Parties".

WHEREAS, certain technologies and materials concerning primate embryonic stem cells and their cultivation claimed in U.S. Patent 5,843,780, U.S. Patent 6,200,806, U.S. Patent Application 09/522,030 and corresponding U.S. or foreign patent rights and any patents granted on any divisional and continuation applications of any type but only to the extent it claims an invention claimed in a patent application listed herein ("Wisconsin Patent Rights") have usefulness in basic research conducted by Recipient as well as potential utility for commercial applications; and

WHEREAS, specific human embryonic stem cell line materials, their unmodified and undifferentiated progeny or unmodified and undifferentiated derivatives ("Wisconsin Materials") have been derived consistent with the Presidential Statement of August 9, 2001 from the research efforts of James A. Thomson of the University of Wisconsin - Madison working alone or with other investigators; and

WHEREAS, Wisconsin Materials were made using solely private funds and are the proprietary, tangible property of WiCell and, as such, their ownership is not subject to the rights and obligations granted the Government in the Wisconsin Patent Rights; and

WHEREAS, the Wisconsin Alumni Research Foundation of the University of Wisconsin – Madison ("WARF") and WiCell have a mission to serve the public good and desire to serve the public interest by making the Wisconsin Materials and the Wisconsin Patent Rights widely available to Recipient and other academic researchers; and

WHEREAS, WiCell represents that it has received a license, with the right to grant sublicenses, to Wisconsin Patent Rights from WARF and that WiCell also owns or otherwise has the right to distribute Wisconsin Materials to third parties; and

WHEREAS, WiCell desires to exercise Wisconsin Patent Rights and distribute Wisconsin Materials without placing undue restrictions or burdens upon health research conducted by Recipient; and

WHEREAS, human embryonic stem cell line materials that are qualified for Federal funding under the President's announcement of August 9, 2001 have been derived from the research efforts of Recipient investigators ("UC Materials"); and

WHEREAS, UC Materials are the property of Recipient; and

WHEREAS, Recipient has a mission to serve the public good and desires to serve the public interest by making UC Materials and other research results of Recipient researchers using Wisconsin Materials and the Wisconsin Patent Rights widely available to other academic researchers;

NOW, THEREFORE, the Parties hereby agree to the following terms and conditions regarding use of Wisconsin Materials or Wisconsin Patent Rights for academic, non-commercial research conducted by

Recipient:

- (1) The Parties agree that Wisconsin Patent Rights are to be made available without cost for use in the Recipient biomedical research program subject to the following conditions:
 - (a) Wisconsin Patent Rights may be used in research programs involving Wisconsin Materials only in programs in compliance with all applicable statutes, regulations and guidelines for research of this type. Specifically, Recipient agrees that its research programs will exclude: (i) the mixing of Wisconsin Materials with an intact embryo, either human or non-human; (ii) implanting Wisconsin Materials or products of Wisconsin Materials in a uterus; and (iii) attempting to make whole embryos with Wisconsin Materials by any method. An annual Certification Statement confirming compliance with the restrictions on the use of Wisconsin Materials shall be supplied to WiCell by Recipient and the scientists receiving Wisconsin Materials under the terms of the "Simple Letter Agreement For The Transfer of Materials" (Attachment A). Recipient agrees that Wisconsin Materials are to be returned to WiCell or destroyed upon Recipient's material breach of the terms of the Simple Letter Agreement for the Transfer of Materials Agreement.
 - (b) Wisconsin Patent Rights may also be used in Recipient research programs involving materials other than Wisconsin Materials that are within the scope of an issued claim of Wisconsin Patent Rights and that originate with a third party to this Agreement ("Third Party Materials"), or involving UC Materials. This research may be conducted only in Recipient research programs using UC Materials or Third Party Materials that are derived consistent with the Presidential Statement of August 9, 2001 and in compliance with all applicable statutes, regulations and guidelines.
 - (c) Suppliers of Third Party Materials are granted a limited, revocable, non-commercial, research license by WiCell under the Wisconsin Patent Rights to provide such Third Party Materials to Recipient research programs provided that such Suppliers make such Third Party Materials available on terms no more onerous than those contained in this Agreement. Specifically, but without limitation, Suppliers of Third Party Materials shall not be permitted to directly or indirectly receive rights (either actual or contingent) for themselves or others under agreements or arrangements governing the supply or use of Third Party Materials. The use of Wisconsin Patent Rights in Recipient research programs utilizing Third Party Materials shall be for teaching or non-commercial research purposes only. As used herein, non-commercial research purposes specifically excludes research sponsored by a for-profit entity either through supply of materials or funding, except as such research sponsor i) is permitted to use Wisconsin Patent Rights under a separate written agreement with WiCell or WARF, or ii) receives no rights to the results of the sponsored research. Specifically, Third Party Materials shall not be used in a Recipient research program sponsored by a for-profit research sponsor who does not have a separate written agreement with WiCell permitting commercial use of Wisconsin Patent Rights unless such sponsor receives no rights, actual or contingent, to the results of the sponsored research. Recipient is granted a limited, revocable, non-commercial, research license by WiCell to provide UC Materials to non-profit third parties for non-commercial research purposes as defined herein. Such UC Materials may be provided by Recipient to a third party if such third party has 1) already entered into an MOU with WiCell, or 2) enters into an MTA with Recipient that has been approved in writing by WiCell (in which case Recipient will provide WiCell with a copy of the fully executed

MTA within thirty (30) days of signing by both parties).

- (d) The Parties recognize that Wisconsin Patent Rights may be used in Recipient research to make patentable discoveries (“Recipient Patent Rights”), which themselves may eventually be the basis of commercial products that benefit public health. Any grant of Wisconsin Patent Rights that may be needed by a third party for commercialization of Recipient Patent Rights shall be done by a separate written agreement with WiCell permitting such use of Wisconsin Patent Rights under terms not less favorable than other similar commercial licenses to the extent such rights are available.
- (2) The Parties agree that Wisconsin Materials are to be made available by WiCell for use in Recipient’s biomedical research programs. For purposes of transferring Wisconsin Materials to Recipient investigators, WiCell agrees to utilize the Simple Letter Agreement For The Transfer of Materials in Appendix A, including the following conditions:
- (a) Wisconsin Materials are the property of WiCell and are being made available to investigators at Recipient institution as a service by WiCell. Ownership of Wisconsin Materials shall remain with WiCell.
 - (b) Wisconsin Materials are not to be used for diagnostic or therapeutic purposes.
 - (c) Wisconsin Materials may only be used in compliance with all applicable statutes, regulations and guidelines relating to their handling or use. Specifically, Recipient agrees that its research program will exclude: (i) the mixing of Wisconsin Materials with an intact embryo, either human or non-human; (ii) implanting Wisconsin Materials or products of Materials in a uterus; and (iii) attempting to make whole embryos with Wisconsin Materials by any method. An annual Certification Statement confirming compliance with the restrictions on the use of Wisconsin Materials shall be supplied to WiCell by Recipient and the scientists receiving Wisconsin Materials under the terms of the Simple Letter Agreement For The Transfer of Materials. Recipient agrees that Wisconsin Materials are to be returned to WiCell or destroyed upon a material breach of the terms of the Simple Letter Agreement for the Transfer of Materials by Recipient or its investigators.
 - (d) The use of Wisconsin Materials shall be for teaching or non-commercial research purposes only. As used herein, non-commercial research purposes specifically excludes research sponsored by a for-profit entity either through supply of materials or funding, except as such research sponsor i) is permitted to use Wisconsin Materials under a separate written agreement with WiCell or WARF, or ii) receives no rights to the results of the sponsored research. Specifically, Wisconsin Materials shall not be used in a Recipient research program sponsored by a for-profit research sponsor who does not have a separate written agreement with WiCell permitting such commercial use of Wisconsin Materials unless such sponsor receives no rights, actual or contingent, to the results of the sponsored research.
 - (e) Wisconsin Materials may not be transferred by Recipient to third parties without the written consent of WiCell.
 - (f) Recipient agrees to acknowledge the source of Wisconsin Materials in any publications or other disclosures reporting their use.

- (g) In order to facilitate potential novel collaborative research interactions between Recipient and WiCell that may utilize Wisconsin Materials, Recipient agrees to identify the titles of its planned research in its individual requests for samples of Wisconsin Materials. This information is to be provided to facilitate new inter-disciplinary collaborations among individual scientists at Recipient and WiCell, but not to obligate either Party to a specific program of research utilizing Wisconsin Materials.
 - (h) The Parties recognize that Wisconsin Materials may be used in the Recipient's research program to make discoveries of different materials ("Recipient Materials") which themselves may eventually be the basis of commercial products that benefit public health. Any grant of rights to Wisconsin Materials or Wisconsin Patent Rights that may be needed by a third party for commercialization of Recipient Materials shall be done by a separate written agreement with WiCell permitting such use of Wisconsin Materials or Wisconsin Patent Rights under terms not less favorable than other similar commercial licenses to the extent such rights are available.
 - (i) Any Wisconsin Materials delivered pursuant to this Agreement are understood to be experimental in nature and may have hazardous properties. WiCell makes no representations and extends no warranties of any kind, either expressed or implied. There are no express or implied warranties of merchantability for fitness for a particular purpose, or that the use of the Wisconsin Materials will not infringe any patent, copyright, trademark or other proprietary rights. Recipient assumes all liability for claims for damages which may arise from Recipient's use, storage, handling or disposal of Wisconsin Materials except that, to the extent permitted by law, WiCell shall be liable to Recipient when the damage is caused by the gross negligence or willful misconduct of WiCell.
 - (j) A transmittal fee may be requested by WiCell to cover its preparation and distribution costs for samples of Wisconsin Materials requested by Recipient. Such fees will be the responsibility of the requesting Recipient laboratory and are not expected to exceed Five Thousand Dollars (\$5,000) to accompany the Recipient Simple Letter Agreement for the Transfer of Materials.
- (3) Upon WiCell's written request, Recipient agrees to provide without cost, other than payment of Recipient's actual out-of-pocket costs, reasonable quantities of any Recipient Materials that it makes in the course of its research program to WiCell for research purposes only at WiCell or the University of Wisconsin after Recipient has publicly disclosed or reasonably characterized such Recipient Materials. Recipient also agrees to grant under the Recipient Patent Rights internal research licenses to WiCell and the University of Wisconsin.
- (4) The provisions of this Agreement and the obligations hereunder with respect to the Wisconsin Patent Rights shall be in effect only during the term of the Wisconsin Patent Rights. However, the provisions of this Agreement and the obligations hereunder with respect to the Wisconsin Materials shall continue as long as Wisconsin Materials, their derivatives or progeny continue to be used by Recipient.
- (5) Nothing contained herein shall be considered to be the grant of a commercial license or right under the Wisconsin Patent Rights or to Wisconsin Materials. Furthermore, nothing contained herein shall be construed to be a waiver of WiCell's patent rights under the Wisconsin Patent Rights or WiCell's property rights in Wisconsin Materials.

(6) In the event of a disagreement between the terms of this Agreement and those of the Simple Letter Agreement for the Transfer of Materials in Appendix A, the terms of this Agreement shall control.

IN WITNESS WHEREOF, the Parties agree to the foregoing and have caused this Agreement to be executed by their duly authorized representatives.

WiCell Research Institute

By: 

Carl E. Gulbrandsen, President

Date: 4/25/02

Name: _____

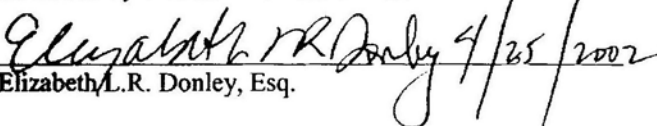
Recipient

By: 

Date: April 25, 2002

Title: Executive Director
Research Admin. and
Technology Transfer

Reviewed by WiCell's General Counsel:

 4/25/2002
Elizabeth L.R. Donley, Esq.

(WiCell's attorney shall not be deemed a signatory to this Agreement.)

WiCell Ref: Thomson – P98222US

APPENDIX A

Agreement No. _____

Simple Letter Agreement for the Transfer of Materials to Recipient Scientists

In response to RECIPIENT's request for MATERIAL (Human Embryonic Stem Cells, WiCell Ref: No. P98222US and its unmodified and undifferentiated progeny or derivatives) for a research program entitled _____

WiCell Research Foundation, Inc. ("PROVIDER") has entered into a Memorandum of Understanding dated _____ (the "MOU") with RECIPIENT which is hereby incorporated by reference and asks that the RECIPIENT and the RECIPIENT SCIENTIST agree to the following before the RECIPIENT SCIENTIST receives the MATERIAL:

1. The above MATERIAL is the property of the PROVIDER and is made available as a service to the research community. Ownership of the MATERIAL shall remain with PROVIDER and transfer of the MATERIAL to the RECIPIENT shall not affect PROVIDER's ownership of the MATERIAL.
2. This MATERIAL is not to be used for diagnostic or therapeutic purposes.
3. The MATERIAL will be used for teaching or non-commercial research purposes. As used herein, non-commercial research purposes specifically excludes research sponsored by a for-profit entity either through supply of materials or funding, except as such research sponsor i) is permitted to use MATERIAL under a separate written agreement with PROVIDER, or ii) receives no rights to the results of the sponsored research. Specifically, MATERIAL shall not be used in a research program sponsored by a for-profit research sponsor who does not have a separate written agreement with PROVIDER permitting such use of MATERIAL unless such sponsor receives no rights, actual or contingent, to the results of the sponsored research.
4. Nothing contained herein shall be considered to be the grant of a commercial license or right under U.S. Patent 5,843,780, U.S. Patent 6,200,806, U.S. Patent Application 09/522,030 and corresponding U.S. or foreign patent rights and any patents granted on any divisional and continuation applications, reissues and reexaminations ("WISCONSIN PATENT RIGHTS") or to the MATERIALS. Furthermore, nothing contained herein shall be construed to be a waiver of PROVIDER's patent rights under the WISCONSIN PATENT RIGHTS or PROVIDER's property rights in the MATERIALS.
5. The MATERIAL will not be further distributed to others without the PROVIDER's written consent. The RECIPIENT shall refer any request for the MATERIAL to the PROVIDER. To the extent supplies are available, the PROVIDER or the PROVIDER SCIENTIST agree to make the MATERIAL available, under a separate Simple Letter Agreement to other scientists for teaching or non-commercial research purposes only.
6. The RECIPIENT agrees to acknowledge the source of the MATERIAL in any publications reporting use of it.
7. Upon PROVIDER's written request, RECIPIENT agrees to provide without cost, other than

payment of RECIPIENT's actual out-of-pocket costs, reasonable quantities of any RECIPIENT MATERIALS that it makes in the course of its research program to PROVIDER for research purposes only at PROVIDER or the University of Wisconsin after RECIPIENT has publicly disclosed or reasonably characterized such RECIPIENT MATERIALS. RECIPIENT also agrees to grant under the RECIPIENT Patent Rights internal research licenses to PROVIDER and the University of Wisconsin-Madison.

8. Any MATERIAL delivered pursuant to this Agreement is understood to be experimental in nature and may have hazardous properties. THE PROVIDER MAKES NO REPRESENTATIONS AND EXTENDS 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. Unless prohibited by law, RECIPIENT assumes all liability for claims for damages which may arise from RECIPIENT's use, storage, handling or disposal of MATERIAL except that, to the extent permitted by law, PROVIDER shall be liable to the RECIPIENT when the damage is caused by the gross negligence or willful misconduct of the PROVIDER.
9. The RECIPIENT agrees to use the MATERIAL only in compliance with all applicable statutes, regulations and guidelines relating to their handling, use or disposal. Specifically, RECIPIENT agrees that its research program will exclude: (i) the mixing of MATERIAL with an intact embryo, either human or non-human; (ii) implanting MATERIAL or products of MATERIAL in a uterus; and (iii) attempting to make whole embryos with MATERIAL by any method. RECIPIENT shall supply an Annual Certification Statement confirming compliance with the restrictions on the use of MATERIAL supplied by PROVIDER. RECIPIENT agrees that MATERIAL is to be returned to PROVIDER or destroyed upon a material breach of the terms of this Agreement by RECIPIENT.
10. The MATERIAL is provided with a transmittal fee solely to reimburse the PROVIDER for its preparation and distribution costs. The amount of the fee for this transfer of MATERIAL will be \$5000.

The PROVIDER, RECIPIENT and RECIPIENT SCIENTIST must sign both copies of this letter and return one signed copy to the PROVIDER. The PROVIDER will then send the MATERIAL.

WICELL RESEARCH INSTITUTE, INC.

By: _____
Carl E. Gulbrandsen, President

Date: _____

RECIPIENT INFORMATION and AUTHORIZED SIGNATURE

Recipient Scientist:
:

Recipient Organization: _____

Address: _____

Signature of Recipient Scientist: _____

Date: _____

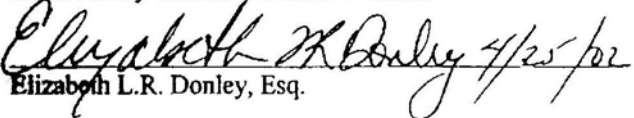
Name of Authorized Official: _____

Title of Authorized Official: _____

Signature of Authorized Official: _____

Date: _____

Reviewed by WiCell's General Counsel:


Elizabeth L.R. Donley, Esq.

(WiCell's attorney shall not be deemed a signatory to this Agreement.)

WiCell Ref: Thomson – P98222US

ANNUAL CERTIFICATION

Annual Certification of Recipient Scientist: I have read and understood the conditions outlined in the Memorandum of Understanding executed by The Regents of the University of California and the WiCell Research Institute, and in the Simple Letter Agreement for the Transfer of Materials executed thereunder on <insert date> and I agree to abide by them in the receipt and use of the MATERIAL. I further certify that, consistent with those agreements, I am not engaged and have not been engaged in commercial research using the MATERIAL or any Third Party Material which requires a license under the WISCONSIN PATENT RIGHTS.

Recipient Scientist: _____

Date: _____

Recipient Scientist: _____

Date: _____

Recipient Scientist: _____

Date: _____