

LOS ALAMOS NATIONAL SECURITY, LLC
BIOLOGICAL MATERIAL TRANSFER AGREEMENT

THIS BIOLOGICAL MATERIAL TRANSFER AGREEMENT (“Agreement”) is entered into by and between, LOS ALAMOS NATIONAL SECURITY, LLC., hereinafter referred to as the PROVIDER, and RECIPIENT as defined in Appendix A and referred to below, the parties to this Agreement being referred to individually as a "Party," and collectively as "Parties."

BACKGROUND

The PROVIDER conducts research and development at Los Alamos National Laboratory for the U.S. Government under Contract No. DE-AC52-06NA25396 with the U.S. Department of Energy.

Certain MATERIAL has been developed in the course of the PROVIDER’S research and development at Los Alamos National Laboratory. In response to the RECIPIENT’S request, the PROVIDER is transferring this Material to RECIPIENT for use in scientific research as described in Article 3 of this Agreement.

AGREEMENT

1. MATERIAL means (a) a modified PRO bacterial expression plasmid, with ColE1 origin and spectinomycin selectable marker, containing a cassette with NcoI-6HIS-thrombin cleavage site-Nde-FS-BamHI-linker-GFP S11 M3, under tet promoter control, for cloning proteins as N-terminal fusions with GFP strand 11 variant “M3”, and (b) a modified pET plasmid, with p15 origin and kanamycin marker, containing a cassette expressing a GFP 1-10 “OPT”. These materials are described in: Cabantous S, Terwilliger TC, Waldo GS (2005) “Protein tagging and detection using engineered self-assembling fragments of green fluorescent protein” *Nat Biotech* 23(1), 102-7.

MATERIAL also includes progeny and unmodified derivatives of the materials provided. Progeny means an unmodified descendent from the original material, such as virus from virus, cell from cell, or organism from organism. Unmodified derivative means substances created by RECIPIENT that constitute an unmodified functional subunit or product expressed by the original material, such as subclones of unmodified cell lines, purified or fractionated subsets of or the original material, proteins expressed by DNA/RNA supplied by PROVIDER, or monoclonal antibodies secreted by a hybridoma cell line.

2. MATERIAL is the PROVIDER’S intellectual property and is embodied in the following patents, copyrights, patent applications, or patent disclosures:

U.S. Application Serial No. 10/423,688, filed 04/24/03, entitled “DIRECTED EVOLUTION METHODS FOR IMPROVING POLYPEPTIDE FOLDING AND SOLUBILITY AND SUPERFOLDER FLUORESCENT PROTEINS GENERATED THEREBY”; related PCT Application No. PCT/US03/13087; and associated priority application(s).

U.S. Application Serial No. 10/973,693, filed 10/25/04, entitled “SELF-ASSEMBLING SPLIT-FLUORESCENT PROTEIN SYSTEMS”; related PCT Application No. PCT/US04/34926, filed 10/23/04; and associated priority application(s).

U.S. Application No. 11/295,374, filed 12/05/2005, entitled “PROTEIN SUBCELLULAR LOCALIZATION ASSAYS USING SPLIT FLUORESCENT PROTEINS”.

U.S. Application No. 11/295,368, filed 12/05/2005, entitled “PROTEIN-PROTEIN INTERACTION DETECTION SYSTEM USING FLUORESCENT PROTEIN MICRODOMAINS”.

3. The MATERIAL is the property of the PROVIDER and is made available as a service to the research community and will be used for teaching or not-for-profit research purposes only. The RECIPIENT does not acquire any property rights or interest in the MATERIAL.

Technical Contact:

For matters concerning technical information regarding the MATERIAL, the following contact information should be used:

Principal Investigator: Geoffrey Waldo, Ph.D.
Technical Division: Biosciences Division
Mailing address: POB 1663, Mail Stop M888
Los Alamos, NM 87545
Phone Number: (505) 665-8161
Email Address: waldo@lanl.gov

Property Contact:

The Property Representative for this Agreement is Michael J. Shepherd or his/her designee. Any questions concerning the MATERIAL property provided, acquired, or used in the performance of this Agreement, other than technical information, should be addressed to his/her attention at the following e-mail address and/or telephone number: disposition@lanl.gov / (505) 665-8063. In addition, the Property Representative is authorized to take any action necessary to comply with the Federal Property Management Regulations, DOE Property Management Regulations, the Albuquerque Property Management instructions, the LANL Property Management Manual and the terms of this Agreement regarding the appropriate acquisition, use, loss, replacement, transfer or return of property furnished under this Agreement.

4. RECIPIENT REPRESENTS AND WARRANTS THAT THE MATERIAL IS NOT TO BE USED IN HUMAN SUBJECTS.
5. The RECIPIENT will not transfer MATERIAL to any third party. RECIPIENT will refer any request for the MATERIAL to the PROVIDER.

The use, disposition, export and re-export of this property are subject to all applicable U.S.

laws and regulations, including the Atomic Energy Act of 1954, as amended; the Arms Export Control Act (22 U.S.C. 2751 et seq.); the Export Administration Act of 1979 (50 U.S.C. Append 2401 et seq.); Assistance to Foreign Atomic Energy Activities (10 CFR part 810); Export and Import of Nuclear Equipment and Material (10 CFR part 110); International Traffic in Arms Regulations (22 CFR parts 120 et seq.); Export Administration Regulations (15 CFR part 730 et seq.); Foreign Assets Control Regulations (31 CFR parts 500 et seq.); and the Espionage Act (37 U.S.C. 791 et seq.) which among other things, prohibit (a) the making of false statements and concealment of any material information regarding the use or disposition, export or re-export of the property; and (b) any use or disposition, export or re-export of the property which is not authorized in accordance with the provisions of this agreement.

6. The RECIPIENT will use the MATERIAL in compliance with all applicable statutes and regulations.
7. RECIPIENT will not analyze the MATERIAL for composition.
8. The MATERIAL is provided at no cost, or with an optional transmittal fee solely to reimburse the PROVIDER for its preparation and distribution costs.
9. In consideration for the MATERIAL, the RECIPIENT will
 - a. acknowledge the source of the MATERIAL in any publications reporting use of it; and
 - b. provide the PROVIDER with a report or abstract of any publication or disclosure to a third party referencing the MATERIAL, at least thirty (30) days prior to such publication or disclosure.
10. The MATERIAL is experimental in nature and may have hazardous properties. THE MATERIAL is provided WITHOUT ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED. THE PROVIDER MAKES NO REPRESENTATION OR WARRANTY THAT THE USE OF THE MATERIAL WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT OF A THIRD PARTY.
11. Except to the extent prohibited by law, the RECIPIENT assumes all liability for claims for damages which may arise from the use, storage or disposal of the MATERIAL. The PROVIDER and the U.S. Government will not be liable to the RECIPIENT for any loss, claim or demand made by the RECIPIENT, or made against the RECIPIENT by any other party, due to or arising from the use, handling, storage or disposal of the MATERIAL by the RECIPIENT, except to the extent permitted by law when caused by the gross negligence or willful misconduct of the PROVIDER.
12. This Agreement will be effective for a period of one (1) year from the effective date of this Agreement. Either the RECIPIENT or the PROVIDER may terminate this Agreement upon thirty (30) days written notice; provided that termination will not relieve the RECIPIENT or the PROVIDER of any obligation or liability accrued hereunder prior to the

effective date of such termination. Upon completion of use of the MATERIAL or upon termination of this Agreement, RECIPIENT will destroy the MATERIAL in RECIPIENT'S possession or, at the PROVIDER'S request, return to the PROVIDER the MATERIAL in RECIPIENT'S possession. The date, quantity, and method of destruction will be recorded and witnessed, and a copy of such record furnished to the PROVIDER.

- 13. Any payment, notice, or other communication required or permitted to be given to either party hereto will be deemed to have been properly given and to be effective on the date of delivery if delivered in person or by first-class certified mail, postage paid, to the respective address given below.
- 14. No amendment or modification of this Agreement is binding on the Parties unless made in a writing executed by duly authorized representatives of the Parties.
- 15. This Agreement may be assigned by the PROVIDER, but is personal to the RECIPIENT and assignable by the RECIPIENT only with the prior written consent of the PROVIDER.
- 16. This Agreement embodies the entire understanding of the Parties and supersedes all previous communications, representations, or understandings, either oral or written, between the Parties relating to this Agreement.

By the signatures of their respective Authorized Officials, the PROVIDER and the RECIPIENT have executed this Agreement on the day and year written below. By his/her signature, the Recipient Scientist acknowledges that he/she has read and understood this agreement.

PROVIDER INFORMATION and AUTHORIZED SIGNATURE

Authorized Official: Division Leader
Bioscience Division

Signature of Authorized Official

Date

Name of Provider Scientist: Geoffrey Waldo, Ph.D.

Address for Notices
Bioscience Division
P.O.B. 1663, Mail Stop M888
Los Alamos, New Mexico 87545
ATTN: Chief of Staff
Fax: +1 505 667 8339

APPENDIX A
RECIPIENT INFORMATION and AUTHORIZED SIGNATURE

RECIPIENT Institution Name: _____

Address for Notices to RECIPIENT:

Authorized Official: _____ (name)

_____ (title)

Signature of Authorized Official

Date

Name of Recipient Scientist: _____

Signature of Recipient Scientist

Date

APPENDIX B
Checklist for Foreign Entities

Complete Facility Name: _____

****Note:** Facility means the entire organization, not just the department you work in.

Typed Name & Title: _____

Signature: _____

Date: _____

What activity will this equipment/material/data be used for?

Nuclear Controls Checklist

Is your facility involved in any of the following activities?

(1) Nuclear explosive activities

Yes ___ No ___ Research on or development, design, manufacture, construction, testing or maintenance of any nuclear explosive device or components or subsystems of such a device?

Yes ___ No ___ Are you a U.S. person involved in support activities where you know that the items will be used in the design, development, production, or use of nuclear explosive devices? "Support activities" includes financing, transportation, and freight forwarding and any action by which you facilitate an export, reexport, or transfer in any other way without being the actual exporter or reexporter.

(2) **Unsafeguarded* nuclear activities.**

Research on, or development, design, manufacture, construction, operation, or maintenance of:

Yes ___ No ___ a nuclear reactor

Yes ___ No ___ a critical facility

Yes ___ No ___ a facility for the fabrication of nuclear fuel

Yes ___ No ___ a facility for the conversion of nuclear material from one form to another

Yes ___ No ___ a storage installation

*Unsafeguarded means that there is no obligation on the part of the country to accept International Atomic Energy Agency (IAEA) safeguards at the relevant facility or installation that contains any source or special fissionable material (regardless of whether or not it contains such material at the time of export) or where any such obligation is not met.

(3) **Safeguarded and unsafeguarded nuclear activities.**

Nuclear fuel cycle activities, including research on a development, design, manufacture, construction, operation or maintenance of any of the following facilities:

Yes ___ No ___ Facilities for the chemical processing of irradiated special nuclear or source material

Yes ___ No ___ Facilities for the production of heavy water

Yes ___ No ___ Facilities for the separation of isotopes of source and special nuclear material

Yes ___ No ___ Facilities for the fabrication of nuclear reactor fuel containing plutonium

Missile Technology Checklist

Yes ___ No ___ Will the item(s) requested for export be used in the design, development, production or use of missiles?

Yes ___ No ___ Is your facility involved in any activities involving the development of missiles?

Yes ___ No ___ Does your facility have any direct or indirect assistance in the design, fabrication, operation or maintenance of rocket systems (including ballistic missile systems, space launch vehicles and sounding rockets) or in unmanned air vehicles systems (including cruise missile systems, target drones, remotely piloted vehicles and reconnaissance drones).

Chemical & Biological Weapons Screen

Yes ___ No ___ Will the item(s) requested for export be used in the design, development, production, stockpiling, or use of chemical or biological weapons?

Yes ___ No ___ Would you refuse Los Alamos National Laboratory personnel access to parts of the plant other than those involved in the contract?