COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (hereinafter “CRADA”),
No. YY-NNNC],

between

The Board of Trustees of the
Leland Stanford Junior University
(hereinafter “Contractor”),
under its
U.S. Department of Energy Contract (DOE),
No. DE-AC02-76SF00515,
for the management and operation of the
SLAC National Accelerator Laboratory
(hereinafter SLAC),

and

[XYZ]
(hereinafter “Participant”),

both being hereinafter jointly referred to as the “Parties”.

Based on the DOE Model CRADA, Rev. 0 Approved (9/2/2014)
ARTICLE I: DEFINITIONS

A. “Background Intellectual Property” means the Intellectual Property identified by the Parties in Annex B, Background Intellectual Property, which was in existence prior to or is first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property.

B. “Contracting Officer” means the DOE employee administering Contractor’s DOE contract.

C. “DOE” means the Department of Energy, an agency of the Federal Government.

D. “Generated Information” means information produced in the performance of this CRADA.

E. “Government” means the Federal Government of the United States of America and agencies thereof.

F. “Intellectual Property” means patents, trademarks, copyrights, mask works, Protected CRADA Information, and other forms of comparable property rights protected by Federal law and foreign counterparts, except trade secrets.

G. “Proprietary Information” means information, including data which is developed at private expense outside of this CRADA, is marked as Proprietary Information, and embodies (i) trade secrets or (ii) commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 U.S.C. 552 (b)(4)).

H. “Protected CRADA Information” means Generated Information which is marked as being Protected CRADA Information by a Party to this CRADA and which would have been Proprietary Information had it been obtained from a non-Federal entity.

I. “Subject Invention” means any invention of Contractor or Participant conceived or first actually reduced to practice in the performance of work under this CRADA.

ARTICLE II: STATEMENT OF WORK, TERM, FUNDING AND COSTS

A. The Statement of Work is Annex A.

B. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by verified facsimile. Address changes shall be made by written notice and shall be effective thereafter. All such communications, to be considered
effective, shall include the number of this CRADA. The addresses, telephone numbers, and email for the Parties are provided in the Statement of Work.

C. The effective date of this CRADA shall be the latter date of (1) the date on which it is signed by the last of the Parties, (2) the date on which it is approved by DOE, or (3) the date on which the Participant’s funding, if any, is received by the Contractor. The work to be performed under this CRADA shall be completed within approximately ______ months/years from the effective date.

D. The Participant’s estimated contribution is $_____, of which $_____ is fund-in to SLAC. The Government’s estimated contribution, which is provided through the Contractor’s contract with DOE, is $_____, subject to available funding.

Standard when advance funding applies

E. The Participant shall provide to the Contractor, prior to any work being performed, a budgetary resource sufficient to cover anticipated work that will be performed for the Participants directly funded share for the first billing cycle. In addition, the Participant shall provide 60 days of additional funding to ensure that funds remain available for the Participants directly funded share for subsequent billing cycles.

If total funds are due at performance

E. Before the Contractor performs any CRADA work to be funded by the Participant, the Participant shall provide to the Contractor the Participant's total agreed funds-in amount.

ARTICLE III: PERSONAL PROPERTY

All tangible personal property produced or acquired under this CRADA shall become the property of Participant or the Government, depending upon whose funds were used to obtain it unless identified in the Statement of Work as being owned by the other Party. All jointly funded property shall be owned by the Government. The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody related to the CRADA.

ARTICLE IV: DISCLAIMER

THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR THE CONTRACTOR SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR
INCIDENTAL DAMAGES ATTRIBUTED TO SUCH RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS CRADA.

ARTICLE V: PRODUCT LIABILITY

Except for any liability resulting from any negligent acts, willful misconduct or omissions of the Contractor and the Government the Participant indemnifies the Government and the Contractor for all damages, costs, and expenses, including attorney’s fees, arising from personal injury or property damage occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the Participant, its assignees, or licensees, which was derived from the work performed under this CRADA. In respect to this article, neither the Government nor the Contractor shall be considered assignees or licensees of the Participant as a result of reserved Government and the Contractor rights.

The indemnity set forth in this Article shall apply only if the Participant shall have been informed as soon and as completely as practical by the Contractor and/or the Government of the action alleging such liability and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Contractor and/or the Government shall have provided all reasonably available information and reasonable assistance requested by the Participant. No settlement for which the Participant would be responsible shall be made without the Participant’s consent unless required by final decree of a court of competent jurisdiction.

ARTICLE VI: RIGHTS IN SUBJECT INVENTIONS

DOE grants Contractor the right to elect to retain title to its Subject Inventions.

DOE grants Participant the right to elect to retain title to its Subject Inventions.

A. Each Party has the right to elect to retain title to any Subject Invention made by its employees, and that election shall be made: (1) by Participant within 12 months or (2) by Contractor within 24 months (in accordance with its contract with DOE) of disclosure of the Subject Invention to DOE. If a Party elects not to retain title to any Subject Invention of its employees, then the other Party shall have the option to elect to obtain title to such Subject Invention within 12 months of notification of non-election by, or of expiration of the time allotted to, the inventing Party.

Title to Subject Inventions jointly made shall be jointly owned by Contractor and the Participant.

B. The Parties agree that DOE has the right to retain title and file Patent applications in any country if neither Party desires to file a Patent application for any Subject Invention. Notification of such negative intent by the last Party with an option (the non-inventing
Party) shall be made in writing to the DOE Contracting Officer within 6 months of the
decision of the Inventing Party to not file a Patent application for the Subject Invention
pursuant to this Article or not later than 60 days prior to the time when any statutory bar
might foreclose filing of a U.S. Patent application. For an issued patent that any party does
not maintain, DOE will be afforded the opportunity to take title and retain the Patent rights
in the United States or in any such foreign country. If DOE is granted a patent on
Participant’s Subject Invention, the Participant may request a non-exclusive license and
DOE will determine whether to grant such license pursuant to statutory authority.

C. The Parties acknowledge that the Government retains a nonexclusive, nontransferable,
irrevocable, paid-up license to practice or to have practiced for or on behalf of the United
States every Subject Invention under this CRADA throughout the world. The Parties agree
to execute a Confirmatory License to affirm the Government’s retained license.

D. Disclosing Subject Inventions: The Parties agree to disclose to each other each Subject
Invention which may be patentable or otherwise protectable under U.S. patent law. The
Parties agree that the Contractor and the Participant will disclose their respective Subject
Inventions to DOE and each other within two (2) months after the inventor first discloses the
Subject Invention in writing to the person(s) responsible for patent matters of the disclosing
Party.

These disclosures should be in sufficiently complete technical detail to convey a clear
understanding, to the extent known at the time of the disclosure, of the nature, purpose, and
operation of the Subject Invention. The disclosure shall also identify any known actual or
potential statutory bars, e.g., printed publications describing the Subject Invention or the
public use or “on sale” of the Subject Invention. The Parties further agree to disclose to each
other any subsequently known actual or potential statutory bar that occurs for a Subject
Invention disclosed but for which a patent application has not been filed. All Subject
Invention disclosures shall be marked as confidential under 35 U.S.C. 205.

E. The Parties agree to include within the beginning of the specification of any U.S. patent
applications and any patent issuing thereon (including non-U.S. patents) covering a Subject
Invention, the following statement: “This invention was made under a CRADA (identify
CRADA number) between (name the Participant) and (name the laboratory) operated for the
United States Department of Energy. The Government has certain rights in this invention.”

F. March-In Rights: The Parties acknowledge that DOE has certain march-in rights to any
Subject Inventions in accordance with 48 CFR 27.304-1(g) and 15 U.S.C. 3710(a)(b)(1)(B)
and (C).

G. The Participant agrees to submit, for a period of five (5) years from the date of termination or
completion of this CRADA and upon request of DOE, a nonproprietary report no more
frequently than annually on efforts to utilize any Intellectual Property arising under the
CRADA including information regarding compliance with U.S. Competitiveness provision
of this CRADA.
H. During the term of this CRADA and for a period of 6 months after the termination or completion of the CRADA, the Participant shall have the opportunity, pursuant to 15 U.S.C. 3710a, to obtain a license to Contractor’s Subject Inventions. In particular, the Participant shall have the option to obtain, up to and including, an exclusive license to Contractor’s Subject Inventions within a defined field of use on agreed-upon reasonable terms and conditions, including the payment of negotiated license fees and royalties.

I. Each Party may use the other Party’s Background Intellectual Property identified in Annex B of this CRADA solely in performance of research under the Statement of Work. This CRADA does not grant to either Party any option, grant, or license to commercialize, or otherwise use the other Party’s Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the Parties, shall be the subject of separate licensing agreements between the Parties.

Each Party has used reasonable efforts to list all relevant Background Intellectual Property, but Background Intellectual Property may exist that is not identified. Neither Party shall be liable to the other Party because of failure to list Background Intellectual Property.

ARTICLE VII: RIGHTS IN DATA

A. The Parties agree that they shall have no obligations of nondisclosure or limitations on their use of, and the Government shall have unlimited rights in, all Generated Information produced and information provided by the Parties under this CRADA, except for restrictions on data provided for in this Article or data disclosed in a Subject Invention disclosure being considered for patent protection.

B. PROPRIETARY INFORMATION: Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than the CRADA Participant, Contractor and its subcontractors (if any) performing work under this CRADA without written approval of the providing Party, except to Government employees who are subject to the statutory provisions against disclosure of confidential information set forth in the Trade Secrets Act (18 U.S.C. 1905). Government employees shall not be required to sign nondisclosure agreements due to the provisions of the above-cited statute.

If Proprietary Information is orally disclosed to a Party, it shall be identified as such, orally, at the time of disclosure and confirmed in a written summary thereof, appropriately marked by the disclosing Party, within 14 days as being Proprietary Information.

All Proprietary Information shall be protected for a period of 3 years from the effective date of this CRADA, unless such Proprietary Information becomes publicly known without the fault of the recipient, shall come into recipient’s possession without breach by the recipient of any of the obligations set forth herein, can be demonstrated by the recipient by written record that it is known prior to receipt from disclosing party, is disclosed by operation of law, or is independently developed by recipient’s employees who did not have access to such Proprietary Information.
C. PROTECTED CRADA INFORMATION: Except where a Participant’s federal funding agreement prohibits such protection, each Party may designate and mark as Protected CRADA Information any Generated Information produced by its employees, which meets the definition in Article I and, with the agreement of the other Party, so designate any Generated Information produced by the other Party’s employees which meets the definition in Article I. All such designated Protected CRADA Information shall be appropriately marked. Because the Contractor is an institution of higher education and generally conducts its activities as fundamental research under the U.S. Export Administration regulations, the Contractor does not intend to mark any of its Generated Information as Protected CRADA Information, but reserves the right to do so in appropriate circumstances.

For a period of 3 years from the date Protected CRADA Information is produced, the Parties agree not to further disclose such information and to use the same degree of care and discretion, but no less than reasonable care and discretion, to avoid disclosure, publication or dissemination of such information to a third party, as the Party employs for similar protection of its own information which it does not desire to disclose, publish, or disseminate except:

(1) as necessary to perform this CRADA;

(2) as published in a patent application or an issued patent before the protection period expires;

(3) as provided in Article X [REPORTS AND PUBLICATIONS];

(4) as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities solely for Government use only with the same protection in place and marked accordingly;

(5) when a specific maximum time period for delaying the public release of data is authorized in the terms of a Government funding agreement used to fund this CRADA and that maximum period is shorter than the time period set forth in this Article for protecting Protected CRADA Information;

(6) to existing or potential licensees, affiliates, customers, or suppliers of the Parties in support of commercialization of the technology with the same protection in place. Disclosure of the Participant’s Protected CRADA Information under this subparagraph shall only be done with the Participant’s consent; or

(7) as mutually agreed to by the Parties in advance.

The obligations of this paragraph shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party’s possession without breach by that Party of the obligations of paragraph above, or shall be independently developed by a Party’s employees who did not have access to the Protected CRADA Information.
D. COPYRIGHT: The Parties may assert Copyright in any of their Generated Information. Assertion of Copyright generally means to enforce or give an indication of an intent or right to enforce such as by marking or securing Federal registration. Copyrights in co-authored works by employees of the Parties shall be held jointly, and use by either Party shall be without accounting.

For all other Generated Information excluding computer software, the Government has for itself and others acting on its behalf, a royalty-free, nontransferable, nonexclusive, irrevocable worldwide Copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government, all Copyrightable works produced in the performance of this CRADA, subject to the restrictions this article places on publication of Proprietary Information and Protected CRADA Information.

The Parties agree that no computer software will be generated under this CRADA. If the scope of work changes to generate computer software, then the CRADA will be amended accordingly.

The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human-readable form onto all physical media, and in digitally encoded form in the header of machine-readable information recorded on such media such that the notice will appear in human-readable form when the digital data are off loaded or the data are accessed for display or printout.

ARTICLE VIII: U.S. COMPETITIVENESS

The Parties agree that a purpose of this CRADA is to provide substantial benefit to the U.S. economy.

A. In exchange for the benefits received under this CRADA, the Participant therefore agrees to the following:

1. Products embodying Intellectual Property developed under this CRADA shall be substantially manufactured in the United States, and

2. Processes, services, and improvements thereof which are covered by Intellectual Property developed under this CRADA shall be incorporated into the Participant’s manufacturing facilities in the United States either prior to or simultaneously with implementation outside the United States. Such processes, services, and improvements, when implemented outside the United States, shall not result in reduction of the use of the same processes, services, or improvements in the United States.

B. The Contractor agrees to a U.S. Industrial Competitiveness clause in accordance with its prime contract with respect to any licensing and assignments of its Intellectual Property
arising from this CRADA, except that any licensing or assignment of its intellectual property rights to the Participant shall be in accordance with the terms of paragraph A of this Article.

ARTICLE IX: EXPORT CONTROL

THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS. EXPORT LICENSES OR OTHER AUTHORIZATIONS FROM THE U.S. GOVERNMENT MAY BE REQUIRED FOR THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES UNDER THIS AGREEMENT. THE PARTIES ACKNOWLEDGE THAT EXPORT CONTROL REQUIREMENTS MAY CHANGE AND THAT THE EXPORT OF GOODS, TECHNICAL DATA OR SERVICES FROM THE U.S. WITHOUT AN EXPORT LICENSE OR OTHER APPROPRIATE GOVERNMENTAL AUTHORIZATION MAY RESULT IN CRIMINAL LIABILITY.

ARTICLE X: REPORTS AND PUBLICATIONS

A. The Parties agree to produce the following deliverables:

(1) an initial abstract suitable for public release at the time this CRADA is executed;

(2) a final report, upon completion or termination of this CRADA, which includes a list of Subject Inventions; and

(3) other scientific and technical information in any format or medium that is produced as a result of the CRADA that is useful to the Government or the public.

The Parties acknowledge that the Contractor has the responsibility to timely provide the above information to the DOE Office of Scientific and Technical Information.

B. The Parties agree to secure pre-publication review from each other which shall not be unreasonably withheld or denied beyond 30 days.

C. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

ARTICLE XI: FORCE MAJEURE

No failure or omission by the Contractor or the Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same
shall arise from any cause or causes beyond the control of the Contractor or the Participant, including but not limited to the following causes here regarded as beyond the control of the Party in question: Acts of God; acts or omissions of any government or agency thereof; compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof; fire, storm, flood, earthquake, accident; acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes; or failures or delays in transportation.

ARTICLE XII: ASSIGNMENT OF PERSONNEL.

A. Each Party may assign personnel to the other Party’s facility as part of this CRADA to participate in or observe the research to be performed under this CRADA. Such personnel assigned by the assigning Party shall not during the period of such assignments be considered employees of the receiving Party for any purpose.

B. The receiving Party shall have the right to exercise routine administrative and technical supervisory control of the occupational activities of such personnel during the assignment period and shall have the right to approve the assignment of such personnel and to later request their removal by the assigning Party.

C. The assigning Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving Party’s facilities under this CRADA except that the receiving Party shall bear facility costs of such assignments.

ARTICLE XIII: ADMINISTRATION OF THIS CRADA AND SUCCESSOR IN INTEREST

The Parties are collaborating as equal partners under this CRADA, and each will administer it in accordance with its own separate policies and obligations, consistent with this CRADA.

In the event that there is a successor in interest to one of the Parties, the succeeded Party will notify the other Party and shall have no further responsibilities except for the confidentiality, use, and nondisclosure obligations of this CRADA. However, if the proposed successor of the Participant is a foreign entity, Contractor must approve the transfer.

In Contractor’s case, DOE may, under its contract with Stanford, transfer this CRADA and its administration to itself or a successor in interest.

ARTICLE XIII: DISPUTES
The Parties shall attempt to jointly resolve all disputes arising from this CRADA. In the event a dispute arises under this CRADA, the Participant is encouraged to contact Contractor’s Technology Partnerships Ombudsman in order to further resolve such dispute before pursuing third-party mediation or other remedies. If the Parties are unable to jointly resolve a dispute within 60 days, they agree to submit the dispute to a third-party mediation process that is mutually agreed upon by the Parties. If the Parties are unable to jointly resolve a dispute within 60 days, at the request of either Party, any controversy or claim arising out of or relating to this CRADA shall be settled by arbitration conducted in the State of California in accordance with the then current and applicable rules of the American Arbitration Association. Judgment rendered by the Arbitrator shall be binding on the Parties unless, within 120 days of the judgment, one of the Parties brings action for adjudication in a court of competent jurisdiction in the State of California. To the extent that there is no applicable U.S. Federal law, this CRADA and performance hereunder shall be governed by the law of the State of California, without reference to that state’s conflict of laws provisions.

**Article XIV: NO WAIVER IMPLIED**

The failure of the Contractor or the Participant at any time to enforce any provisions of this CRADA or to exercise any right or remedy shall not be construed to be a waiver of such provisions or of such right or remedy or of the right of the Contractor or the Participant thereafter to enforce each and every provision, right, or remedy.

**ARTICLE XV : ENTIRE CRADA, MODIFICATIONS, ADMINISTRATION AND TERMINATION**

A. This CRADA with its annexes contains the entire agreement between the Parties with respect to the subject matter hereof, and all prior representations or agreements relating hereto have been superseded in totality by this CRADA.

B. Any agreement to materially change any terms or conditions of this CRADA or the annexes shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

C. The Contractor enters into this CRADA under the authority of its prime contract with DOE. The Contractor is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from the Contractor to DOE or its designee with notice of such transfer to the Participant, and the Contractor shall have no further responsibilities except for the confidentiality, use and/or nondisclosure obligations of this CRADA.

D. This CRADA may be terminated by either Party upon 60 days written notice to the other Party. If Article III provides for advance funding, this CRADA may also be terminated by the Contractor in the event of failure by the Participant to provide the necessary advance funding.
In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination, and which are related to the termination.

The confidentiality, use, and/or non-disclosure obligations of this CRADA shall survive any termination of this CRADA, as well as provisions of this CRADA which would naturally survive termination or expiration of this CRADA.

FOR CONTRACTOR:

SIGNATURE: ______________________
NAME: ______________________
TITLE: ______________________
DATE: ______________________

FOR PARTICIPANT:

SIGNATURE: ______________________
NAME: ______________________
TITLE: ______________________
DATE: ______________________
ANNEX A: STATEMENT OF WORK

A. PURPOSE

1.1 Parties

(The names, postal addresses, telephone and email addresses for the Parties)

1.2 Relationships

2. Background of project

3. Expected goals and accomplishments

4. Reason for cooperation

B. SCOPE

1. Technical description

2. Project phases, tasks, and division of responsibilities

3. Deliverables

4. Key Personnel

(Each Party shall assign and identify a project manager, the contact information for official notices.)

5. Limitations of time or resources

6. Schedule

Who will provide what funds, personnel, services, and property; who will do what reporting on the work; and procedures for interaction between the parties to accomplish the Statement of Work

7. Budget by Task

C. ESTIMATED COST AND SOURCE OF SUPPORT

1. Total cost summary
## PROJECT COST

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1. Contractor's in-kind contribution.
2. M&S, materials and supplies
3. Contractor collects, as part of its standard indirect cost rate, a Laboratory Directed Research and Development (LDRD) cost as a percentage of funding received. For this project the LDRD cost is approximately #### k$; it has already been included in the cost total. The Department of Energy believes that LDRD efforts provide opportunities in research that are instrumental in maintaining cutting edge science capabilities that benefit all sponsors of Laboratory work. By approving and providing funds to THE CONTRACTOR under this agreement you acknowledge that such activities are beneficial to your organization and consistent with your agreements with sponsors.
4. Participant’s in-kind contribution.

CRADAs supported by 100% direct funds-in from the Participant must also include elements of in-kind contributions by the Participant.

### PERSONNEL (May provide)

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## 2. Total funding summary

### PROJECT FUNDING

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1. CONTRACTOR’s in-kind contribution.

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<td>DOE CONTRIB MADE THROUGH CONTRACTOR</td>
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ANNEX B: BACKGROUND INTELLECTUAL PROPERTY

The Contractor and the Participant have identified and agreed that the following Background Intellectual Property may be used in the performance of work under this CRADA and may be needed to practice the results of this CRADA:

Contractor’s background intellectual property: ________________

Participant’s background intellectual property: ________________
ANNEX C: FORM FOR ANNOUNCEMENT OF COMPUTER SOFTWARE

See http://www.osti.gov/estsc/241-4pre.jsp for the data entry form that will be used for reporting computer software. The form is used to describe project-generated software (which might be of significance beyond the project itself).