Cooperative Research & Development Agreement

Article 1. INTRODUCTION

This Cooperative Research and Development Agreement (CRADA) between the National Institute of Standards and Technology (NIST) and [Insert Company Name] (Collaborator) will be effective when signed by all Parties. The research and development project(s) which will be undertaken by each of the Parties in the course of this CRADA is detailed in the Technical Statement of Work (SoW) which is attached as part of Appendix A. Any exceptions or changes to the CRADA are set forth in Appendix B.

Article 2. DEFINITIONS

As used in this CRADA, the following terms shall have the indicated meanings:

- 2.1 "Background Invention" means any invention of either Party conceived outside of this CRADA.
- 2.2 "Cooperative Research and Development Agreement," "CRADA," or "Agreement" means this Agreement, entered into by NIST pursuant to 15 U.S.C. section 3710a.
- 2.3 "CRADA Data" means all recorded information, including computer software, first produced in the performance of this Agreement, excluding Proprietary Information.
- 2.4 "CRADA Invention" means any invention conceived under this CRADA. Inventions created from research continuing after the expiration date of the CRADA are not CRADA Inventions and are not covered by provisions of this Agreement. The License options of Article 7 do not apply to inventions conceived solely or jointly by NIST after the expiration date of the CRADA or in any period during which this CRADA or any subsequent extensions are not effective.
- 2.5 **"Invention"** means any invention or discovery which is or may be patentable or otherwise protected under Title 35 (35 U.S.C.) or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).
- 2.6 **"Principal Investigator"** or **"PI"** means the person designated respectively by each Party to this CRADA who will be responsible for the scientific and technical conduct of the research.
- 2.7 **"Project Team"** means all personnel assigned by the Collaborator to conduct the research designated in this Agreement.
- 2.8 **"Proprietary Information"** means confidential scientific, business, or financial information, including data created under this Agreement solely by the Collaborator at the Collaborator's research facilities, which may embody trade secrets provided by the Collaborator to NIST in the course of this CRADA, and developed exclusively at private expense, except if such information:
 - 2.8.1 was in NIST's possession before receipt from the Collaborator; or
 - 2.8.2 is or becomes a matter of public knowledge through no fault of NIST; or
 - 2.8.3 is received by NIST from a third party without a duty of confidentiality; or
 - 2.8.4 is disclosed by the Collaborator to a third party without a duty of confidentiality on the third party; or
 - 2.8.5 is independently disclosed by NIST with the Collaborator's prior written approval; or

- 2.8.6 is independently developed by NIST without reference to information disclosed hereunder.
- 2.9 **"Written Notice"** means signed communication delivered by one party to the other, via attachment to electronic mail, facsimile, or common carrier.

Article 3. COOPERATIVE RESEARCH

- 3.1 <u>**Research Plan and Changes.**</u> The Research Plan/Statement of Work (SoW) of this CRADA, its duration, and its objectives are detailed in Appendix A. The research under this CRADA shall be performed on a reasonable efforts basis. Collaborator certifies the correctness of the information contained in Appendix A.
- 3.2 **<u>Principal Investigators.</u>** NIST shall be the supervising Federal agency, both administratively and scientifically, for this CRADA. The NIST PI is responsible for the scientific and technical conduct of this project on behalf of NIST. The designated Collaborator PI is responsible for the scientific and technical conduct of this project on behalf of the Collaborator. The Collaborator shall designate the Project Team in Appendix A of this Agreement.
- 3.3 <u>Conduct.</u> Collaborator agrees that each member of its Project Team will abide by all applicable regulations, policies and procedures applicable to NIST personnel relating to safety, security, and conduct while on NIST premises, and will adhere to applicable building and restricted area access controls.

Article 4. TITLE TO EQUIPMENT

4.1 **Equipment.** Equipment purchased by NIST with funds provided under this CRADA by the Collaborator shall be the property of NIST. All equipment loaned under this CRADA by a Party remains the property of that Party unless the Parties agree in writing on some other disposition. Each Party's equipment will be returned to the lending Party at the lending Party's expense and risk as soon as practical after termination of the Agreement.

Article 5. TREATMENT OF PROPRIETARY INFORMATION

- 5.1 Protection. Each Party agrees to limit its disclosure of Proprietary Information to the other to the amount necessary to carry out the SoW of this CRADA. The Collaborator shall place a Proprietary Information notice on all information it delivers to NIST under this Agreement, which the Collaborator asserts is proprietary. NIST agrees that Proprietary Information shall be used only for the purposes described in the attached SoW. Except where NIST is legally obligated to release information pursuant to the Freedom of Information Act (5 U.S.C. 552), or other requirement of law, Proprietary Information shall not be disclosed or otherwise made available in any form to any other person, firm, corporation, partnership, association or other entity without the written consent of the Collaborator. NIST agrees to use its best efforts to maintain the confidentiality of Proprietary Information. NIST will promptly notify the Collaborator of requests for Collaborator's Proprietary Information. The Collaborator agrees that NIST is not liable for the disclosure of information designated as Proprietary which, after notice to and consultation with the Collaborator, NIST determines may not lawfully be withheld or which a court of competent jurisdiction requires disclosed.
- 5.2 These provisions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive order relating to (1) classified information, (2) communications to Congress, (3) the reporting to an Inspector General of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety, or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive orders and statutory provisions are incorporated into this CRADA and are controlling

Article 6. INTELLECTUAL PROPERTY

6.1 **<u>Rights to Background Inventions.</u>** No rights to Background Inventions are conveyed by this Agreement.

6.2 **Reporting Inventions and Other Responsibilities.** Each Party shall promptly supply written disclosure to the other Party of any invention conceived or reduced to practice under the CRADA Research Plan. Such disclosures shall not be further disclosed to others by the receiving Party until such time as a patent or other intellectual property application claiming that CRADA Invention has been filed or the parties inform each other through written notice that they do not wish to pursue patent protection. The Collaborator shall ensure that all Project Team members (a) promptly report any CRADA Inventions they make to the Collaborator, and (b) sign any documents necessary or desirable for the filing and prosecution of patent applications. If any Project Team member is not the Collaborator's employee, the Collaborator shall require the member to agree in writing to assist the Collaborator in fulfilling all of its patent responsibilities under this CRADA.

6.3 **Treatment of CRADA Data.**

- 6.3.1 <u>Ownership of Original Copies of CRADA Data.</u> NIST and the Collaborator agree to exchange all CRADA Data. NIST and Collaborator shall each have the right to use all CRADA Data for their own purposes, consistent with their obligations under this Agreement.
- 6.3.2 **Ownership of Copyrights of CRADA Data.** Collaborator may elect to copyright scientific and technical publications, or those identifiable portions of a joint publication, developed solely by a Project Team member. When Collaborator obtains a copyright, Collaborator shall affix the applicable copyright notice of 17 U.S.C. §§ 401, 402, and 403, and an acknowledgment of the scientific and technical contributions of the National Institute of Standards and Technology. The Collaborator grants to the U.S. Government a paid-up, non-exclusive, irrevocable world-wide license to reproduce or have reproduced, prepare or have prepared in derivative form, and distribute or have distributed copies of publications and solely created CRADA Data for Government purposes. CRADA Data prepared by NIST employees, and CRADA Data prepared jointly by NIST employees and the Project Team, are not subject to copyright in the United States pursuant to section 105 of title 17 of the United States Code. NIST may, however, own copyright in jointly created, or solely created, publications and CRADA Data outside of the United States.
- 6.4 **<u>Research Products.</u>** The Parties agree to make mutually acceptable arrangements for the disposition of any unique or hard-to-replace research products.
- 6.5 **<u>Publication.</u>** Before either Party submits a paper or abstract for publication or otherwise intends to publicly disclose information about a CRADA Invention, or CRADA Data, the other Party shall be provided thirty (30) days to review the proposed publication or disclosure.

6.6 **Patenting and Ownership of CRADA Inventions.**

6.6.1 Government's Minimum Rights.

- 6.6.1.1 **NIST Sole Inventions and Joint Inventions.** Pursuant to the Federal Technology Transfer Act of 1986 as amended (15 U.S.C. 3710a (b)), NIST, on behalf of the United States Government, shall retain a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced NIST Sole CRADA Inventions and Joint CRADA Inventions throughout the world by or on behalf of the Government.
- 6.6.1.2 <u>Collaborator Sole Inventions.</u> Pursuant to the Federal Technology Transfer Act of 1986 as amended (15 U.S.C. 3710a (b)), NIST, on behalf of the United States Government, shall retain a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced Collaborator Sole CRADA Inventions throughout the world by or on behalf of the Government for research or other Government purposes.
- 6.6.2 **Joint CRADA Inventions.** Joint CRADA Inventions shall be jointly owned. Collaborator shall be responsible for filing U.S. Patent Applications for joint CRADA Inventions in a timely manner. If Collaborator does not file a U.S. Patent Application on a joint CRADA Invention within six (6) months after disclosure, NIST may file a U.S. Patent Application on such joint CRADA Invention. The non-filing

Party shall reasonably cooperate and assist the filing Party in perfecting the patent application, and the Filing Party shall have the right to control the prosecution of the U.S. Patent Application.

- 6.6.3 <u>**CRADA Inventions Solely Developed.</u>** Except for joint CRADA Inventions, each Party shall retain title to any CRADA Invention of its employees or Project Team members. The Party retaining title to a CRADA Invention may file a U.S. Patent Application after consultation with the other Party. The owner of a CRADA Invention has no duty to file a U.S. or foreign patent application.</u>
- 6.6.4 **Patent Expenses and Prosecution.** Prior to the filing of patent applications, the parties shall agree as to which party shall bear the expenses attendant to filing the applications. Each Party shall promptly provide the other Party with copies of Provisional Applications filed, Patent Applications filed and Office Actions bearing upon any CRADA Invention. Any post filing and post-patent fees shall also be borne by the same Party.
- 6.6.5 **Foreign Filings of CRADA Inventions.** The Parties will consult with each other as to the advisability of filing for patent protection outside the U.S.

Article 7. LICENSING

- 7.1 **Option for a Commercialization License.** NIST, on behalf of the Government, hereby grants to the Collaborator an option to choose an exclusive or nonexclusive commercialization license to patents or patent applications on NIST CRADA Inventions or to NIST's interest in patents or patent applications on joint CRADA Inventions. The exclusive or nonexclusive license shall be limited to fields of use defined by the subject matter of the SoW found in Appendix A. The license will specify the licensed fields of use, geographic territory, markets, term and royalties. Additional terms and conditions shall be added to all licenses consistent with applicable statutes and regulations. License will be based on mutually agreeable terms consistent with those conventionally granted in the field identified in the SoW for inventions with reasonably similar commercial potential. The royalty rates will reflect the relative contributions of the Parties to the invention. Licenses granted under this Article are subject to the reservation of licenses in favor of the United States Government required in Section 6.6.1 above.
- 7.2 **Exercise of License Option to NIST Sole CRADA Inventions.** The option of Section 7.1 on NIST sole CRADA Inventions must be exercised by written notice within three (3) months from the date on which the Government notifies the Collaborator that it intends to file a non-provisional patent application. Exercise of the license option by the Collaborator initiates a negotiation period that expires six (6) months after the written notice to exercise the license option has been received by NIST. This period may be extended for three (3) months, by mutual agreement of the parties. If no agreement is concluded in this period, NIST shall be free to license such CRADA inventions to any other interested parties.
- 7.3 **Exercise of License Option to Joint CRADA Inventions.** The option of Section 7.1 on Joint CRADA Inventions must be exercised by written notice within three (3) months from the date on which the Government or Collaborator notifies the other Party that it intends to file a non-provisional patent application. Exercise of the license option by the Collaborator initiates a negotiation period that expires six (6) months after the written notice to exercise the license option has been received by NIST. This period may be extended for three (3) months, by mutual agreement of the Parties. If no agreement is concluded in this period, NIST shall be free to license such CRADA Inventions to any other interested parties.

Article 8. **TERMINATION**

- 8.1 <u>**Termination Notices.**</u> The Collaborator and NIST each have the right to terminate this Agreement upon 30 days written notice to the other Party.
- 8.2 <u>**Termination After Change of Control.**</u> NIST may terminate this Agreement immediately if direct or indirect control of the Collaborator is transferred to a foreign company or government; or, if Collaborator is already

controlled by a foreign company or government, if that control is transferred to another foreign company or government.

8.3 **Interim Extension.** Upon written notice from the Collaborator and NIST PI that it is the intent that the CRADA be Amended, as provided in Section 11.5, to extend the term of the CRADA, the term of this Agreement shall be extended for ninety (90) days. The notice shall be directed to the Technology Partnerships Office Director. Such interim extension shall be available only once prior to the effective date of a written amendment extending the CRADA pursuant to Article 11.5.

Article 9. **DISPUTES**

- 9.1 <u>Settlement.</u> Any dispute arising under this Agreement, which is not disposed of, by agreement of the Parties shall be submitted jointly to the signatories of this Agreement. A joint decision of the signatories or their designees shall be the disposition of such dispute. If the Parties cannot reach a joint decision, either Party may terminate this Agreement immediately.
- 9.2 <u>Continuation of Work.</u> Pending the resolution of any dispute or claim pursuant to this Article, the Parties agree that performance of all obligations shall be pursued diligently in accordance with the direction of the NIST signatory.

Article 10. LIABILITY

10.1 **Property.** The U.S. Government shall not be responsible for damage to any property of the Collaborator provided to NIST or acquired by NIST pursuant to this Agreement.

10.2 Indemnification.

- 10.2.1 <u>Conduct of Employees.</u> Collaborator's Project Team assigned to this SoW are not employees of NIST. The Collaborator shall indemnify and hold harmless the U.S. Government for any loss, claim, damage, or liability of any kind to the Collaborator's Project Team arising in connection with this Agreement except to the extent that such loss, claim damage or liability arises from the gross negligence or wrongful acts of NIST or its employees. NIST's responsibility for payment of tort claims in connection with the performance of work under this Agreement is governed by the Federal Tort Claims Act.
- 10.2.2 **Collaborator's Use of NIST Research.** The Collaborator shall indemnify and hold harmless the U.S. Government for any loss, claim, damage, or liability of any kind arising out of the use by the Collaborator, or any Party acting on its behalf or under its authorization, of NIST's research and technical developments or out of any use, sale or other disposition by the Collaborator or others acting on its behalf or with its authorization, of products made by the use of NIST's technical developments.
- 10.3 **Force Majeure.** Neither Party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this Agreement (and which it has been unable to overcome by the exercise of due diligence), including, but not limited to, flood, drought, earthquake, storm, fire, pestilence, lightning and other natural catastrophes, epidemic, war, riot, civic disturbance or disobedience, strikes, labor dispute, or failure, threat of failure, or sabotage, or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeure event, the Party unable to perform shall promptly notify the other Party. It shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.
- 10.4 **NO WARRANTY.** THE PARTIES MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO ANY MATTER WHATSOEVER, INCLUDING THE CONDITIONS OF THE RESEARCH OR ANY INVENTION OR PRODUCT, WHETHER TANGIBLE OR INTANGIBLE, MADE OR DEVELOPED UNDER THIS AGREEMENT, OR THE OWNERSHIP, MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR ANY INVENTION OR PRODUCT.

Article 11. MISCELLANEOUS

- 11.1 <u>No Benefits.</u> No member of, or delegate to the United States Congress, or resident commissioner, shall be admitted to any share or part of this Agreement, nor to any benefit that may arise therefrom; but this provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit.
- 11.2 <u>**Governing Law.**</u> The construction validity, performance and effect of this Agreement for all purposes shall be governed by the laws of the United States.
- 11.3 **Entire Agreement.** This Agreement constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes any prior understanding or written or oral agreement relative to said matter.
- 11.4 **Headings.** Titles and headings of the Sections and Subsections of this Agreement are for the convenience of references only and do not form a part of this Agreement and shall in no way affect the interpretation thereof.
- 11.5 <u>Amendments.</u> If either Party desires a modification in this Agreement, the Parties shall, upon reasonable notice of the proposed modification by the Party desiring the change, confer in good faith to determine the desirability of such modification. Such modification shall not be effective until a written amendment is signed by all the Parties hereto by their representatives duly authorized to execute such amendment.
- 11.6 <u>Assignment.</u> Neither this Agreement nor any rights or obligations of any Party hereunder shall be assigned or otherwise transferred by either Party without the prior written consent of the other Party except that the Collaborator may assign this Agreement to the successors or assignees of a substantial portion of the Collaborator's business interest to which this Agreement directly pertains.
- 11.7 <u>Notices.</u> All notices pertaining to or required by this Agreement shall be written notices, as defined in Section 2.9, and shall be directed by the Collaborator to the NIST Technology Partnerships Office Director, or by NIST to the Collaborator's signatory.
- 11.8 **Independent Contractors.** The relationship of the Parties to this Agreement is that of independent contractors and not as agents of each other or as joint venturers or partners. Each Party shall maintain sole and exclusive control over its personnel and operations.
- 11.9 **The Use of Name or Endorsements.** Neither party shall use the name of the other party on any advertisement, product or service which is directly or indirectly related to either this Agreement or any patent license or assignment agreement which implements this Agreement. By entering into this Agreement NIST and collaborator do not directly or indirectly endorse any product or service provided, or to be provided, by the other party, its successors, assignees, or licensees. NIST and the Collaborator shall not in any way imply that this Agreement is an endorsement of any such product or service.
- 11.10 **Duration of the Agreement.** It is mutually recognized that the duration of this project cannot be rigidly defined in advance and that the contemplated time periods for various phases of the SoW are only good faith guidelines subject to adjustment by mutual agreement to fit circumstances as the SoW proceeds. In no case will the term of this CRADA extend beyond the term specified in Appendix A, Section 9 unless it is revised in accordance with Section 11.5, or Section 8.3.
- 11.11 **Full Execution.** The Collaborator acknowledges that this CRADA is not an offer to enter into a contract and cannot unilaterally be made binding. No contract exists until this CRADA is fully executed and signed by all parties, including the Collaborator, Chief Counsel for NIST, NIST OU Director and the NIST Technology Partnerships Office Director.
- 11.12 **Survivability.** The provisions of Articles 5, 6, 7, 10, and 11.9 shall survive the termination of this CRADA.

11.13 **Export of Technical Data.** The Collaborator agrees to comply with United States export laws and regulations, including, but not limited to, the International Traffic in Arms Regulations and the Department of Commerce Export Regulations.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as follows:

Signatory for the Collaborator:

(Name)

(Title)

Date

Signatory Contact, Company Name and Address:

Signatories for National Institute of Standards and Technology:

Chief Counsel for NIST

Date

OU Director

Date

Date

TPO Director

NIST Contact:

NIST Technology Partnerships Office CRADA Administrator 100 Bureau Drive Gaithersburg, MD 20899-2200 ipp@nist.gov

Appendix A The Research Plan/Statement of Work

NIST requires the information listed below, and the Collaborator agrees to notify NIST within thirty (30) days of any change relevant to Collaborator's responses in this Appendix A. NIST considers items 8, 10, and 12 to be proprietary business information.

- 1. <u>Collaboration Project Title.</u> (Please provide a brief project title that NIST may use for public disclosure and management reporting.):
- 2. <u>Collaborator Eligibility.</u> In order to assure compliance with section 2 of the Federal Technology Transfer Act of 1986 (15 U.S.C. 3710a), the Collaborator certifies the following to NIST, and the Collaborator agrees to notify NIST within thirty (30) days of any change in the following:

PLEASE CHECK/COMPLETE ALL APPROPRIATE BOXES.

[] Collaborator certifies that it is incorporated under the laws of one of the states or territories of the United States.

[] Collaborator certifies that it is not subject to the control of any foreign government or foreign company.

[] Collaborator certifies that it is subject to the control of the following foreign government:

[] Collaborator certifies that it is subject to the control of the following foreign company:

[] Collaborator certifies that it has a manufacturing presence in the United States.

- 3. **Protection of Human Subjects.** To assure compliance with 15 CFR Part 27 (the Common Rule for Protection of Human Subjects) and other relevant statutes, regulations and Presidential statements of Policy, the Collaborator certifies that:
 - [] The research to be conducted under this agreement does not involve human subjects within the meaning of 15 CFR Part 27.
 - [] The research to be conducted under this agreement involves human subjects within the meaning of 15 CFR Part 27, and Collaborator agrees to take all steps required by NIST to assure compliance with 15 CFR Part 27. Collaborator certifies that research involving human subjects shall not begin until an appropriate exemption or IRB review is completed and approved by NIST.
- 4. **Protection of Animal Subjects.** To assure compliance with the Animal Welfare Act as amended and implementing regulations (7 USC 2131 et seq., 9 CFR Parts 1, 2, and 3), and other Federal statutes and regulations relating to animals, the Collaborator certifies that:
 - [] The research to be conducted under this agreement does not involve animal subjects within the meaning of 7 USC 2131 *et seq.* and 9 CFR Parts 1, 2, and 3.
 - [] The research to be conducted under this agreement involves animal subjects within the meaning of 7 USC 2131*et seq.* and 9 CFR Parts 1, 2, and 3, and Collaborator agrees to take all steps required by NIST to assure compliance with 9 CFR Parts 1, 2, and 3. Collaborator certifies that research involving animal subjects shall not begin until documentation of the appropriate reviews and certifications have been provided to and approved by NIST.

- 5. **Participation in other Federally Funded Projects:** NIST may enter into CRADAs with recipients of awards from other Federal agencies, or other awards from NIST. Collaborator certifies that:
 - [] Collaborator's participation in this CRADA is not supported by other Federal or NIST Funds.
 - [] Collaborator is a recipient of other Federal or NIST Funding that is related to the work done under this CRADA, and which is identified in an enclosed attachment.
- 6. **<u>Restricted Information:</u>** Collaborator certifies that:

[] The Statement of Work (SOW) does not pertain to federally classified or otherwise restricted subject matter.

[] The Statement of Work (SOW) does pertain to federally classified or otherwise restricted subject matter.

- 7. <u>NIST's Principal Investigator:</u> (please provide name, mailing address, email, and phone): (The NIST P.I. may change at NIST management's sole discretion.)
- 8. **Collaborator's Principal Investigator(s):** (please provide name, mailing address, email, and phone):

9. **Duration of the CRADA:**

10. <u>Collaborator Project Team (name, email or phone), Services, Facilities, Intellectual Property, Equipment,</u> <u>and/or Funds Contributions are listed as follows:</u>

If the Collaborator contribution includes funds, please provide the following information:

Specify if invoices will be:	Mail only	Email only	🗌 Mail & Email
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Billing Contact Name/Payables Department: _____ Phone Number: _____

Mailing Address for Invoices (if applicable):

Email Address for Invoices (if applicable):

Special Instructions or description to be included on invoice:

- 11. **NIST Personnel, Services, Facilities, Intellectual Property, and/or Equipment Contributions are Listed as Follows:** (NIST management reserves the right to replace these staff members at its sole discretion.)
- 12. **The Technical Statement of Work (SoW):** (Please describe the research project, including specifying what is to be performed by NIST, Collaborator, or jointly. The description should: 1) state the project's objectives, and 2) detail the research approach sufficiently to permit your management chain to review the proposed collaboration. A brief description of one page is usually sufficient.)