

**MASTER COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT**

**FOR**

**MULTI TASK DOMESTIC TECHNOLOGY TRANSFER**

**BETWEEN**

***U.S. Army Research Laboratory (ARL)***

**And**

***The following member institutions of The University of Texas System:***

***The University of Texas at Austin***

***The University of Texas at Arlington***

***The University of Texas at Brownsville***

***The University of Texas at Dallas***

***The University of Texas at El Paso***

***The University of Texas Pan American***

***The University of Texas Permian Basin***

***The University of Texas at San Antonio***

***The University of Texas at Tyler***

***The University of Texas Health Science Center at Houston***

***The University of Texas Health Science Center at San Antonio***

***The University of Texas Health Science Center at Tyler***

***The University of Texas Medical Branch at Galveston***

***The University of Texas M. D. Anderson Cancer Center***

***The University of Texas Southwestern Medical Center***

***Each a Collaborator Organization (CO or COLLABORATOR)***

**ARL CRADA# 14-11**

The purpose of this agreement is to establish a cooperative effort between the *U.S. Army Research Laboratory* and *COLLABORATOR ORGANIZATION* that involves research and development consistent with the military requirements of the *U.S. Army Research Laboratory* and the commercial technology goals of *COLLABORATOR ORGANIZATION*.

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# MASTER COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

## PREAMBLE

The U.S. Army Research Laboratory (hereinafter "ARL") and Collaborator Organization (hereinafter "COLLABORATOR") enter into this Master Cooperative Research and Development Agreement (MASTER CRADA), (hereinafter "Master Agreement") and agree as follows:

### Article I General

#### 1.1 Authority

This Master Agreement is entered into pursuant to the Federal Technology Transfer Act of 1986, (Public Law No. 99-502), as codified in 15 United States Code (U.S.C.) 3710a and implemented by Executive Order 12591 (10 April 1987). This Master Agreement is not a procurement contract, grant or cooperative agreement as those terms are used in 31 U.S.C. 6303, 6304, and 6305.

#### 1.2 ARL Representative

The person signing this Master Agreement on behalf of ARL represents that he or she has authority to enter into this Master Agreement subject to review in limited situations.

#### 1.3 COLLABORATOR Representative

The person signing this Master Agreement on behalf of COLLABORATOR represents that he or she has the authority to bind the COLLABORATOR to the terms of this Master Agreement.

#### 1.4 No Violation

The execution and delivery of this Master Agreement does not contravene any material provision of, or constitute a material default under any material agreement binding on COLLABORATOR or ARL or any valid order of any court, or any regulatory agency or other body having authority to which COLLABORATOR or ARL is subject.

### Article II Definitions

2.1 Computer Software or Software - means computer programs, source code, source code listings, object code listings, designs, details, algorithms, processes, flow charts, formulae, and related material that would enable the software to be reproduced, recreated, or recompiled. Computer Software does not include computer databases or computer software documentation.

2.2 Data – means recorded information of any kind regardless of the form or method of the recording, including Technical Data and Computer Software.

2.3 Government - means the United States of America and the agencies thereof.

2.4 Government Purposes - means any activity in which the Government is a party, but does not include for commercial purposes.

2.5 Government Purpose Rights – means the right of the Government to use, duplicate, or disclose Subject Data, in whole or in part, and in any manner, for Government Purposes only, and to have others to do so for Government Purposes only. Government Purpose Rights includes competitive procurement, but does not include the right to have or permit others to use, duplicate or disclose Subject Data for commercial purposes.

2.6 Invention - means any invention or discovery, which is or may be patentable or otherwise protected under U.S.C. Title 35 or any novel variety of plant, which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 7321 et seq.).

2.7 Intellectual Property – means patents, copyrights, and other forms of comparable property rights protected by Federal law and foreign counterparts, except trade secrets and trademarks.

2.8 Joint Subject Invention – means a Subject Invention Made jointly by employees of ARL and employees of COLLABORATOR in the performance of work under this Master Agreement.

2.9 Made - means, when used in conjunction with any Invention, the conception or first actual reduction to practice of the Invention.

2.10 Party or Parties - means ARL and/or COLLABORATOR based upon usage.

2.11 Proprietary Information - means information that embodies trade secrets exclusively developed at private expense, or business, commercial, or financial information that is privileged or confidential, provided that such information: (a) is not known or available from other sources without obligations concerning its confidentiality; (b) has not been made available by the owners to others without obligation concerning confidentiality; (c) is not already available to the Government without obligation concerning its confidentiality; and (d) has not been developed independently by persons who have had no access to the information.

2.12 Protectable Invention Information – means information about an Subject Invention in which the Government owns or may own a right, title, or interest, and that are subject to confidentiality under 35 U.S.C. 205 for a reasonable time in order for a patent application to be filed.

2.13 Restricted Access Information – means Subject Data generated by the Government that would be Proprietary Information if the information had been obtained from a non-Federal collaborator participating in a CRADA. Under 15 U.S.C. 3710a(c)(7)(B) the parties mutually may agree to provide appropriate protection to Subject Data generated by the Army against public dissemination or release under the Freedom of Information Act (FOIA) for a period of up to five (5) years after development of the Subject Data.

2.14 Subject Data - means recorded information first produced in performance of this Master Agreement. Subject Data includes both Technical Data and Computer Software. The term does not include Data incidental to the administration of this Master Agreement, such as financial or management information.

2.15 Subject Invention - means any Invention Made in the performance of work under this Master Agreement.

2.16 Technical Data - means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation and databases). The term does not include Computer Software or Data incidental to the administration of this Master Agreement, such as financial or management information.

2.17 Unlimited Rights – means the right to use, modify, reproduce, release, disclose, perform, or display Technical Data or Computer Software in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so.

### **Article III Cooperative Research**

#### **3.1 Joint Work Statement (JWS)**

Cooperative research and development efforts (as defined in specific JWS documents) under this Master Agreement shall be performed in accordance with a JWS attached as Appendix A. ARL and COLLABORATOR will participate in this cooperative effort and utilize such personnel, facilities, equipment, know-how, and information consistent with the JWS and their own policies.

#### **3.2 Review of Work**

ARL and COLLABORATOR will hold periodic conferences to review the JWS progress. The parties agree that the general exchange of information pursuant to this Master Agreement is not a “collection of information” as defined at 44 U.S.C. 3502(3) and, therefore, that this CRADA and any JWS hereunder is not subject to the requirements of the Paperwork Reduction Act (44 U.S.C. §§ 3501 et seq.).

#### **3.3 Joint Technical Effort**

ARL and COLLABORATOR agree to establish a joint research and development team (hereinafter the “Team”) that shall conduct the sponsored research projects outlined in specific JWS documents under this Master Agreement. The nature of this cooperative effort is such that completion of this effort within the period of performance specified or the resources planned cannot be guaranteed. Accordingly, each Party pledges to support the Team in a mutually cooperative manner, and on a reasonable best effort basis.

#### **3.4 Independent Parties**

The relationship of COLLABORATOR and ARL to this Master Agreement is that of independent Parties and not as agents of each other or as a joint venture. ARL shall maintain

sole and exclusive control over its personnel and operations. COLLABORATOR shall maintain sole and exclusive control over its personnel and operations.

### 3.5 JWS Changes

Each party may suggest changes to the scope and direction of the cooperative effort and the JWS. The parties shall make a good faith effort to agree to any changes consistent with the basic scope of research set forth in the JWS. Modifications will be made in accordance with Article XIX, paragraph 19.2.

### 3.6 Points of Contact

The principal Points of Contact for ARL are set forth below and the COLLABORATOR principal Points of Contact are listed in Appendix F. In addition, if required, ARL, through its Subordinate ARL elements (its Federal Laboratories), and COLLABORATOR shall identify Principal Investigators for each Joint Work Statement under this Master Agreement.

COLLABORATOR POC:

ARL POC:

See Appendix F	Thomas Mulkern (410) 278-0889 <a href="mailto:thomas.j.mulkern.civ@mail.mil">thomas.j.mulkern.civ@mail.mil</a>
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## **Article IV Reports**

### 4.1 Progress and Other Reports

The Parties shall prepare and exchange written reports in accordance with each JWS regarding their cooperative effort to include: results obtained, problems encountered, expenditure of funds, if applicable, and recommendations for further efforts. Any progress report shall be prepared subject to the joint supervision of the Parties; each shall make their own independent judgment regarding the advancements.

## **Article V Financial Obligation**

### 5.1 ARL

ARL shall not provide any Federal funds to the COLLABORATOR under this Master Agreement.

### 5.2 COLLABORATOR

COLLABORATOR shall fund all of its activities under this Master Agreement, and in addition, COLLABORATOR agrees to reimburse ARL to the extent provided in this paragraph and in the JWS. COLLABORATOR certifies that all funds provided under this Master Agreement either used by COLLABORATOR to perform its activities under this Master Agreement or transferred from COLLABORATOR to ARL are not from an existing U.S. Government funding agreement.

## **Article VI Title to Property**

### **6.1 Title to Preexisting or Acquired Tangible Property**

Each Party shall retain title to all tangible property to which it had title prior to the effective date (see Section 23.2) of this Master Agreement or to which it acquired or acquires title, by purchase or by fabrication, outside of the scope of this Master Agreement. Consumable property to be used pursuant to this Master Agreement shall remain the property of the original owning party until consumed.

### **6.2 Title to Developed Property**

All tangible property fabricated or acquired under this Master Agreement with all components provided by one Party shall remain the property of that Party. Tangible property having any component purchased or supplied by the Government (such component or property shall be specifically identified in each JWS) shall be the property of the Government, unless such tangible Government components reasonably can be separated from non-Government components without damage to any of the individual components comprising the tangible property. After termination of this Master Agreement, the Parties may, by mutual consent, separate the tangible property into its components and the separated components shall remain the property of the Party that originally acquired or fabricated same. If such ARL individual components are not separable, ARL shall grant to COLLABORATOR a nonexclusive royalty free license to use such tangible property owned by ARL for internal research and educational purposes. Such nonexclusive license shall be evidenced by a confirmatory document prepared by ARL in the form attached hereto as Appendix E.

### **6.3 Tangible Property Operational and Disposition Costs**

Each Party shall be responsible for all costs of maintenance, removal, storage, repair, disposal and shipping of all tangible property to which it has title.

### **6.4 Disposal of Tangible Property**

Unless otherwise agreed, each Party shall take possession of its respective tangible property within sixty (60) days of termination of any JWS under this Master Agreement. Each Party shall cooperate with the other Party in the recovery or disposition of the other Party's property.

## **Article VII Patents**

### **7.1 Background Inventions**

This Master Agreement does not grant any implied licenses for practicing background inventions in the performance of work outside of this Master Agreement. However, as to work performed under this Master Agreement in accordance with the JWS, the Parties agree to refrain from asserting any claims of patent infringement or other violations of Intellectual Property rights which the Parties own or control.

### **7.2 Reporting**

**7.2.1 Annual Report of Subject Inventions:** Each Party shall provide to the other Party an annual report every twelve months from the effective date of the JWS, listing all Subject Inventions made under the JWS during the term of the JWS. The annual report shall also

represent that all Subject Inventions have been reported or that there were no Subject Inventions for that period.

**7.2.2 Detailed Disclosure of Subject Inventions:** Each Party shall prepare a written disclosure of each Subject Invention made by its employee(s), in reasonable detail to convey a clear understanding of the Invention. Each Party shall provide a copy of the detailed disclosure to the other Party by the earliest of: (1) two months after receiving a completed disclosure from its employee(s); (2) six months after the Party first becomes aware that a Subject Invention has been made by its employee(s). In the case of joint inventorship, unless the Government agrees otherwise, it shall be the responsibility of the COLLABORATOR, subject to the COLLABORATOR receiving a completed disclosure from its employee(s), to prepare and provide the detailed disclosure as described above, and the non-preparing Party shall cooperate fully in the preparation of the detailed disclosure.

**7.3 ARL Subject Inventions**

ARL, on behalf of the Government, shall retain title to each Subject Invention made by its employees ("ARL Subject Invention"). ARL has the first right to file patent applications on these ARL Subject Inventions at its own expense. ARL grants to Collaborator a nonexclusive, paid-up, irrevocable, nontransferable license to practice or have practiced ARL Subject Inventions for the performance of the JWS or for non-commercial research and educational purposes. Such nonexclusive license shall be evidenced by a confirmatory document prepared by ARL in the form attached hereto as Appendix E.

**7.4 Collaborator Subject Inventions**

COLLABORATOR shall retain title to each Subject Invention made by its employees. COLLABORATOR has the first right to file patent applications on these Subject Inventions at COLLABORATOR's own expense. In accordance with 15 U.S.C. 3710a(b)(2), the COLLABORATOR grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced throughout the world by or on behalf of the Government for research or other Government purposes Subject Inventions made under this Master Agreement by COLLABORATOR and COLLABORATOR's employees. Such nonexclusive license shall be evidenced by a confirmatory license agreement prepared by COLLABORATOR in the form attached hereto as Appendix E.

Further, COLLABORATOR agrees to secure the Government Purpose Rights in any inventions Made by other entities in performing work called for by this CRADA for the benefit of COLLABORATOR. Such Government Purpose Rights to be secured by COLLABORATOR for the Government in such circumstance shall be the same rights which would inure to the Government if such inventions were ARL Subject Inventions under this Master Agreement. Such Government Purpose Rights shall be evidenced by a confirmatory license agreement prepared by COLLABORATOR in the form attached hereto as Appendix E.



### 7.5 Joint Subject Inventions

Title to Subject Inventions made jointly by employees of ARL and COLLABORATOR ("Joint Subject Inventions") shall be held jointly by the Government and COLLABORATOR.

COLLABORATOR shall have the initial option to file patent applications on Joint Subject Inventions at its own expense. If COLLABORATOR declines to file or complete prosecution of such patent applications, COLLABORATOR waives co-ownership interest and agrees to assign its title to such Joint Subject Inventions to the Government. In such case COLLABORATOR shall retain a non-exclusive, irrevocable royalty free license to practice such Joint Subject Invention for non-commercial research and educational purposes.

### 7.6 Filing of Patent Applications

**7.6.1 First Rights Party** The party having the right to retain title and/or file patent applications on a specific invention, hereinafter "First Rights Party," may elect to file patent applications thereon provided it so advises the other Party within sixty (60) days from the date it discloses the Subject Invention to the other Party, but see 7.6.3. Any election NOT to file a patent application shall also be conveyed, in writing, by the same date. In the event that the First Rights Party fails to advise the other Party of its intent to file patent applications and in what countries it intends to file within ninety (90) days from the date it reports the Subject Invention, the other Party may elect to file patent applications on such Subject Invention in those countries for which an affirmative election has not been timely made.

**7.6.2 Failure to File** The First Rights Party shall file within six months from the date it discloses the Subject Invention to the other party if same is earlier. If the First Rights Party fails to file within six months from the date it discloses the Subject Invention to the other Party, or at least one month before a statutory bar date, fails to provide assurance of filing before the statutory bar date, the other Party may elect to file patent applications on such Subject Invention in those countries where a patent application has not been timely made or assured. For purposes of this paragraph, the filing of a U.S. Patent application qualifying as a priority document for filing of an International Patent Application under the Patent Cooperation Treaty (PCT) shall be deemed a timely application filing in PCT signatory countries.

**7.6.3 Written Notice** If the First Rights Party elects not to file a PCT application, elects not to designate all PCT countries, or elects not to enter the national phase in any PCT signatory country and elects not otherwise to pursue patent rights in all countries, the First Rights Party shall provide written notice to the other Party not less than ninety (90) days before the expiration of the applicable deadline for filing, designation, or entry of national phase. In such an event, the other Party may elect to file the application or continue the prosecution.

**7.6.4 Other Party Rights** If the other Party elects to file patent applications, First Rights Party agrees to assign to the other Party its rights, title and interest in such patent rights and to cooperate with the other Party in the preparation and filing of patent applications. The assignment of the above rights to the other Party shall be subject to the retention by the First Rights Party of a royalty-free, nonexclusive, irrevocable license to practice or have practiced the

Subject Invention worldwide by or on behalf of that Party. Where both Parties will be filing or prosecuting an application in different countries, the assignment shall reflect this distinction of rights by jurisdiction.

7.6.5 U.S. Inventions To avoid potential deemed or actual export of information subject to the International Traffic in Arms Regulations or other export control laws, the Parties agree that any patent application for an invention first made in the United States will be first filed in the United States as a U.S. domestic (not PCT) patent application.

#### 7.7 Patent Expenses and Cooperation

The expense attendant to the filing of patent applications as specified above shall be borne by the Party filing the patent application. Each Party shall provide the other Party with a copy of each patent application (and subsequent prosecution documents upon request by the other Party) it files in the U.S. Patent and Trademark Office or any foreign patent offices, along with the power to inspect and make copies of all documents retained in the official patent application files by the applicable patent offices. Copies so obtained will by their nature be unmarked. Such copies will be presumed protected until verified otherwise. The Party filing the patent application shall have the right to control the prosecution of the application. The Parties agree to cooperate with each other in preparing and prosecuting patent applications.

#### 7.8 Maintenance Fees

At its option, the Party filing the patent application will pay all patent maintenance fees to the U.S. Patent and Trademark Office; or, if a foreign patent issues, pay annuities to any foreign patent offices, respectively in order to maintain the patent's enforcement. If that Party decides not to pay maintenance fees or annuities, it shall notify the other Party, who may pay the maintenance fees or annuities if it desires to maintain the enforcement of the patent. The notification shall be given sixty (60) days or more prior to the maintenance fee or annuity due date. If one Party decides not to pay such maintenance fees or annuities, and the other Party elects to pay such maintenance fees or annuities, the first Party will assign title to the patent to the other Party ready and able to pay such maintenance fees or annuities.

#### 7.9 Exclusive Licensing of Subject Inventions

ARL agrees to enter into negotiations in good faith with COLLABORATOR for an exclusive license to COLLABORATOR within specified fields of use, at reasonable rate, terms and conditions (including optionally a right of patent enforcement), of ARL-Made or Jointly-Made Subject Inventions. Any such license agreement shall be subject to a nonexclusive, nontransferable, irrevocable, paid-up license to practice the invention or have the invention practiced throughout the world by or on behalf of the Government. ARL reserves the right to ensure that any license it grants to COLLABORATOR is consistent with the Government's international treaty and agreement obligations. COLLABORATOR shall notify ARL in writing of its interest in obtaining exclusive license rights within thirty (30) days of Subject Invention patent application filing.

#### 7.10 Assignment and Transfer

Unless specifically stated otherwise in the licensing Agreement, COLLABORATOR agrees that any nontransferable license granted to COLLABORATOR by the Government pursuant to this Article may not be assigned, sublicensed, or otherwise disposed of without prior notification to the Government and receipt of Government approval.

#### 7.11 Government Retained Rights

The Parties acknowledge the rights of the Government in any invention which has been assigned or exclusively licensed to COLLABORATOR under 15 U.S.C. §3710(a)(b)(1)(B) and (C).

### **Article VIII Copyrights**

#### 8.1 Works Created Solely by Collaborator

COLLABORATOR and/or author (as the case may be) retains all ownership to copyrights for original works of authorship created solely by COLLABORATOR's employees (or for hire by COLLABORATOR) in the course of performance of work under this Master Agreement. COLLABORATOR (to the extent COLLABORATOR is the sole copyright owner) grants to the Government a royalty-free, nonexclusive, irrevocable license to use, modify, prepare derivative works, reproduce, distribute, perform, and display worldwide such copyrighted works by or on behalf of the Government for Government purposes.

#### 8.2 Jointly Created Works

Ownership to copyrights for original works of authorship (excluding scholarly works created by COLLABORATOR's employees which are owned by author) created jointly by ARL employees and COLLABORATOR's employees (or for hire by COLLABORATOR) in the course of performance of work under this Master Agreement is vested in COLLABORATOR and/or author (as the case may be). COLLABORATOR (to the extent Collaborator is the sole copyright owner) grants to the Government a royalty-free, nonexclusive, irrevocable license to use, modify, prepare derivative works, reproduce, distribute, perform, sell or resell, and display worldwide such copyrighted works. COLLABORATOR (to the extent COLLABORATOR is the sole copyright owner) agrees to share revenues in jointly created works with ARL at reasonable rates, terms, and conditions agreed upon by the Parties.

#### 8.3 Works Created Solely by ARL

Pursuant to 17 U.S.C. § 105, copyright protection in the United States is not available for works of the Government.

#### 8.4 Copyright Statement

COLLABORATOR shall include the following statement on any text, drawing, mask work or other work of authorship, that may be copyrighted under 17 USC, that is created in the performance of this Master Agreement:

“The U.S. Government has a copyright license in this work pursuant to a Cooperative Research and Development Agreement with COLLABORATOR ORGANIZATION”

## **Article IX Trademarks**

COLLABORATOR and ARL agree to negotiate in good faith Trademark licensing agreements when requested by the other Party. A Party intending to claim or assert a trademark with respect to the subject of this Master Agreement shall provide the other Party immediate notice of such intent.

## **Article X Exchange of Technical Data and Software**

### **10.1 Exchange of Data**

Unless prohibited by law or regulation, the Parties agree to exchange all Subject Data relevant to the performance of this Master Agreement. Absent actual knowledge to the contrary, information that is not marked as being protected in accordance with the terms of this Master Agreement, shall be presumed to be unprotected and releasable. See Article VII, Paragraph 7.7, for an exception.

Any Data and/or software the Collaborator exchanges with ARL that has restrictive markings or legends affixed thereto pursuant to and authorized by any previous or existing funding agreement, as that term is defined in 35 U.S.C. 201, shall be handled by ARL in accordance with the funding agreement, the FAR, DFARS and any other applicable regulations. Once notified by ARL, restrictive markings not in a format authorized by the FAR, DFARS or Collaborator funding agreement must be removed or corrected by Collaborator within 60 days or ARL may ignore any nonconforming marking.

### **10.2 Software**

To the extent not otherwise governed by the Articles on Patents and Copyrights and subject to export control requirements and Government designated classified material guidelines, the developing Party will provide the other Party with the executable code, and minimum support documentation needed by a competent user to use Software created in performance of work for a JWS under this Master Agreement for the sole purpose of performing the JWS under this Master Agreement.

## **Article XI Protected Information**

### **11.1 Exchange of Data**

Either Party may make any use of any Subject Data of the other Party as it requires for purposes of fulfilling its responsibilities under the Master Agreement, subject to export control requirements and the Government's right to designate materials as classified. Where the Government wishes to make a non-public disclosure to an employee of COLLABORATOR of Subject Data designated as Proprietary Information, the Government will first require the COLLABORATOR to execute on behalf of the employee(s) a Non-Disclosure Agreement limiting the recipient's use to be for purposes of fulfilling its responsibilities under this Master

Agreement. Absent actual knowledge to the contrary, Subject Data that is not marked as being protected in accordance with the terms of this Master Agreement, shall be presumed to be unprotected and releasable to which the Government will have Unlimited Rights.

## 11.2 Protected Data

11.2.1 Form. Collaborator shall place a proper proprietary marking on each medium used for recording Subject Data that Collaborator delivers to ARL for a JWS under this Master Agreement that Collaborator asserts is Proprietary Information. Collaborator shall request in writing if it wishes Subject Data generated by ARL to be marked as Restricted Access Information. The Parties together shall confer to determine if such marking is appropriate, with reference to the definitions in Article II entitled "Definitions".

Proprietary Information may be disclosed to the other Party orally, electronically, visually, in writing, or in any other tangible or intangible form. If the Proprietary Information is initially disclosed in a non-fixed media, then the Party disclosing the information shall furnish the other Party with the information in a fixed medium marked appropriately and within thirty (30) days of its initial disclosure. Failure to furnish the fixed medium within thirty (30) days, or to prominently mark the information as proprietary or otherwise protected, will not automatically result in the loss of the information's protected status. However, such action will excuse any Party's unauthorized disclosure or use of the information (e.g., Subject Data) caused by the failure to meet the thirty (30) day period to properly mark the information.

11.2.2 Collaborator Non-Subject Data. Collaborator shall place a proprietary marking on all Non-Subject Data it asserts as Proprietary Information that is furnished to ARL. The markings shall prominently and explicitly identify which Non-Subject Data is Proprietary Information and which Non-Subject Data is not Proprietary Information. For Non-Subject Data that are Proprietary Information, the marking shall read:

"PROPRIETARY INFORMATION OF COLLABORATOR – GOVERNMENT HAS GOVERNMENT PURPOSE RIGHTS AND WILL PROTECT IN ACCORDANCE WITH ARL CRADA NUMBER XX-xx"

11.2.3 Collaborator Subject Data. Collaborator shall place a proprietary marking on all Subject Data it asserts as Proprietary Information that is furnished to ARL. The markings shall prominently and explicitly identify which Subject Data is Proprietary Information and which Subject Data is not Proprietary Information. For Subject Data that are Proprietary Information the marking shall read:

"PROPRIETARY INFORMATION OF COLLABORATOR - GOVERNMENT HAS GOVERNMENT PURPOSE RIGHTS AND WILL PROTECT IN ACCORDANCE WITH ARL CRADA NUMBER XX-xx."

11.2.4 Government Non-Subject Data and Protectable Invention Information. ARL shall place a nondisclosure marking on all Non-Subject Data that is Proprietary Information or Protectable Invention Information and furnished to Collaborator. Such marked Non-Subject Data, as long as

it remains protected, shall not be disclosed or otherwise made available by Collaborator outside the Parties without the written consent of ARL.

“NON-SUBJECT DATA PROTECTED FROM RELEASE OR DISCLOSURE UNDER 35 U.S.C. 205 AND/OR 5 U.S.C. CHAPTER 5, SUBCHAPTER II IN ACCORDANCE WITH ARL CRADA NUMBER XX-xx.”

11.2.5 Government Subject Data. ARL shall place a nondisclosure marking on all Subject Data agreed to by the Parties to be protected as “Restricted Access Information.” For Government Subject Data that are Restricted Access Information the marking shall read:

“RESTRICTED ACCESS INFORMATION – GOVERNMENT HAS GOVERNMENT PURPOSE RIGHTS AND WILL PROTECT IN ACCORDANCE WITH ARL CRADA NUMBER XX-xx UNTIL 5 YEARS AFTER THE INFORMATION HAS BEEN DEVELOPED AND THEREAFTER SHALL HAVE UNLIMITED RIGHTS.”

11.2.6 Standard of Care. Each Party is obligated to use not less than reasonable care in the protection of properly marked Subject Data.

11.2.7 Disputes or disagreements between the Parties regarding the appropriate marking for Subject Data shall be resolved in accordance with Article XVI Disputes. Resolution of such disagreements shall give priority to implementing all the rights and licenses contained within this Master Agreement.

## **Article XII Publications**

12.1 The collaborative research conducted under this Master Agreement as outlined in each JWS is intended to be basic and applied research and, as such, unclassified and publishable in the open literature. Deviations from the fundamental research exclusions as defined in 15 CFR 734.8 shall be agreed upon in the negotiation of a JWS under this Master Agreement. Each Party desiring to publish information or press releases pertaining to work performed as fundamental research under this Master Agreement shall provide the other Party the opportunity to review any proposed manuscripts, presentations (e.g. abstracts, oral presentations or posters), or similar documents thirty (30) days prior to such document(s) submission for publication. The publication/presentation may be delayed to allow a reasonable period of time for the Parties to discuss revisions to such disclosure to remove Protected Subject Data or to file a patent application; however, in no case shall a delay period last longer than ninety (90) days from submission to the other Party.

12.2 Should the Parties agree to conduct research under a JWS under this Master Agreement that is not considered fundamental research as defined in 15 CFR 734.8 that is restricted in accordance with applicable export control laws, the Parties will negotiate terms under a JWS consistent with the handling and disclosure of such Subject Data under terms more appropriate to restricted research.

## **Article XIII    Export Control and Classified Data**

13.1 Fundamental Research Limitation. The research developed and delivered by COLLABORATOR under this Master Agreement, including all Subject Data, Inventions, discoveries, copyrightable works, software, tangible materials and information, will be confined to "fundamental research" as defined by ITAR and EAR regulations (collectively, "Export Control Regulations") and will therefore not be restricted under the Commerce Control List of the Export Control Regulations or the US Munitions List of the International Traffic in Arms Regulations. Further, faculty and/or students who are "foreign persons" shall not be restricted from participating in these research efforts pursuant to this Master Agreement and should therefore not be subject to Export Control. Should ARL believe at some point in this collaborative project that materials which are being developed pursuant to this Master Agreement are deemed "export controlled", ARL must provide specific information to COLLABORATOR's Administrative Contact (see Appendix F) as to the regulation under which the materials are classified as "controlled". The Parties may terminate the JWS under this Master Agreement for convenience if COLLABORATOR is unable to perform the type of project ARL requires.

13.2 Compliance with Export Control. This Master Agreement is subject to United States laws and regulation controlling the export of technical data; computer software, laboratory prototypes and all other export controlled commodities. These laws include, but are not limited to the Arms Export Control Act and Export Administration Act as they may be amended. All rights granted by this Master Agreement are contingent upon compliance with these laws and regulations. COLLABORATOR shall not, directly or indirectly, export any export controlled commodities, which are subject to this Master Agreement, unless the required authorization and/or license is obtained from the required Government agency(ies) prior to export. COLLABORATOR shall notify ARL in writing of its intent to obtain an export license for technologies and/or equipment resulting under this Master Agreement. By granting rights in this Master Agreement, ARL does not represent that export authorization or an export license will not be necessary or that such authorization or export license will be granted.

**The COLLABORATORS agree to report in Appendix D, all COLLABORATORS foreign nationals employees that will conduct research described in Appendix A of this Master Agreement, unless the work is to be limited to fundamental research as defined in 15 CFR 734.8. COLLABORATORS agree to abide by the terms and conditions of paragraph 13.3 of this Master Agreement should COLLABORATORS employ non-resident aliens to conduct the work described in Appendix A of this Master Agreement.**

13.3 Classified Data: The work performed under this Master Agreement may cover classified national security information and unclassified Military Critical Technology (MCT). All personnel, government and non-government, working with classified material must have an appropriate security clearance and need to know. Any exchange of classified Data with industry shall comply with the National Industrial Security Program Operating Manual, DoD 5200.22-M (February 2006) and the DD-254, DoD Contract Security Classification Specification provided as a separate removable attachment to this Master Agreement. If required, the COLLABORATOR must also be certified by the Joint Certification Program (JCP) to receive

MCT and Technical Data governed by DoD Directive 5230.25. This Technical Data must be controlled in accordance with the International Trade in Arms Regulations (ITAR).

#### **Article XIV Competitiveness**

Recognizing the Government's preference to enter into Cooperative Research and Development Agreements with businesses that will enhance U.S. competitiveness, as promulgated in 15 U.S.C. 3710a (c)(4), COLLABORATOR agrees that any products embodying inventions made under this Master Agreement or produced through the use of such inventions shall be manufactured substantially in the United States.

#### **Article XV Termination**

##### **15.1 Mutual Consent**

COLLABORATOR and ARL may terminate this Master Agreement or an individual JWS under this Master Agreement at any time by mutual consent.

##### **15.2 Unilateral Action**

Either Party may unilaterally terminate this Master Agreement or an individual JWS under this Master Agreement by giving the other Party written notice, not less than thirty (30) days prior to the desired termination date. Pending termination of this Master Agreement pursuant to this Article, the Parties agree that performance of work under this Master Agreement or the individual JWS shall continue diligently in accordance with each JWS.

##### **15.3 Termination Costs**

Unless otherwise explicitly provided in this Master Agreement or the JWS, each Party shall be solely responsible for all of the costs it has incurred for the JWS under this Master Agreement through the effective date of termination as well as any costs it incurs after the effective date of termination.

##### **15.4 Disposition**

Upon termination of a JWS, the Parties shall specify the disposition of property, inventions, and other results of work accomplished or in progress, if such disposition is not otherwise specified.

##### **15.5 JWS Termination Does Not Terminate Master Agreement**

Termination of an individual JWS under this Master Agreement pursuant to 15.1 or 15.2 above will not affect termination of this Master Agreement or any other active JWS. This Master Agreement will remain effective until expiration or earlier termination pursuant to 15.1 or 15.2 above. Any JWS with an effective date during the term of this Master Agreement will continue beyond the date of this Master Agreement until completion in accordance with the terms of the JWS.



## **Article XVI    Disputes**

### **16.1    Settlement**

Any disputes arising under this Master Agreement that are not disposed of by agreement of the Parties, shall be submitted jointly to the signatories of this Master Agreement. A joint decision of the signatories or their designees shall be the disposition of such disputes. The Parties may use alternative disputes resolution (ADR) techniques to resolve disputes brought to their attention; however, nothing in this Master Agreement precludes either party from pursuing resolution of a dispute by other means.

### **16.2    Continuation of Work**

Pending dispute resolution pursuant to this Article, the Parties agree that performance of work under this Master Agreement shall continue diligently in accordance with the JWS.

## **Article XVII    Liability**

### **17.1    No Warranty.**

The Parties make no express or implied warranty as to the conditions of the research, Inventions, Technical Data, or products exchanged, made, or developed under this Master Agreement, or the ownership, merchantability, or fitness for a particular purpose, technical feasibility, or freedom from infringement of intellectual property rights of the research, Inventions, Technical Data, or products. Neither Party shall be liable for lost profits, lost savings, special, consequential, incidental, or other indirect damages, even if such Party is made aware of the possibility thereof.

### **17.2    Products Liability.**

To the extent authorized by applicable State or local law, COLLABORATOR agrees to indemnify and hold harmless the Government for any loss, claim, damage, expense, or liability of any kind occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the COLLABORATOR, its assignees and licensees, which was derived from work performed under this Master Agreement. In respect to this provision, the Government shall not be considered an assignee or licensee of the COLLABORATOR as a result of reserved Government rights under this CRADA. The Government's liability for losses, claims, damages, or expenses of the COLLABORATOR occurring as a result of the making, using, or selling of a product, process, or service by or on behalf of the Government shall be governed by the provisions of the Federal Tort Claims Act.

### **17.3    Parties' Employees.**

To the extent authorized by applicable State or local law, the COLLABORATOR shall indemnify and hold harmless the Government for any loss, claim, damage, expense, or liability of any kind involving an employee of the COLLABORATOR arising in connection with the performance of work under this Master Agreement, except to the extent that such loss, claim, damage, or liability arises from the negligence of the ARL or its employees. The Government's liability for the loss of property, personal injury or death, or otherwise arising out of any negligent act or omission of its employees in connection with the performance of work under this Master Agreement shall be governed solely by the Federal Tort Claims Act.

#### 17.4 Notice and Assistance.

The indemnification provisions of this Article shall apply only if the U.S. Army Research Laboratory upon which the claim or lawsuit is asserted gives the COLLABORATOR prompt notice of the claim or lawsuit and allows the COLLABORATOR to participate in the defense/adjudication of the claim or lawsuit as is permitted by applicable laws and Government regulations.

#### 17.5 Force Majeure Events.

Neither Party shall be liable for any unforeseen 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 Master Agreement and which it has been unable to overcome by the exercise of due diligence. Such unforeseen events include, but are not limited to, fire, storm, flood, earthquake, or other natural catastrophes, accidents, acts of civil disturbance or disobedience, war, acts of terrorism, rebellion, insurrection, labor strikes or disputes, compliance with any laws, requirements, rules, regulations, or orders of any governmental authority or instrumentality thereof, sabotage, invasion, quarantine, and embargoes.

### **Article XVIII    Enforcement**

#### 18.1 Governing Law

The laws applicable to the Federal Government of the United States of America shall govern the construction, validity, performance, and effect of this Master Agreement for all purposes. COLLABORATOR will be subject to any Federal, State, or Local laws governing their activities under this Master Agreement.

#### 18.2 Headings

Titles of the Articles and Sub-articles of this Master Agreement are for convenience and reference only, and shall in no way affect the interpretation thereof.

#### 18.3 Waivers

None of the provisions of this Master Agreement shall be considered waived by any Party hereto, unless such waiver is given in writing to the other Party. The failure of any Party to insist upon strict performance of any of the terms and conditions hereof, or a failure or a delay in exercising any rights provided herein or by law, shall not be deemed a waiver of any rights of such Party.

#### 18.4 Provisions Contrary to Law

Any Master Agreement provision that is prohibited by law is void and shall not impair, affect, or invalidate the other provisions of this Master Agreement.

## **Article XIX    Modification**

### **19.1    Entire Agreement**

This Master Agreement constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes all prior representations or agreements relating hereto, which have been merged into this document and are superseded in totality by this Master Agreement. This Master Agreement shall not be used to alter or interpret the provisions or clauses of any other contract or agreement.

### **19.2    Agreement Modification**

If either Party desires to modify this Master Agreement, and upon giving reasonable notice of the proposed modification by the Party desiring the modification, the Parties shall confer in good faith to determine the desirability of such modification. Such modification shall take effect upon a written amendment being signed by all the Parties hereto by their duly authorized representatives.

## **Article XX    Assignment**

Neither this Master Agreement nor any rights or obligations of any Party hereunder may be assigned or transferred without the prior written consent of the other Party. Such consent shall not be unreasonably withheld.

## **Article XXI    Notices**

21. All notices pertaining to this Master Agreement shall be in writing and shall be signed by an authorized representative of the Party giving notice. Notices shall be sent by certified mail, return receipt requested, with postage prepaid, express mail, or private delivery service and addressed as follows:

If to **COLLABORATOR**: See **Appendix F**.

If to **ARL**:

Thomas Mulkern  
U.S. Army Research Laboratory  
Technology Transfer Office  
Bldg 321 Rm 110  
Aberdeen Proving Ground MD 21005

## **Article XXII    Endorsement**

Neither ARL nor the Government directly or indirectly endorse any product or service provided, or to be provided by the COLLABORATOR, its successors, assignees, or licensee. The COLLABORATOR shall not in any way imply that this Master Agreement is an endorsement by the Government of any such product or service.

### Article XXIII Duration of Master Agreement

#### 23.1 Duration

The parties mutually recognize that the Master Agreement objective cannot be rigidly defined in advance and that projected milestones are subject to adjustment. The term of this Master Agreement is five (5) years from the effective date noted in Section 23.2 with automatic renewal for another five (5) years unless either Party specifically requests that this Master Agreement be terminated.

#### 23.2 Effective Date

The effective date of this Master Agreement shall be the date of the last signature subject to Article I, Paragraph 1.2.

#### 23.3 Continuing Obligation

All Master Agreement obligations and rights specified in Articles VI, VII, VIII, IX, XI, XII, and XVII shall survive the termination or expiration of this Master Agreement.

### Article XXIV Acceptance

IN WITNESS THEREOF, the parties hereto have caused this **MASTER AGREEMENT** to be executed by their duly authorized representatives.

ARMY RESEARCH LABORATORY

THE UNIVERSITY OF TEXAS AT  
AUSTIN

BY: 

Dr. Thomas P. Russell  
Director,  
U.S. Army Research Laboratory

Date: 5/30/14

BY: 

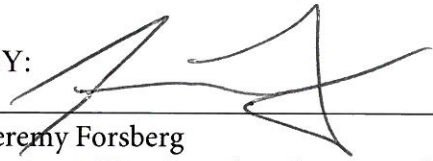
Susan W. Sedwick  
Associate VP for Research  
Director, Office of Sponsored Projects

Date: 5/15/2014

Signatures Continue on Next Page



THE UNIVERSITY OF TEXAS AT ARLINGTON	THE UNIVERSITY OF TEXAS AT BROWNSVILLE
---	---

BY:   
 \_\_\_\_\_  
 Jeremy Forsberg  
 Assistant Vice President for Research  
 Date: 5/16/16

BY: \_\_\_\_\_  
 Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT DALLAS	THE UNIVERSITY OF TEXAS AT EL PASO
--------------------------------------	---------------------------------------

BY: \_\_\_\_\_  
 Date: \_\_\_\_\_

BY: \_\_\_\_\_  
 Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS PAN AMERICAN	THE UNIVERSITY OF TEXAS PERMIAN BASIN
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BY: \_\_\_\_\_  
 Date: \_\_\_\_\_

BY: \_\_\_\_\_  
 Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT ARLINGTON	THE UNIVERSITY OF TEXAS AT BROWNSVILLE
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BY: \_\_\_\_\_

BY: 

Alan F.J. Artibise, Provost & Vice President for Academic Affairs

Date: \_\_\_\_\_

Date: 5/29/14

THE UNIVERSITY OF TEXAS AT DALLAS	THE UNIVERSITY OF TEXAS AT EL PASO
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS PAN AMERICAN	THE UNIVERSITY OF TEXAS PERMIAN BASIN
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT ARLINGTON	THE UNIVERSITY OF TEXAS AT BROWNSVILLE
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT DALLAS	THE UNIVERSITY OF TEXAS AT EL PASO
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BY: 

BY: \_\_\_\_\_

Rafael Martin  
Associate Vice President for Research

Date: 05.28.14

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS PAN AMERICAN	THE UNIVERSITY OF TEXAS PERMIAN BASIN
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT ARLINGTON	THE UNIVERSITY OF TEXAS AT BROWNSVILLE
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BY: \_\_\_\_\_ BY: \_\_\_\_\_

Date: \_\_\_\_\_ Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT DALLAS	THE UNIVERSITY OF TEXAS AT EL PASO
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Roberto Osegueda, Ph.D.  
Vice President for Research

BY: \_\_\_\_\_

BY: 

Date: \_\_\_\_\_

Date: May 19, 2014

THE UNIVERSITY OF TEXAS PAN AMERICAN	THE UNIVERSITY OF TEXAS PERMIAN BASIN
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



**THE UNIVERSITY OF TEXAS AT  
ARLINGTON**

**THE UNIVERSITY OF TEXAS AT  
BROWNSVILLE**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS AT  
DALLAS**

**THE UNIVERSITY OF TEXAS AT  
EL PASO**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_


Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS  
PAN AMERICAN**

**THE UNIVERSITY OF TEXAS  
PERMIAN BASIN**

BY: \_\_\_\_\_

  
Martin Baylor  
VPBA

  
Sadiq Shah, PhD  
VPR

BY: \_\_\_\_\_

Date: 5/20/14

5/15/14

Date: \_\_\_\_\_

<b>THE UNIVERSITY OF TEXAS AT ARLINGTON</b>	<b>THE UNIVERSITY OF TEXAS AT BROWNSVILLE</b>
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

<b>THE UNIVERSITY OF TEXAS AT DALLAS</b>	<b>THE UNIVERSITY OF TEXAS AT EL PASO</b>
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

<b>THE UNIVERSITY OF TEXAS PAN AMERICAN</b>	<b>THE UNIVERSITY OF TEXAS PERMIAN BASIN</b>
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BY: \_\_\_\_\_

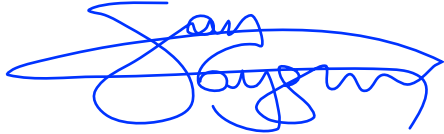
BY: W. David Watts  
DR. W. DAVID WATTS

Date: \_\_\_\_\_

Date: 5-20-14

**THE UNIVERSITY OF TEXAS AT  
SAN ANTONIO**

**THE UNIVERSITY OF TEXAS AT  
TYLER**



BY: Can (John) Saygin, Ph.D.  
AVP-Research

BY: \_\_\_\_\_

5/15/2014

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT HOUSTON**

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT SAN ANTONIO**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT TYLER**

**THE UNIVERSITY OF TEXAS MEDICAL  
BRANCH AT GALVESTON**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS AT  
SAN ANTONIO**

**THE UNIVERSITY OF TEXAS AT  
TYLER**

BY: \_\_\_\_\_



BY: Dr. Michael Odell, VP for Research &  
Technology Transfer  
\_\_\_\_\_

Date: \_\_\_\_\_

Date: May 28, 2014  
\_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT HOUSTON**

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT SAN ANTONIO**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT TYLER**

**THE UNIVERSITY OF TEXAS MEDICAL  
BRANCH AT GALVESTON**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT SAN ANTONIO	THE UNIVERSITY OF TEXAS AT TYLER
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON	THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO
---	---

BY:   
 Karen S. Niemeier  
 Director, Contracts  
 Office of Sponsored Projects

Digitally signed by  
 karen.niemeier@uth.tmc.edu  
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 cn=karen.niemeier@uth.tmc.  
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 Date: 2014.05.19 13:47:17  
 -05'00'

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER	THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON
---	--

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS AT  
SAN ANTONIO**

**THE UNIVERSITY OF TEXAS AT  
TYLER**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT HOUSTON**

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT SAN ANTONIO**

BY: \_\_\_\_\_

BY: Chris G. Green

Chris G. Green, CPA

Director, Office of Sponsored Programs

Date: \_\_\_\_\_

Date: 21 May 2014

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT TYLER**

**THE UNIVERSITY OF TEXAS MEDICAL  
BRANCH AT GALVESTON**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS AT  
SAN ANTONIO**

**THE UNIVERSITY OF TEXAS AT  
TYLER**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT HOUSTON**

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT SAN ANTONIO**

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**THE UNIVERSITY OF TEXAS HEALTH  
SCIENCE CENTER AT TYLER**

**THE UNIVERSITY OF TEXAS MEDICAL  
BRANCH AT GALVESTON**

BY: \_\_\_\_\_



David Anderson  
Director, Pre-Award Services

Date: 5/15/14 \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS AT SAN ANTONIO	THE UNIVERSITY OF TEXAS AT TYLER
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BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON	THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO
---	---

BY: \_\_\_\_\_

BY: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER	THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON
---	--

BY: \_\_\_\_\_

BY:  \_\_\_\_\_

Toni D'Agostino, Associate Dean for Research

Date: \_\_\_\_\_

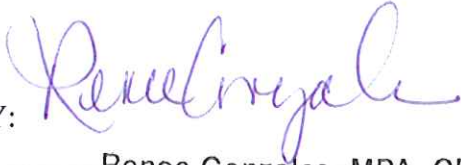
Date: 5/16/2014



THE UNIVERSITY OF TEXAS M. D.  
ANDERSON CANCER CENTER

THE UNIVERSITY OF TEXAS  
SOUTHWESTERN MEDICAL CENTER

BY:



Renee Gonzales, MPA, CRA  
Executive Director, Sponsored Programs

Date:

5/19/14

BY:

Date:

Reviewed and Approved by  
UTMDACC Legal Services for  
UTMDACC Signature:



THE UNIVERSITY OF TEXAS M. D.  
ANDERSON CANCER CENTER

THE UNIVERSITY OF TEXAS  
SOUTHWESTERN MEDICAL CENTER

BY:

\_\_\_\_\_

BY:



David Ngo, Assistant Vice President

\_\_\_\_\_

Date:

\_\_\_\_\_

Date:

5/29/14

\_\_\_\_\_

## **APPENDIX A-1**

Joint Work Statement

for

Cooperative Research and Development Agreement (CRADA)

XX-XX

between the

U.S. Army Research Laboratory (ARL)

And

The University of Texas \_\_\_\_\_

Collaborator Organization (CO)

Project #1 Title: XXXXXXXXXXXXXXXXXXXX

Research Plan:

Approach:

ARL Background Intellectual Property (if any) :

COLLABORATOR Background Intellectual Property (if any):

Support In Kind:

**ARL** will:

- Xxx
- Xxx
- Xxx
- Xxx
- Xxx

**CO** will:

- Xxx
- XXXX
- Xxx
- Xxx
- Xxx
- Xxx

Staff Rotation - An important element of CRADA collaboration is the rotation of technical staff through short- and long-term temporary assignments. The scope of this collaboration may range from regular, periodic short term visits to sabbaticals lasting a year or more. Staff rotations will be undertaken to foster and facilitate collaborative research where face-to-face interaction is advantageous, to enable a researcher to utilize unique facilities, to enable ARL and CO personnel to obtain specialized experience and to facilitate the exchange of research results. In addition, this exchange of personnel will provide CO personnel with insight into Army unique requirements and will provide Government personnel with insight into state of the art research and commercial practices and/or the opportunity to pursue fundamental research with noted researchers. The success of these interactive and collaborative exchanges will be assessed by the quality of the collaboration as demonstrated by joint efforts such as basic research transitions to applied research programs, archival journal papers, patents, and refereed presentations. The Parties shall participate in CRADA in accordance with the JWS, which sets forth the specific goals and objectives for the program for each program period. ARL will have continuous involvement with the CO.

Salary and Travel Costs - All salary and travel costs associated with the rotation of government personnel will be borne by the Government. All salary and travel costs associated with staff rotation of CO personnel will be paid for by CO.

Host Facility Regulations – Both parties' personnel in rotational assignments or on-site collaboration are required to comply with the safety, environmental, security, and operational regulations or requirements of the host facility.

Administrative Support - The host facility will provide adequate office space, communications connections, administrative support, and office supplies, if available, for guest on rotational assignments.

## APPENDIX B-1

### ESTIMATE OF RESOURCES

#### 1. Project Description

The project is intended to further advance the technology.....

#### 2. ARL Expenses:

a. Personnel: salary / X MY

b. Rent / expenses

c. Travel / TDY:

d. Equipment:

TOTAL ESTIMATED ARL YEARLY COSTS: up to \$XXXX

#### 3. CO Expenses:

a. Personnel: salary / X MY

b. Rent / expenses

c. Travel / TDY:

d. Equipment:

TOTAL ESTIMATED CO YEARLY COSTS: up to \$XXXX

The purpose of this project is to establish a cooperative effort between the U.S. Army Research Laboratory and CO that involves research and development, which is consistent with the military requirements of the US Army Research Laboratory and CO's technology goals.

**APPENDIX C-1**  
**Points of Contact Named for Each JWS**

	<b>Collaborator Organization</b>	<b>U.S. Army Research Laboratory</b>
ACRONYM	CO or COLLABORATOR	ARL
Tech POC w/ phone#		
Legal POC w/ phone#		Alan Kalb (301) 394-1769 <a href="mailto:alan.i.kalb.civ@mail.mil">alan.i.kalb.civ@mail.mil</a>
Administrative POC W/ phone#		Thomas Mulkern (410) 278-0889 <a href="mailto:thomas.j.mulkern.civ@mail.mil">thomas.j.mulkern.civ@mail.mil</a>
Mailing Address		U.S. Army Research Laboratory Technology Transfer Office RDRL-DPP/T. Mulkern Bldg 4402 RM229 APG MD 21005-5425

IN WITNESS WHEREOF, The Parties have caused this **PROJECT** to be executed by their duly Authorized Representatives as follows:

<b>Collaborator Organization</b>	<b>ARMY RESEARCH LABORATORY</b>
----------------------------------	---------------------------------

BY: \_\_\_\_\_

Director, Collaborator Organization

BY: \_\_\_\_\_

Dr. Thomas P. Russell  
 Director,  
 U.S. Army Research Laboratory

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX D-1

*COLLABORATOR ORGANIZATION*  
Foreign Nationals Working Under this Agreement  
(If none, report none)

Name	Home Address	Nationality	<u>Permanent Resident Card (Green Card)#</u>	<u>Visa Type (if applicable)</u>

## APPENDIX E-1

CONFIRMATORY LICENSE  AGREEMENT	1. APPLICATION FOR (Title of Invention)
2. INVENTOR(S) AND AFFILIATION	
3. PATENT APPLICATION SERIAL NO.	4. PATENT APPLICATION FILING DATE
5. ARL ACTIVITY (Name, address, point of contact)	6. NON-ARL ACTIVITY (Name, address, point of contact)
7. CRADA AGREEMENT NO.	8. DATE OF THIS AGREEMENT
<p>9. The Invention identified above is a "Subject Invention" under Article 7 Patents included with the CRADA identified in Box 7 between the Army Research Laboratory and Non-ARL Activity identified in Box 6.</p> <p>This document is confirmatory of the nonexclusive, irrevocable, paid-up license to practice the identified Subject Invention or have that Subject Invention practiced throughout the world by or on behalf of the receiving party, and of all other rights acquired by the receiving party by the referenced clause.</p> <p>This license is granted to</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 60%;"> <p>_____ the Government</p> <p>_____ Non-ARL Activity identified in Box 6</p> </div> <div style="width: 35%; text-align: center;"> <p>(Select one)</p> </div> </div> <p>under this CRADA in the identified Invention, Patent Application and any resulting patent.</p> <p>The licensee is hereby granted an irrevocable power to inspect and make copies of the above-identified Patent Application.</p> <div style="margin-top: 20px;"> <p>_____ ACTIVITY NAME OF LICENSOR</p> <p>_____ SIGNATURE</p> <p>_____ NAME (Typed or Printed)</p> <p>_____ TITLE</p> <p>_____ BUSINESS TELEPHONE</p> </div>	



CRADA RELEVANT INTELLECTUAL PROPERTY (PATENTS)  
OR  
PROPRIETARY INFORMATION

ARL Background Intellectual Property *that has actually been reduced to practice:*

COLLABORATOR Background Intellectual Property *that has actually been reduced to practice:*

COLLABORATOR Background Intellectual Property *that the US Government has an interest in:*

**APPENDIX F**  
**Administrative Contacts for The University of Texas System**  
**Institutions (Collaborator Organizations; see Sections 3.6 and 13.1 and Article XXI)**

**See Next Page**

**APPENDIX F**  
**Administrative Contacts for The University of Texas System**  
**Institutions (Collaborator Organizations; see Sections 3.6 and 13.1 and Article XXI)**

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