

# **FUNDING OPPORTUNITY**

## **ANNOUNCEMENT**



### **Research Associateship Program (RAP)**

**Funding Opportunity Number: W911NF-22-S-0005**

**ISSUED BY:**

**U.S. Army Contracting Command - Aberdeen Proving Ground**

**Research Triangle Park Division**

**P.O. Box 12211**

**Research Triangle Park, NC 27709-2211**

**ISSUED: January 2022**

**APPLICATIONS DUE: 08 March 2022**

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## **OVERVIEW OF THE FUNDING OPPORTUNITY AND PROGRAM**

**Federal Agency Name:** U.S. Army Combat Capabilities Development Command Army Research Laboratory (DEVCOM ARL), 2800 Powder Mill Road, Adelphi, MD 20783-1197

- **Issuing Acquisition Office:** U.S. Army Contracting Command (ACC), Aberdeen Proving Ground (APG), Research Triangle Park (RTP) Division, 800 Park Office Drive, Research Triangle Park, NC 27709
- **Funding Opportunity Title:** ARL Research Associateship Program (RAP)
- **Announcement Type:** Initial
- **Funding Opportunity Number:** W911NF-22-S-0005
- **Catalog of Federal Domestic Assistance (CFDA) Number(s):** 12.630 - "Basic, Applied, and Advanced Research in Science and Engineering"
- **Dates:** The following is a summary of the events and dates associated with the ARL Research Associateship Program (RAP) Funding Opportunity Announcement (FOA):

<b><u>EVENT</u></b>	<b><u>ESTIMATED</u></b>
Announcement released	13 January 2022
Deadline for questions	4 February 2022
Proposals due	8 March 2022
Award made	June 2022

The purpose of this United States **ARL RAP FOA** is to solicit offers from interested Applicants to establish a program to provide scientists, engineers and postsecondary students of unusual promise and ability the opportunity to engage in research on problems, largely of their own choice, that are compatible with the interests of the Government. The RAP will further science and technology through mentorship and experiential educational training through the conduct of collaborative fundamental research, with this research having potentially both civilian and military applications. Under the RAP, scientists, engineers and postsecondary students are sought and selected as Fellows. Selected Fellows will perform fundamental research, applying their knowledge and talents to research areas that are of interest.

The Applicant is responsible for providing selected Fellows under the RAP. The type of legal agreement to document the relationship between the Applicant and the selected Fellow is at the discretion of the Applicant. A selected Fellow may be an employee of the Applicant. A selected Fellow may also be provided the Fellowship (further described below, Section A.6) without being an employee of the Applicant. A selected Fellow will not be an employee of ARL, the Army or the Federal Government. A selected Fellow will not perform any service directly for the benefit or use by ARL, but rather will conduct scholarly fundamental research at ARL which should embody original ideas of the individual. To facilitate Fellow selection, the Recipient will execute a competitive application process that involves an individual writing and submitting a research proposal for evaluation under the RAP. ARL will also participate in this application process by providing a written evaluation of the research proposal. It is important that a research proposal be consistent with, and complements, ARL facilities and interests, supporting or stimulating ARL basic and applied research programs.

**Important National Security Statement:** This announcement requires that all current and pending research support, as defined by Section 223 of the FY21 National Defense Authorization Act must be disclosed annually, for all covered individuals identified in the proposal. Such disclosure will be updated annually during the performance of any research project selected for funding, and whenever covered individuals are added or identified as performing under the project.

Any decision to accept a proposal for funding under this announcement will include full reliance on the applicant's statements. Failure to report fully and completely all sources of project support and outside positions and affiliations may be considered a material statement within the meaning of the federal False Claims Act, and constitute a violation of law.

The funding agency will conduct a pre-award security review of any proposal selected for funding, and may impose additional security requirements on a resulting award, based on that review.

## **A. PROGRAM DESCRIPTION**

### **1. ARL Background**

The U.S. Army Combat Capabilities Development Command Army Research Laboratory (DEVCOM ARL) is the Army's corporate research laboratory strategically placed in the Army Futures Command. DEVCOM ARL is the Army's sole corporate research laboratory, focused on cutting-edge disruptive foundational research, shaping and informing the future operating environment, and serving as the primary link to the world-wide scientific community. The DEVCOM ARL Mission is to operationalize science for transformational overmatch.

DEVCOM ARL is the Army's corporate, or central, laboratory for materiel technology. Its diverse assortment of unique facilities and its workforce of government engineers and scientists comprise the largest source of world class integrated research and analysis in the Army. DEVCOM ARL's programs consist of foundational research as well as human factors analysis. These programs are focused on key non-system specific science and technology that will enable the transformation of the Army into a more versatile, agile, survivable, lethal, deployable, and sustainable force. DEVCOM ARL consists of four directorates and the Army Research Office. These organizations focus on technology areas critical to strategic dominance across the entire spectrum of military operations.

By combining its in-house technical expertise with those from academic and industry partners, DEVCOM ARL is able to maximize each dollar invested to provide the best technologies for our Soldiers. DEVCOM ARL also applies the extensive research and analysis tools developed in its direct mission program to support ongoing development and acquisition programs in the DEVCOM Centers, Program Executive Offices (PEOs)/Program Manager (PM) Offices, and Industry. DEVCOM ARL has consistently developed the enabling technologies found in many of the Army's most important weapons systems.

The DEVCOM ARL Research Associateship Program (RAP) will help to introduce selected Fellows to the roles and needs of the Warfighter as well as provide access to DEVCOM ARL's world class research facilities, while allowing the Selected Fellows to pursue fundamental research of mutual interest to the Army and the Fellows. Selected Fellows will bring new ideas, expertise, approaches, and techniques to DEVCOM ARL. The RAP allows the United States Government to rapidly build a critical mass of talent in specific research and technology areas. Being involved with research at DEVCOM ARL broadens the Fellows' experience, under the mentorship of DEVCOM ARL's excellent scientific staff, thus also enhancing the Fellows' credentials.

## **2. Purpose.**

The purpose of the Cooperative Agreement (CA) to be awarded as a result of this Funding Opportunity is to establish and administer the DEVCOM ARL RAP to provide scientists, engineers and postsecondary students of unusual promise and ability the opportunity to engage in research on problems, largely of their own choice, that are compatible with the interests of ARL. The RAP includes five Fellow designations: Postdoctoral Fellows, Senior Fellows, Journeyman Fellows, Short-Term Fellows, and Summer Student Experience participants (as described section 6, below.) The RAP is expected to contribute significantly to the overall efforts of DEVCOM ARL. This CA will be issued under the authority of 10 USC §2358, Research and Development Projects.

The CA awarded will be a “parent” CA with the Recipient and under that “parent” CA the conduct and administration of the RAP will be executed and funded. However, separate “child” CAs with the Recipient will be subsequently issued to fund the individual fundamental research efforts of each selected Fellow, to include stipends and any approved relocation, travel, insurance or other costs as necessary and appropriate

## **3. Period of Performance.**

The award, if any, made as a result of this Funding Opportunity Announcement (FOA) will provide for a period of performance of no more than five years.

## **4. Place of Performance.**

The selected Fellows will conduct research at the DEVCOM ARL facilities in Adelphi, MD, Aberdeen Proving Ground, MD, and White Sands Missile Range, NM as well as West Point, NY. There is no limitation on the place of performance for all other activities performed by the Recipient to execute the RAP. For proposal preparation purposes, Applicants are to assume that all performance will be at DEVCOM ARL, Adelphi, MD or Aberdeen Proving Ground, MD. All personnel performing at federal facilities are required to comply with the safety, environmental, security, and operational regulations or requirements of that host facility. RAP Fellows requiring a Common Access Card (CAC) and physical access to a federal facility will also need to provide a completed NonDisclosure Agreement to the Government prior to commencing performance.

## **5. DEVCOM ARL Areas of Research Interest.**

DEVCOM ARL executes research in 11 competencies that provide the Army foundational expertise and specialized capabilities grounded in scientific excellence and driven by Army unique challenges. The scientific knowledge created and exploited in the competencies is leveraged to develop new opportunities, build programs, align people and dollars and advise on future operational concepts.

The active Government participants will be from the DEVCOM ARL directorates. These directorates perform foundational research within the broad context of scientific and engineering disciplines as defined in DEVCOM ARL’s Campaign Plan (<https://api.army.mil/e2/c/downloads/370510.pdf>) and specifically DEVCOM ARL’s Competencies.

The following is a list of DEVCOM ARL’s Competencies.

**Sciences of Extreme Materials (SEM)** – materials and related manufacturing methods focusing on "mechanical" response and performance extremes, including active, adaptive, and flexible/soft materials; novel manufacturing science for energetic materials

**Photonics, Electronics, and Quantum Sciences (PE&QS)** – materials (and related manufacturing methods) and devices intended for achieving photonic, electronic, and quantum-based effects.

**Military Information Sciences (MIS)** – underpinning sciences and enablers required to provide timely, mission-aware information to humans and systems at speed and scale for all-domain and coalition operations.

**Biological and Biotechnology Sciences** – biological related disciplines, including synthetic biology, incapacitation and degradation, and augmentation.

**Humans in Complex Systems (HCxS)** – multi-disciplinary non-medical approaches to understand and modify the potential of humans situated in and interacting within complex social, technological, and socio-technical systems.

**Network Science and Computational Sciences (NS&CS)** – sciences to enable and ensure secure resilient communication networks that enable distributed analytics in multi-domain operations.

**Terminal Effects (TE)** – sciences and applied research of weapon target interactions.

**Weapons Sciences (WS)** – the science of internal, transitional and external ballistics; launch, flight, control and navigation of guided weapons.

**Electromagnetic Spectrum Sciences (EMSS)** – novel approaches to sensing, counter-sensing, protection of sensing; emerging concepts for lasers, DE, propagation, RF, radars, EW;

**Energy Sciences (ES)** – the science of mechanical and electrical power generation, storage, conditioning and distribution; and energy conversion.

**Mechanical Sciences (MS)** – sciences of physical robotics and autonomy, novel mechanics, mechanisms, and control, including related AI, enable unmanned ground and air vehicle concepts.

The listing above is being provided for Applicants to consider as a “starting point” for understanding the broad context of scientific and engineering disciplines for the DEVCOM ARL RAP. Since the resulting award will be a cooperative agreement with substantial Government involvement, it is expected the Recipient will be in regular communication, working collaboratively with ARL to identify new and emerging areas of interest and targeted areas of special emphasis during performance under the CA.

***Additional information related to ARL’s future research plans that are provided for reference purposes to Applicants can be found at:***

The Combat Capabilities Development Command - Army Research Laboratory (DEVCOM ARL) (<https://www.arl.army.mil/>) is an element of the U.S. Army Combat Capabilities Development Command (DEVCOM) (<https://www.army.mil/devcom>). As the Army’s corporate research laboratory, DEVCOM ARL is operationalizing science to achieve transformational overmatch. Through collaboration across the command’s core technical competencies, DEVCOM leads in the discovery, development and delivery of the technology-based capabilities required to make Soldiers more successful at winning the nation’s wars and come home safely. DEVCOM is a major subordinate command of the Army Futures Command (<https://www.army.mil/futures>).

## **6. Fellow Designations and Requirements.**

Background - DEVCOM ARL historically has partnered with academia and industry to further its research interests. This participation brings new talent, ideas and techniques to DEVCOM ARL. The principal purpose of DEVCOM ARL’s collaboration with the Recipient is to support and stimulate the furthering of science through the conduct of fundamental research. In addition to working with the Recipient, substantial Government involvement is expected through the collaborative research to be performed by the Fellows and the Government employees of ARL.

The following are the five Fellow designations:

**Postdoctoral Fellows** - Candidates must have received a doctorate degree (e.g., Ph.D, Sc.D. or other earned research doctoral **degree**) from an accredited university or college, or must present acceptable evidence of having completed all formal academic requirements for one of these degrees before selection. Postdoctoral Fellows must be available for a period of performance of a minimum of one continuous year. Based on an annual evaluation and recommendation by the DEVCOM ARL advisor, the period of performance may be extended with a recommendation from the Cooperative Agreement Manager (CAM) and approval of the Grants Officer.

To be eligible:

A candidate for a Postdoctoral Fellowship must have received their doctorate (or the University confirms that the individual has completed their degree but it has not yet been awarded) in a science or related discipline within five years of their Fellowship start date.

**Senior Fellows** - Senior Fellows are candidates who have held a doctorate degree five years or more at the time of application, candidates who have held a master's degree seven or more years at the time of application, or candidates who hold a permanent appointment in academia, or industry and have research experience that has resulted in significant contributions and recognition as established investigators in their specialized fields. The period of performance for Senior Fellows is usually for one year; however, periods as short as three months may be considered. Based on an annual evaluation and recommendation by the DEVCOM ARL advisor, the period of performance may be extended with a recommendation from the CAM and approval of the Grants Officer.

To be eligible:

A candidate for a Senior Fellowship must have either received their doctorate in a science or related discipline more than five years before their Fellowship start date, or if they have earned a Master's degree the time period is seven years.

**Journeyman Fellows** – Journeyman Fellows are members of the academic community (i.e., masters, bachelors, and associate degree recipients), postsecondary students (undergraduate and graduate school). The term of the Journeyman Fellow can vary based on needs and will be determined by the DEVCOM ARL advisor as appropriate, and will be provided as part of the posted research opportunity. Based on an annual evaluation and recommendation by the DEVCOM ARL advisor, the period of performance may be extended with a recommendation from the Cooperative Agreement Manager (CAM) and approval of the Grants Officer.

To be eligible:

A candidate for a Journeyman Fellow appointment must be in good standing or have earned a degree, at an accredited US College, University or technical institute, and in an academic program leading to an associate, baccalaureate, graduate degree, or approved certificate program at time of application.

A candidate who is currently pursuing, or has received within one year of their application date, a certificate in an appropriate science, engineering, or technology discipline are eligible for an appointment. The certificate is related to, or complements, a prior degree (bachelor degree or higher); is offered by an accredited academic institution; and requires a minimum of 30 semester credit hours or the equivalent. This initiative encourages continued education studying new technologies and supplements the individual's existing degree.

**Short-Term Fellows** - Short -Term Fellows must meet the requirements of the Postdoctoral, Senior, or Journeyman Fellows as described in this section. However, the Short-Term Fellows participation will be for a term not to exceed 20 consecutive weeks. An extension beyond the 20 weeks will not be considered, although a new application may be submitted through the Recipient to ARL by interested candidates.

To be eligible:

A candidate for a Short-term Fellow appointment must be in good standing, or have earned a degree, at an accredited US college, university or technical institute, and in an academic program leading to an associate, baccalaureate, graduate degree, or approved certificate program at time of application.

A candidate for a Postgraduate component must have received a college degree (associate, bachelors, masters or doctorate) in a science or related discipline before their Fellow's start date.

A candidate for a faculty appointment must be a faculty member at an accredited US College or University at time of application.

**Summer Student Experience (SSE)** – DEVCOM ARL has a number of summer programs that bring in students for summer research experience. Program participants for this program have the same requirements as Journeyman Fellows. This program runs from mid-May through September. The only difference between the two is the program time frame.

To be eligible:

A candidate for a postsecondary student appointment must be in good standing or have earned a degree, at an accredited US College, University or technical institute, and in an academic program leading to an associate, baccalaureate, graduate degree, or approved certificate program at time of application.

A candidate who is currently pursuing, or has received within one year of their application date, a certificate in an appropriate science, engineering, or technology discipline are eligible for an appointment. The certificate is related to, or complements, a prior degree (bachelor degree or higher); is offered by an accredited academic institution; and requires a minimum of 30 semester credit hours or the equivalent. This initiative encourages continued education studying new technologies and supplements the individual's existing degree.

For all Fellowships, a candidate typically will be a U.S. citizen, U.S. national, or a permanent resident of the U.S. (i.e., Green Card). A candidate with dual citizenship may be considered on a case-by-case basis. In rare cases, and with the concurrence of the CAM, a foreign national may be considered for this program. The Recipient will be responsible for ensuring a foreign national has an appropriate visa for their entry into the United States.

Commencement of performance by a Fellow under a child award will be contingent upon a satisfactory completion by the Recipient of the Tier 1 Investigation paperwork and submission to U.S. Office of Personnel Management (OPM) with no derogatory information present and completion of an FBI fingerprint check with favorable results. Candidates must obtain a favorable background check as a condition of eligibility to receive federal funds under this program for their research. Failure to maintain a favorable background check will result in termination of their award.

## **7. Program Requirements.**

It is the intent of this FOA to solicit the most creative, innovative, and effective approaches to the execution of the ARL RAP. In response to the FOA, an Applicant must submit a proposal that provides evidence of their ability to:

- Formulate a marketing plan to attract qualified candidates based on the ARL mission and capabilities. This plan should consider issues such as (a) potential sources of candidates, e.g., major domestic colleges, universities, Historically, Black Colleges and Universities (HBCUs), Minority Serving Institutions (MSIs), (b) ethnic and gender diversity, (c) academic diversity, (d) various types of methods to disseminate information (e.g., professional trade journals, and professional society meetings and seminars), (e) different ways to advertise (e.g., electronic and print media), (f) leveraging of ARL's major research, such as Collaborative Technology and Research Alliances and Multidisciplinary University Research Initiatives (see ARL's website), and (g) implementation methods.

Advertisements should indicate that research projects can come from a broad context of scientific disciplines applicable to the mission of ARL.

- Prepare Marketing Materials annually, in collaboration with the CAM, to outline the ARL RAP. Marketing materials should contain or identify web links that contain: (a) information considered in advertisements as described above and (b) information concerning background and accomplishments of ARL. The Recipient will obtain information on the history and accomplishments of ARL through the ARL Public Affairs Officer. Further, marketing materials will contain a list of research opportunities and corresponding ARL advisors. New research opportunities and updates to current opportunities are expected to be posted/released by the Recipient within 2 weeks of receipt by the Recipient. Finally, marketing materials will contain information concerning the eligibility of candidates, the availability of stipends and benefits, and the application and selection process.
- Establish an application process to solicit the interest of qualified individuals (i.e. postdoctoral and senior level scientists and engineers and postsecondary students, to include nontraditional disciplines and institutions) with interests in research that is consistent with the ARL mission and in a contextual framework that can be understood by the nongovernment scientific community.
- Identify the process by which the applications will be reviewed, vetted, approved and recommended to ARL.
- Provide a plan to identify, address and mitigate any potential organizational conflicts of interest (OCI) which may occur with a RAP Fellow due to that individual's permanent appointment with a Non-Federal Entity and concurrent consideration for a RAP Fellow.
- Identify a management structure and plan to address the management required for successful execution of the RAP, to include items such as progress reports and evaluations for each Fellow, recordkeeping requirements, travel arrangements, payments and financial reports and fellow tax consequences. In order for the ARL RAP to be successful, the Recipient must have familiarity with the ARL programs and functions and the needs of ARL and its Directorates. The Recipient must have an understanding of the sciences involved in the ARL mission and be able to communicate this information effectively to candidates.

## **8. Funding.**

This FOA is issued subject to the availability of funds. The FOA provides the estimated number of Fellows (based on historical data) and estimated stipend levels. For proposal preparation purposes, Applicants are to assume all performance by Fellows will be at ARL, Adelphi, MD or Aberdeen Proving Ground, MD. **The numbers are provided in the FOA for proposal preparation purposes only. The numbers of Fellows is likely to change during the performance period.**

As stated above, the CA awarded will be a "parent" CA with the Recipient and under that "parent" CA the conduct and administration of the RAP will be executed and funded. However, separate "child" CAs with the Recipient will be subsequently issued to fund the individual foundational research efforts of each selected Fellow, to include stipends and any relocation, travel, insurance or other costs as necessary and appropriate.

For the individual foundational research efforts of each selected Fellow, the Recipient will pay the stipend in equal monthly installments, issued at the end of each month. Generally, the stipend will be equivalent to the current General Schedule (GS) Locality Pay Table for the appropriate geographical area, issued by OPM, based on the educational level of the Fellow. For a Fellow's first year, Step 1 of the appropriate GS level will be used. For each year the Fellow is extended, the stipend is to be increased to approximately coincide with the next Step within that GS level.

The following describes the educational levels and corresponding GS levels generally expected to be used for Fellows:

Educational Level	GS Level
Postdoctoral	GS-12*
PhD Student	GS-11
MS Degree	GS 9-11
BS Degree	GS 5-9
Undergrad/AA Degree	GS 3-5

\*For Senior Fellows, the Recipient will propose a pay Step to be used commensurate with the credentials of the Senior Fellow. The pay Step must be approved by the CAM prior to the award of the Senior Fellow “child” CA. Occasionally, certain scientific and engineering fields have been qualified for special (accelerated) pay by the Government, with an increase in stipend being provided for experience. Any such special pay or increased stipend must be approved by the CAM prior to award of a “child” CA. A Postdoctoral or Senior Fellow may request and receive a stipend advance (interest free) at the beginning of their period of performance. The advance will be deducted from the Fellow’s regular monthly stipend in equal monthly deductions over the period of performance. The Recipient must include language in their legal arrangement with the Fellows that requires recoupment of the advance in the event of termination prior to repayment of the advance. As the Fellows are not employees of the Federal Government, these Fellows are not subject to any Government award/recognition program. Any type of award/recognition program for the Fellows (*e.g.*, recognition, incentive awards) is the responsibility of the Recipient and will not be funded under the “parent” or “child” CA.

For proposal preparation purposes, set forth below are the projected numbers of Fellows by year of performance under the CA.

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
<b>Postdoctoral Fellows</b>	45	50	55	60	65
<b>Senior Fellows</b>	24	24	25	26	27
<b>Short-Team Fellows</b>	6	7	8	9	9
<b>Journeyman Fellows</b>	140	145	150	155	155
<b>Summer Student Program</b>	40	45	50	50	55

The Recipient will also provide reimbursement for approved relocation expenses and other program-related travel expenses for Postdoctoral and Senior Fellows. Relocation expenses will not be provided to Short-term or Journeyman Fellows, but these Fellows may receive program-related travel expenses, subject to funding availability and justification of need. These expenses must be determined reasonable, by the CAM or Grants Officer, prior to a “child” CA award. The Recipient will also provide to all Fellows the opportunity to enroll in a group health insurance program provided by the Recipient. As needed, the Recipient will assist Short-Term Fellows in securing suitable housing arrangements.

## 9. Intellectual Property.

The Intellectual Property Rights contained in 2 CFR Part 200 or 32 CFR §34.25, as applicable, and the patent rights clause at 37 CFR 401.14, will be incorporated by reference into the “parent” CA and into each “child” CA. ARL does not consider Fellows under the RAP to be subject to 35 USC §212 as these Fellows are not educational awardees. Therefore, a Fellow will be required to complete the ARL Intellectual Property Agreement, Enclosure 1, prior to performing under a “child” CA award. It is up to the Applicant to determine tax consequences for the Fellows due to the ARL Intellectual Property Agreement. The proposal should address this aspect of Fellows management.

In addition, an Applicant recognizes that this Program may result in intellectual property that is generated by the Recipient or Sub-recipient personnel, a Fellow and/or Government personnel. Should this occur, all parties agree to use their best efforts to mutually agree to an equitable distribution of property rights and distribution of filing fees or other administrative costs. Should the parties reach an impasse in determining the distribution of property rights, the parties shall resort to the Disputes, Claims, and Appeals Process as set forth at 32 CFR §22.815. An Applicant's proposal should specifically address how they intend to manage this requirement.

## **10. Facility Requirements.**

All Fellows performing onsite collaboration at a Government facility are required to comply with the safety, environmental, security and operational regulations or requirements of that facility. The Government or non-federal facility will provide adequate office space, communications connections, administrative support and office supplies, as needed and if available, for Fellows.

Fellows may be required to attend Army designated mandatory training upon the DEVCOM ARL CAM request.

Although a Fellow is not an employee of DEVCOM ARL, there may be some restrictions on work hours, facilities use, etc. that will be established in each Fellow's letter of acceptance and/or when the Fellow begins performance.

## **11. Management.**

Overall Management Concept

A description of each component of Management follows:

**Cooperative Agreement Manager (CAM).** The Government's technical representative from ARL charged with the overall responsibility of management and guidance of the CA, both the "parent" and "child" CAs.

**Recipient Program Manager (RPM).** The RPM is the Recipient's technical representative charged with the Recipient's overall responsibility of management and guidance of the CA, both the "parent" and "child" CAs.

**Grants Officer** -- Is the Government's principal point of contact for all administrative, financial or other nontechnical issues arising under a CA. The ARL Grants Officer will receive recommendations from the CAM and will be the ultimate legal authority empowered to make any formal adjustments in the CA, both the "parent" and "child" CAs.

**Meetings** - The Recipient will schedule a meeting with the CAM within 30 calendar days after the "parent" CA award and AT LEAST every six months thereafter, to review in detail the status of the program - its objectives, philosophies, and procedures and to discuss policies, issues, and other items of mutual interest. At these meetings, the Recipient will describe its efforts to further the RAP program initiatives since the last meeting held.

### **Agreement Administration**

During the course of performance, the Grants Officer, in coordination with the CAM, will have approval authority for certain specific changes to the CA including but not limited to:

The absence for more than three months, or a 25% reduction in time devoted to the project, by the approved RPM;

The need for additional Federal funding;

Any sub-award, transfer, or contracting out of substantive program performance under an award, unless described in the application and funded in the approved awards.

12. There will be no access to controlled unclassified information (CUI) for performers under this cooperative agreement.

## **B. FEDERAL AWARD INFORMATION**

**Award Instrument:** Subject to the availability of funds, this FOA will result in the award of one Cooperative Agreement (CA), as defined at 31 U.S.C. 6305, with the Recipient for the establishment and administration of the RAP. This award will be governed by:

- 2 Code of Federal Regulations (CFR) Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," as modified and supplemented by the Department of Defense's (DoD) interim implementation found at 2 CFR Part 1103, "Interim Grants and Cooperative Agreements Implementation of Guidance in 2 CFR Part 200" (79 FR 76047, December 19, 2014)
- 32 CFR Part 21, DoD Grants and Agreements – General Matters
- 32 CFR part 22, DoD Grants and Agreements – Award and Administration
- 32 CFR Part 26, Government-wide Requirements for Drug-Free Workplace
- 32 CFR Part 28, New Restrictions on Lobbying
- 32 CFR Part 34, Administrative Requirements for Grants and Agreements with For-Profit Organizations
- 2 CFR Part 1125, Non-Procurement Debarment and Suspension

All of the above will be incorporated by reference into the award, both the “parent” and “child” CAs. **The CA awarded as a result of this FOA will be a “parent” CA with the Recipient and under that “parent” CA the conduct and administration of the RAP will be executed and funded. However, separate “child” CAs with the Recipient will be subsequently issued to fund the individual fundamental research efforts of each selected Fellow. These “child” CAs will be funded to address stipends, relocation, travel, insurance and other costs as approved, necessary and appropriate.** The principal purpose of ARL’s collaboration with the Recipient is to carry out the public purpose of the support or stimulation of basic and applied (fundamental) research in areas of science with potential interest to ARL, rather than the acquisition of supplies or services for the direct benefit of the Government. This collaboration will result in bringing new talent, ideas and techniques to ARL and will also introduce emerging Fellows to the roles and needs of the Warfighter. This collaboration will also provide access to ARL’s world class research facilities to the selected Fellows, while pursuing collaborative fundamental research of mutual interest to the Army and the Fellows. Substantial Government involvement with the Recipient is expected through the collaborative planning and management of the RAP and through the research to be conducted by the Fellows.

Should your proposal be selected for award, you will be contacted telephonically or via email by the Grants Officer or his/her representative. At that time, the Applicant will be asked to execute the “Parent” CA. Award is not made until the “Parent” CA is signed by both the successful Applicant and the Grants Officer. Substantial Government involvement in both the “parent” and subsequent “child” CA is expected throughout the five year agreement.

It is anticipated that performance will start on **June 2022** and for budget preparation purposes in response to this Funding Opportunity, use a start date of **June 2022**.

### **C. ELIGIBILITY INFORMATION**

- 1. Eligible Applicants** – Eligible organizations to submit RAP proposals include institutions of higher education, nonprofit organizations, and for-profit organizations.

**To be qualified, a potential applicant must:**

- Have the management capability and adequate financial and technical resources, given those that would be made available through the “parent” CA, to execute the program of activities envisioned under the “parent” CA.
- Have the management capability and adequate financial and technical resources, given those that would be made available through the “parent” CA, to execute the program of activities envisioned under the “parent” CA.
- 
- Have a satisfactory record of executing such programs or activities (if a prior recipient of an award).
- Have a satisfactory record of integrity and business ethics.
- Be otherwise qualified and eligible to receive a cooperative agreement under applicable laws and regulation.

In deciding whether a Recipient is otherwise qualified, the Grants Officer shall ensure that the potential Recipient is registered and in good standing in the System for Award Management (SAM).

- 2. Cost Sharing Or Matching**

Cost sharing or matching is allowed, but not required. Cost sharing is not an evaluation factor on this award.

- 3. Other.** An Applicant may submit only one application to (See Paragraph D - Application and Submission Information) under this announcement.

### **D. APPLICATION AND SUBMISSION INFORMATION**

- 1. Address to Request Application Package -**

Proposals shall be submitted electronically through the [www.grants.gov](http://www.grants.gov) portal. Proposals sent by fax or email will not be considered.

**Registration Requirements for [www.grants.gov](http://www.grants.gov):** In order to submit applications through Grants.gov, recipients must obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number and register in SAM (see Section D.3 below), register with the credential provider, register with Grants.gov, and obtain approval for an Authorized Representative (AR) to submit applications on behalf of the organization. Registration in Grants.gov must be accomplished prior to submitting an application. Go to [http://www.Grants.gov/applicants/get\\_registered.jsp](http://www.Grants.gov/applicants/get_registered.jsp) for further information. Use the Grants.gov Organization Registration Checklist, which may be accessed at <http://www.Grants.gov/assets/OrganizationRegCheck.pdf> to guide you through the process.

**Questions:** Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or the email address at [support@grants.gov](mailto:support@grants.gov).

## 2. Content and Form of Application Information

Application forms and instructions will be available at Grants.gov. To access these materials, go to <http://www.grants.gov>, select "Apply for Grants", and then select "Download an Application Package." Enter the funding opportunity number, W911NF-22-S-0005.

NOTE: Compatible versions of Adobe Reader are currently 8.1.1 and 8.1.2. You will be asked to specify your Operating System (examples: Windows, Mac) and Version (examples: XP, Vista, 10.4.9) be sure to specify Adobe Reader Version 8.1.2 to get the compatible version to apply for grants on Grants.gov. Click here to download version 8.1.2 from Adobe Website:

[http://www.adobe.com/products/acrobat/readstep2\\_allversions.htm](http://www.adobe.com/products/acrobat/readstep2_allversions.htm).

Applicants must complete the mandatory forms and any optional forms (e.g., SF-LLL Disclosure of Lobbying Activities) in accordance with the instructions on the forms and the additional instructions below. The required fields should be completed in accordance with the "pop-up" instructions on the forms. To activate the instructions, turn on the "Help Mode" (icon with the pointer and question mark at the top of the form). Files that are attached to the forms must be in Adobe Portable Document Form (PDF) unless otherwise specified in this announcement.

The following formatting rules apply for the file attachments:

Paper size when printed – 8.5 x 11 inch paper

Margins – 1 inch on all sides of paper

Spacing – single

Font – No smaller than Times New Roman, 10 point

Form: SF 424 (R&R) (Mandatory) – Complete this form first to populate data in other forms. Authorized Organization Representative (AOR) usernames and passwords serve as "electronic signatures" when your organization submits applications through Grants.gov. By using the SF 424 (R&R), applicants are providing the certification required by 32 CFR Part 28 regarding lobbying.

Form: Research & Related Other Project Information (**Mandatory**) - Complete questions 1 through 6 and attach files.

Project Summary/Abstract (Field 7 on the form) - The Project Summary should be a brief abstract that summarizes the content of the proposal. The project summary must not exceed 5 pages. Pages in excess of this page limit will not be evaluated.

- Project Narrative (Field 8 on the form) - Chapters and Numbers of pages – Field 8 is to contain the chapters set forth below and may not exceed the stipulated page counts for those chapters. Pages in excess of the noted page limits will not be evaluated.

- Chapter 1 - **Plan**. The pages included in Chapter 1 shall be numbered. Applicants are advised that Chapter 1 **must not exceed 25 pages**, utilizing one side of the page.
- Chapter 2 - **Management and Execution Plan**. The pages included in Chapter 2 shall be numbered. Applicants are advised that Chapter 2 of the proposal **must not exceed 10 pages**, utilizing one side of the page.
- Chapter 3 - **Past Performance Information** - The pages included in Chapter 3 shall be numbered. Applicants are advised that Chapter 3 of the proposal **must not exceed 10 pages**, utilizing one side of the page.
- Chapter 4 - **Biographical Sketches** - Biographical sketches are limited to two (2) pages per individual, with no limitation on the number of individuals.
- Pages in excess of the noted page limits above for each chapter will not be evaluated.

Bibliography and References Cited (Field 9 on the form) - Attach a listing of applicable publications cited in above sections.

Facilities and Other Resources (Field 10 on the form) - The applicant is to include a listing of facilities and other resources available to support the proposal. Any Government resources necessary for performance are to be clearly identified. Attach this information at Field 10.

Equipment (Field 11 on the form) - The applicant is to include a listing of equipment available to support the proposal. Any Government equipment necessary for performance is to be clearly identified. Attach this information at Field 11.

Other Attachments (Field 12 on the form) are as follows:

ATTACHMENT 1. Attach the Cost Proposal. As stated above, the CA awarded as a result of this FOA will be a “parent” CA with the Recipient and under that “parent” CA the conduct and administration of the RAP will be executed and funded; however, separate “child” CAs with the Recipient will be subsequently issued to fund the individual fundamental research efforts of a selected Fellow, to include Stipends and any relocation, travel or insurance costs as appropriate. **In response to this FOA, applicants must provide a Cost Proposal for the conduct and administration of the RAP under the “parent” CA. Applicants are not to submit a cost proposal for the separate “child” CAs subsequently to be awarded; however, applicants are to indicate any nominal indirect cost (in the form of a rate), ONLY IF REQUIRED to be incurred under each “child” CA.** The cost portion of the proposal shall contain cost estimates sufficiently detailed for meaningful evaluation. For budget purposes, assume a performance start date of **June 2022**. For all proposals, the elements of the budget should include:

- Direct Labor - Individual labor category or person, with associated labor hours and unburdened direct labor rates.
- Indirect Costs - Fringe benefits, overhead, G&A, etc. (must show base amount and rate). Justify.

- Travel - Number of trips, destination, duration, etc. Justify and include basis for costs.
- Subaward - A cost proposal, as detailed as the Applicant's cost proposal, will be required to be submitted by each proposed subrecipient.
- Consultant - Provide consultant agreement or other document that verifies the proposed loaded daily/hourly rate. Include a description of the nature of and the need for any consultant's participation. Provide budget justification.
- Materials - Specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify.
- Other Directs Costs - Particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the recipient (justifications must be provided when Government funding for such items is sought). Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market research, etc.). Justify.

#### ATTACHMENT 2. SF-LLL - Disclosure of Lobbying Activities

If applicable, attach a complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/collaborative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."

ATTACHMENT 3 – (See Also Section F.2 below.) Complete the following and include with the submission:

#### **Representations under DoD Assistance Agreements: Appropriations Provisions on Tax Delinquency and Felony Convictions**

(1) The applicant represents that it is \_\_\_is not\_\_\_ a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(2) The applicant represents that it is \_\_\_is not\_\_\_ a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

NOTE: If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the agency suspension and debarment official (SDO) has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore should provide information about its tax liability or conviction to the agency's SDO as soon as it can do so, to facilitate completion of the required consideration before award decisions are made. Applicant's authorized representative must sign and date form.

### **3. Unique entity identifier and System for Award Management (SAM)**

Each Applicant (unless the Applicant is an individual or Federal agency that is exempt from those requirements under 2 CFR §25.110(b) or (c), or has an exception approved by the agency under 2 CFR §25.110(d)) is required to: (i) Be registered in the SAM prior to submitting its application; (ii) provide a valid DUNS number in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by an agency. An award will not be made to an Applicant until the Applicant has complied with all applicable DUNS and SAM requirements. If an Applicant has not fully complied with the requirements by the time the Agency is ready to make award, the Government may determine that the Applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another Applicant.

### **4. Submission Dates and Times**

Electronic submission of proposals through the grants.gov portal are due by 3:00 pm (Local North Carolina, USA time), 1 March 2022.

After a proposal is submitted through Grants.gov, the Authorized Organization Representative (AOR) will receive a series of three e-mails. It is extremely important that the AOR watch for and save each of the e-mails. Applicants will know that the proposal has been properly received when the AOR receives e-mail Number 3. Retain the Submission Receipt Number (e-mail Number 1) to track a submission. The three e-mails are:

Number 1 – The AOR will receive a confirmation page upon completing the submission to Grants.gov. This confirmation page is a record of the time and date stamp for the submission.

Number 2 – The AOR will receive an email indicating that the proposal has been validated by Grants.gov within a few hours of submission. (This means that all of the required fields have been completed.)

Number 3 – The third notice is an acknowledgment of receipt in email from Grants.gov. The email is sent to the AOR for the institution. The email notes that the proposal has been received and provides the assigned tracking number. **THE PROPOSAL IS NOT CONSIDERED PROPERLY RECEIVED UNTIL THE AOR RECEIVES EMAIL #3.**

### **5. Intergovernmental Review - Not applicable**

### **6. Funding Restrictions – See Section A.8**

### **7. Other Submission Requirements - None**

## E. APPLICATION REVIEW INFORMATION

### 1. Criteria

It is the intent of this FOA to solicit the most creative, innovative, and effective approaches to the execution of the ARL RAP. In response to the FOA, an Applicant must submit a proposal that provides evidence of their ability to:

- Formulate a marketing plan to attract qualified candidates based on the ARL mission and capabilities. This plan should consider issues such as (a) potential sources of candidates, *e.g.*, major domestic colleges, universities, Historically Black Colleges and Universities (HBCUs), Minority Serving Institutions (MSIs), (b) ethnic and gender diversity, (c) academic diversity, (d) various types of methods to disseminate information (*e.g.*, professional trade journals, and professional society meetings and seminars), (e) different ways to advertise (*e.g.*, electronic and print media), (f) leveraging of ARL's major research, such as Collaborative Technology and Research Alliances and Multidisciplinary University Research Initiatives (see ARL's website), and (g) implementation methods. Advertisements should indicate that research projects can come from a broad context of scientific disciplines applicable to the mission of ARL.
- Prepare Marketing Materials annually, in collaboration with the CAM, to outline the ARL RAP. Marketing materials should contain or identify web links that contain: (a) information considered in advertisements as described above and (b) information concerning background and accomplishments of ARL. The Recipient will obtain information on the history and accomplishments of ARL through the ARL Public Affairs Officer. Further, marketing materials will contain a list of research opportunities and corresponding ARL advisors. New research opportunities and updates to current opportunities are expected to be posted/released by the Recipient within 2 weeks of receipt by the Recipient. Finally, marketing materials will contain information concerning the eligibility of candidates, the availability of stipends and benefits, and the application and selection process.
- Establish an application process to solicit the interest of qualified individuals (*i.e.* postdoctoral and senior level scientists and engineers and postsecondary students, to include nontraditional disciplines and institutions) with interests in research that is consistent with the ARL mission and in a contextual framework that can be understood by the nongovernment scientific community.
- Identify the process by which the applications will be reviewed, vetted, approved and recommended to ARL.
- Identify a management structure and plan to address the management required for successful execution of the RAP, to include items such as progress reports and evaluations for each Fellow, recordkeeping requirements, travel arrangements, payments and financial reports.

In order for the ARL RAP to be successful, the Recipient must have familiarity with the ARL programs and functions and the needs of ARL and its Directorates. The Recipient must have an understanding of the sciences involved in the ARL mission and be able to communicate this information effectively to candidates.

The following represents the evaluation criteria for this FOA:

The award decision will be based on an overall evaluation of each applicant's proposal in accordance with the factors set forth below. The four factors are: (A) Plan to Identify Fellows to Perform Research with Technical Merit, (B) Management Plan (C) Past Performance, and (D) Cost.

#### FACTOR A – PLAN TO IDENTIFY FELLOWS TO PERFORM RESEARCH WITH TECHNICAL MERIT

Evaluation of this factor will include the evaluation of the merit of the applicant's plan for establishment and provision of the ARL RAP. The proposed plan will be evaluated on the following requirements:

- How effective the proposed marketing/publicizing of the ARL RAP is expected to be to attract high quality candidates to perform research with technical merit. This will include evaluation of the various methods by which the Applicant will market and publicize the program, to include citing specific organizations that will be targeted; the methods by which those specific organizations will be marketed to ensure the participation of highly qualified candidates; and, the appropriateness / demonstrated effectiveness of the approaches upon the targeted organizations. Targeted organizations include, but are not limited to, accredited universities, engineering schools, and professional engineering societies.
- The quality of the proposed competitive application review process, to include demonstration of the ease of application process to the targeted audience, with applications with appropriate references.
- Evidence in the plan of the familiarity with ARL and the expected effectiveness of the plans to work with ARL throughout the recruitment process, so the potential relationship of the proposed research to the ARL mission is very clear.
- Evidence in the plan of the inclusion of the appropriate technical expertise and subject matter experts required to execute a competitive selection process expected to result in the recruitment of candidates of the highest caliber to perform research with technical merit. Applicants must provide documentation supporting the availability, experience and qualifications of proposed technical experts / organizations to be used in the competitive application process. Documentation may include, but not be limited to: prior use of the expert/organization to review post-doctoral qualifications, agreements with scientific organizations / individuals, etc.

#### FACTOR B – MANAGEMENT AND EXECUTION PLAN

Evaluation of the Applicant's proposed plan for management and execution of the RAP includes the following areas:

- the adequacy of the management plan and organizational structure to ensure a successful program;

- demonstrated understanding/ ability to manage the day-to-day needs of the Fellows participating in the RAP, to include the Intellectual Property (IP), CUI and facility requirements identified in A.8, A.9 and A.11;
- the plan for submission of reports to the Army;
- annual evaluations for each Fellow,
- recording keeping, payments and financial reporting; and
- annual evaluation of the qualifications and credentials of Recipient personnel involved in the management and execution of the ARL RAP.

#### FACTOR C - PAST PERFORMANCE

Applicant's probability/likelihood of successful performance based on the Applicant's demonstrated experience in working / managing programs of a similar nature and complexity. The Government will consider the Applicant's record of complying with the requirements in the areas of technical quality, timeliness and cost control. Applicants are requested to provide three examples of similar efforts that are being performed or have been performed in the last 5 years. Applicants are requested to describe the dollar amount of the agreements, periods of performance, number of Fellows supported, Customers, Customer contact information (which may be used to verify the information provided in the proposal.) and any other information to demonstrate the program was of a similar nature and complexity to the ARL RAP.

An Applicant with no past performance information will be treated as neutral, which is neither a positive or negative assessment, but an Applicant with a positive past performance assessment will be viewed more favorably than an Applicant with a neutral or negative past performance rating.

#### FACTOR D - COST

While this area will not be weighted, evaluation of this area will consider cost realism, cost reasonableness, and affordability within funding constraints. The Government may make adjustments to the cost of the total proposed effort as deemed necessary to reflect what the effort should cost. These adjustments shall consider the task undertaken and approach proposed. These adjustments may include upward or downward adjustments to proposed labor hours, labor rates, quantity of materials, price of materials, overhead rates and G&A, etc.

#### RELATIVE IMPORTANCE OF EVALUATION FACTORS

Evaluation factors are listed in descending order of importance, with Factor A, accounting for more than half of the weight. Cost is not weighted, however, as the other Factor ratings of the proposals become closer, the importance of cost increases.

### **2. Review and Selection Process**

All information necessary for the review and evaluation of a proposal must be contained within the proposal. No other material will be provided to those evaluating proposals.

An initial review of the proposals will be conducted to ensure compliance with the requirements of this FOA. Failure to comply with the requirements of the FOA may result in a proposal receiving no further consideration for award.

Proposals that are in compliance with the requirements of the FOA will be evaluated in accordance with the evaluation factors described above using an adjectival and color rating system.

Award will be based on an integrated assessment of each Applicant's ability to satisfy the FOA requirements. The Government reserves the right to award without discussions. If discussions are held, those Applicants will be invited to submit Proposal Revisions which will be evaluated using the same evaluation procedures as were used in the initial proposals. The Government will make award to the Applicant, conforming to the FOA, which offers the best value to the Government, cost and other factors considered. Further, award may be made to other than the Applicant who offers the lowest cost proposal. ARL reserves the right not to make an award should no acceptable offer be submitted.

**3. Recipient Qualification** - See Section C.

**4. Anticipated Announcement And Award Dates** - See **Overview of the Funding Opportunity and Program.**

## **F. FEDERAL AWARD ADMINISTRATION INFORMATION**

### **1. Federal Award Notices.**

Should your proposal be selected for award, you will be contacted telephonically or via email by the Grants Officer or his/her representative. At that time the Applicant will be asked to execute the "parent" CA. Award is not made until the "parent" CA is signed by both the successful applicant and the Grants Officer.

### **2. Administrative and National Policy Requirements**

a. Required Representations and Certifications (to be included as part of ATTACHMENT 3 to the proposal):

(1) In accordance with Continuing Appropriations Act, 2017 (Pub. L. 114-223), or any other Act that extends to fiscal year (FY) 2017 funds the same prohibitions as contained in section 743, division E, title VII, of the Consolidated Appropriations Act, 2016 (Pub. L. 114-113), none of the funds appropriated or otherwise made available by that or any other Act may be made available for a grant or cooperative agreement with an entity that requires its employees or contractors seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting those employees or contractors from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive the information.

**PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRED CERTAIN  
INTERNAL CONFIDENTIALITY AGREEMENTS – REPRESENTATION**

Agreement with the representation below will be affirmed by checking the “I agree” box in block 17 of the SF424 (R&R) as part of the electronic proposal submitted via Grants.gov. The representation reads as follows:

By submission of its proposal or application, the Applicant represents that it does not require any of its employees, contractors, or sub-recipients seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting those employees, contractors, sub-recipients from lawfully reporting that waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

\*Note that: Section 743 states that it does not contravene requirements applicable to SF 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(2) Recipients are required to submit the following representation with the application package:

**REPRESENTATIONS UNDER DOD ASSISTANCE AGREEMENTS: APPROPRIATIONS  
PROVISIONS ON TAX DELINQUENCY AND FELONY CONVICTIONS**

The Applicant is ( ) is not ( ) a “Corporation” meaning any entity, including any institution of higher education, other nonprofit organization, or for-profit entity that has filed articles of incorporation.

If the Applicant is a “Corporation” please complete the following representations:

(a) The Applicant represents that it is ( ) is not ( ) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(b) The Applicant represents that it is ( ) is not ( ) a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

NOTE: If an Applicant responds in the affirmative to either of the above representations, the Applicant is ineligible to receive an award unless the agency suspension and debarment official (SDO) has considered suspension or debarment and determined that further action is not required to protect the Government’s interests. The Applicant therefore should provide information about its tax liability or conviction to the agency’s SDO as soon as it can do so, to facilitate completion of the required considerations before award decisions are made.

PROHIBITION ON CONTRACTING WITH ENTITIES USING  
CERTAIN TELECOMMUNICATIONS AND VIDEO  
SURVEILLANCE SERVICES OR EQUIPMENT

Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or 105 renew a contract) to procure or obtain the equipment, services, or systems prohibited systems as identified in section 889 of the NDAA for FY 2019. For more information on how this applies to all grant recipients and sub-recipients after August 13, 2020, please see DoD Research General Terms and Conditions (SEP 2020) NP Article IV. Other national policy requirements, paragraph 18.

b. Policy Requirements:

The following list provides notable national policy requirements that may be applicable to an award. NOTE: The following is not an all-inclusive list of policy requirements. For assistance awards, refer to the DoD Research and Development General Terms and Conditions at <http://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions.aspx> for additional national policy requirements that may apply.

i. MILITARY RECRUITING:

(1) Assistance Instruments: This is to notify potential Applicants that each grant or cooperative agreement awarded under this announcement to an institution of higher education must include the following term and condition:

(a) As a condition for receiving funds available to the DoD under this award, you agree that you are not an institution of higher education (as defined in 32 CFR part 216) that has a policy or practice that either prohibits, or in effect prevents:

(i) The Secretary of a Military Department from maintaining, establishing, or operating a unit of the Senior Reserve Officers Training Corps (ROTC)—in accordance with 10 U.S.C. 654 and other applicable Federal laws—at that institution (or any sub-element of that institution);

(ii) Any student at that institution (or any sub-element of that institution) from enrolling in a unit of the Senior ROTC at another institution of higher education.

(iii) The Secretary of a Military Department or Secretary of Homeland Security from gaining access to campuses, or access to students (who are 17 years of age or older) on campuses, for purposes of military recruiting in a manner that is at least equal in quality and scope to the access to campuses and to students that is provided to any other employer; or

(iv) Access by military recruiters for purposes of military recruiting to the names of students (who are 17 years of age or older and enrolled at that institution or any sub-element of that institution); their addresses, telephone listings, dates and places of birth, levels of education, academic majors, and degrees received; and the most recent educational institutions in which they were enrolled.

(b) If you are determined, using the procedures in 32 CFR part 216, to be such an institution of higher education during the period of performance of this award, we:

(i) Will cease all payments to you of DoD funds under this award and all other DoD grants and cooperative agreements; and

(ii) May suspend or terminate those awards unilaterally for material failure to comply with the award terms and conditions.

ii. DRUG-FREE WORKPLACE:

(1) Assistance Instruments: The Recipient must comply with drug-free workplace requirements in Subpart B of 2 CFR part 26, which is the DoD implementation of 41 U.S.C. chapter 81, “Drug-Free Workplace.”

iii. DEBARMENT AND SUSPENSION:

(1) Assistance Instruments: The Recipient must comply with requirements regarding debarment and suspension in Subpart C of 2 CFR part 180, as adopted by DoD at 2 CFR part 1125. This includes requirements concerning the Recipient’s principals under an award, as well as requirements concerning the Recipient’s procurement transactions and sub-awards.

ix. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION:

(1) Assistance Instruments: The Recipient must report information about sub-awards and executive compensation as specified in the award term in Appendix A to 2 CFR part 170, “Reporting sub-award and executive compensation information,” modified as follows:

(a) To accommodate any future designation of a different Government wide Web site for reporting sub-award information, the Web site “https://www.fsr.gov” is replaced by the phrase “http://www.fsr.gov or successor OMB-designated Web site for reporting sub-award information”;

(b) To accommodate any future designation of a different Government-wide Web site for reporting executive compensation information, the Web site “http://www.sam.gov” is replaced by the phrase “https://www.sam.gov or successor OMB-designated Web site for reporting information on total compensation”; and

(c) The reference to “Sec. \_\_\_\_ .210 of the attachment to OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations” is replaced by “2 CFR 200.330, as implemented in DoD Research and Development General Terms and Conditions SUB Article I of this award.”

**3. Reporting.**

The following reporting requirements will be included in any resulting CA award (separately out as appropriate for the “Parent” CA and each “Child” CA):

**a. Monthly Performance and Cost Report**

The report will account for all finances, accrued and disbursed, during the reporting period under the parent CA. This report will include a summary of receipts and disbursements, travel, and other benefits for the Fellows under the child CAs. The report will also include and sum admin costs by the categories of:

TRAVEL,  
ADVERTISING,  
OFFICE COSTS,  
SALARIES,  
OTHER  
Total

The "other" category will include all admin expenses that do not apply to the other admin cost categories. All administrative expenses will be summed under the "Total" category.

The report will contain a listing of Fellows added to the program, departing from the program, and continuing in the program as of the report date. Furthermore, the Recipient will include in this listing or in a separate listing the sum of all costs associated with each of these Fellows in order that the expenses associated with each may be known (e.g. stipends, travel expenses, medical benefits, additional anticipated cost for Fellow to finish tenure, and all other costs that can be attributable to each Fellow).

The Recipient will include a summary of the candidate review committee meeting, if a meeting was conducted during the month.

The Recipient shall make distribution of the Monthly Performance and Cost Report as follows:

Cooperative Agreement Manager - 1 original plus 1 copy;  
Agreement Administration Office - 1 copy, and the  
Grants Officer - 1 copy of the letter of transmittal only.

Each child CAs will include requirement for monthly performance and cost report. Distribution for the child CA Monthly performance and Cost Report is as stated above.

#### **b. Joint Papers and Presentations**

Periodic joint papers and presentations may be given. Copies of such shall be provided to the CAM.

#### **c. Journal Articles**

Journal articles in general and joint ARL/Recipient/Fellows journal articles are strongly encouraged as a reporting mechanism for the research effort.

#### **d. Fellow Progress Reports and Final Report**

The Recipient will submit periodic progress reports and a final report under the child CAs for each Fellow. The periodic progress reports will be submitted every 6 months. Each progress report and the Final report will include the date written, name of Fellow, date of tenure, title of research project, research advisor's name, professional travel during tenure, programmatic travel during tenure, seminars or lectures delivered during tenure, work in progress, summary of research, publications and papers resulting from research, and patents applied for as a result of research. The final report will also include a forwarding address and appraisal of the program. The progress reports and final report for each Fellow will be submitted to the ARL CAM.

**e. Annual and Final Reports**

The Recipient shall submit Annual Reports and a Final Report for the parent CA of all activity under the program. This report will summarize the monthly reports and highlight all activities under the parent CA. The report will also provide an accounting of all Federal funds expended during the term of the Agreement. With the approval of the CAM, reprints of published articles may be attached to the Final Report. The Recipient shall also submit Annual Reports and a Final Report for each child CA summarizing activities and an accounting of all Federal Funds expended during the term of each child CA.

The Recipient shall make distribution of the Annual Reports and Final Report as follows:

Cooperative Agreement Manager - 1 original plus 1 copy;  
Agreement Administration Office - 1 copy, and the  
Grants Officer - 1 copy of the letter of transmittal only.

One (1) copy of the Final Report shall be provided to:  
Defense Technical Information Center (DTIC)  
8725 John J. Kingman Road, Suite 0944  
Ft. Belvoir, VA 22060-6218.

**f. Financial Reporting: Federal Financial Report (SF 425): Annual and Final Reports for parent CA and child CA**

1. Reporting period end dates fall on the end of the calendar year for annual reports (12/31) and the end date of the grant project or period for the final report. Annual reports are due 30 days after the reporting period end date, and the final report is due 90 days after the end date of the grant.

All financial reports shall be submitted to the Grant Administration Office. Copies of the forms and instructions may be found on the Internet at <http://www.aro.army.mil/forms/forms2.htm>.

The Recipient shall make distribution of the Annual and Final (SF425) Reports as follows:

Cooperative Agreement Manager - 1 original plus 1 copy;  
Agreement Administration Office - 1 copy, and

Note: The SF 425 is a single form that consolidates and replaces the Federal Cash Transaction Report (FACTOR or SF 272/SF 272A) and the Financial Status Report (FSR or SF 269/SF 269A).

## G. FEDERAL AWARDING AGENCY CONTACTS

Questions or comments concerning this FOA will be directed to Ms. Megan Deluca by email at [megan.a.deluca.civ@army.mil](mailto:megan.a.deluca.civ@army.mil). All emails will include the FOA number “W911NF-22-S-0005” in the subject line. Questions and comments should be concise and to the point. In addition, the relevant part and paragraph of the FOA should be referenced. Responses to questions received will be responded to via email.

Questions must be submitted by 4 February 2022 in order for the Government to have time to respond prior to the due date for submission under this FOA.

## H. OTHER.

1. **Incumbent Performer:** The ARL RAP is currently being performed under Cooperative Agreement No. W911NF-16-2-0008. The current Recipient is Oak Ridge Associated Universities, Incorporated, 100 Orau Way, Oak Ridge, TN 37830-6218.

2. **Women in Stem:** Some situations require that special information and supporting documents be included in the proposal before funding can be approved. Such information and documentation should be included by appendix to the proposal. To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. A Section 1681 Et. Seq.), the Department of Defense is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in STEM disciplines. To enable this assessment, each application must include the following forms completed as indicated.

(A) Research and Related Senior/Key Person Profile (Expanded) form: The Degree Type and Degree Year fields on the Research and Related Senior/Key Person Profile (Expanded) form will be used by DoD as the source for career information. In addition to the required fields on the form, applicants must complete these two fields for all individuals that are identified as having the project role of PD/PI or Co-PD/PI on the form. Additional senior/key persons can be added by selecting the “Next Person” button. 34

(B) Research and Related Personal Data form: This form will be used by DoD as the source of demographic information, such as gender, race, ethnicity, and disability information for the Project Director/Principal Investigator and all other persons identified as Co-Project Director(s)/Co-Principal Investigator(s). Each application must include this form with the name fields of the Project Director/Principal Investigator or any Co-Project Director(s)/Co-Principal Investigator(s) completed; however, provision of the demographic information in the form is voluntary. If completing the form for multiple individuals, each Co-Project Director/Co-Principal Investigator can be added by selecting the “Next Person” button. The demographic information, if provided, will be used for statistical purposes only and will not be made available to merit reviewers. Applicants who do not wish to provide some or all of the information should check or select the “Do not wish to provide” option.]

## ENCLOSURE 1

### Disposition of Rights In Intellectual Property

#### *Army Research Laboratory*

#### *Agreement -Disposition of Rights in Intellectual Property*

*I, the Fellow identified below, in consideration of financial and other benefits attributable to my work at the Army Research Laboratory (ARL) as a Fellow, do hereby attest to the fact I am not subject to the intellectual property policies of any other organization, through employment, contract, or otherwise, or, if I am subject to the IP policies of any other organization have informed ARL Patent Counsel of such IP policies and obtained conflict clearance, and agree as follows:*

### **1. Invention and Patent Rights**

#### **A. Fellow Inventions**

(a) Being subject to applicable regulations governing patents and inventions, including government wide regulations issued by the Department of Commerce at 37 CFR Part 401, and the Patent Rights Clause at 37 CFR 401.14, I may elect to retain the entire right, title, and interest throughout the world to each invention made (i.e., conceived or first actually reduced to practice) by me as a consequence of, or in direct relation to, my work as a Fellow.

(b) I shall disclose each invention I have made to the ARL Laboratory Patent Counsel using all locally approved forms. I will elect in writing whether or not to retain title to the invention by notifying the ARL Laboratory Patent Counsel within two (2) years after disclosure.

(c) After election to retain title, I have one (1) year in which to file an initial patent application on the invention or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use.

(i) I agree to include, within the specification of any United States patent application and any patents issuing thereon covering an invention, the following government support statement:

*"This invention was made with U.S. Government support and the U.S. Government has certain rights in this invention and the right in limited circumstances to require the patent owner to license others on reasonable terms."*

(ii) I agree to execute and promptly deliver to ARL all instruments necessary to establish or confirm the rights the U.S. Government has in each invention. I further agree to notify ARL Laboratory Patent Counsel of any decision not to continue prosecution of the application(s), pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration period required by the U.S. Patent and Trademark Office.

(d) If I decide not to file for patent protection or if I fail to elect title to my invention or fail to file an initial patent application within the times specified, I agree to assign title, both domestic and/or foreign, to the U.S. Government, upon written request. I understand that by voluntarily assigning title to the Government that I shall be eligible to share royalties from the Government's licensing of my invention pursuant to 15 U.S.C. §3710c and Army Policy.

(e) I agree that the Federal Government shall be granted, at a minimum, a nonexclusive, nontransferable, irrevocable, paid-up license, to practice, or have practiced for or on behalf of the United States, in each invention in which I retain title.

(f) I agree that title to each invention made under this Agreement is subject to March-In-Rights by the Federal Government as stated in 35 U.S.C. §203.

#### **B. Joint Inventions with U.S. Government Personnel**

(a) I shall disclose any inventions made jointly to the Program Administrator or ARL Laboratory Patent Counsel. I may elect to retain title to my undivided interest.

(b) I agree that the same election and filing requirements as found in Sections 1 A. (b) and (c) above also apply to joint inventions.

(c) If I decide not to file for patent protection I agree to assign my undivided interest in the invention to the U.S. Government

#### **C. Joint Inventions with U.S. Government Contractor Personnel**

If I am a co-inventor with a U.S. Government Contractor employee, a joint ownership situation initially arises with the Contractor.

#### **D. Inventions made in support of Cooperative Research and Development Agreements**

(a) Notwithstanding the ownership and licensing provisions of subsections 1. A. through 1. C. above, if I voluntarily participate with ARL under a Cooperative Research and Development Agreement (CRADA) authorized by 15 U.S.C. §3710a, the Government may require me to negotiate an agreement with the CRADA collaborating party or parties regarding the allocation of rights to any subject invention I make, solely or jointly, under the CRADA. The agreement shall be negotiated prior to me undertaking the CRADA work or, with the permission of ARL, upon the identification of a subject invention. In the absence of such an agreement, and if I retain title ownership, I agree to grant the collaborating party or parties an option for a license in my inventions of the same scope and terms set forth in the CRADA for inventions made by the Government.

(b) I agree that the Federal Government shall be granted, at a minimum, a nonexclusive, nontransferable, irrevocable, paid-up license, to practice, or have practiced for or on behalf of the United States, in each invention made in support of the CRADA.

(c) I understand that should I voluntarily assign title ownership to the Government that I shall be eligible to share royalties from the Government's licensing of my invention pursuant to 15 U.S.C. §3710c and Army Policy.

## **2. Copyright**

(a) I agree that in the event that I assert copyright in original works of authorship for which copyright protection subsists, the U.S. Government, and others acting on the Government's behalf, shall have a paid-up license to reproduce the copyrighted work, distribute copies, prepare derivative works, perform the copyrighted work publicly and display the copyrighted work publicly. I agree to affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledge U.S. Government sponsorship to the work. I also agree that any assignment or license of the copyright I make shall identify the Government's license to the work as prescribed herein.

(b) If I decide not to retain ownership of copyright in a work in which the Government expresses interest, I agree to assign my copyright to the U.S. Government.

(c) Joint works between the Fellow and U.S. Government employees shall be jointly owned.

## **3. Controlled Data**

I understand and agree to respect any and all limitations to access to any controlled data or other classified information, proprietary information (including but not limited to proprietary data, trade secrets, or other information which is restrictively marked or designated), or any other technical data, commercial or financial information that is privileged or confidential, which I receive during or as a result of such appointment, as may be established by ARL. In the event that I should receive or in any way obtain access to any such information in connection with this appointment, whether by authorization, inadvertently, or otherwise, I further understand that unauthorized disclosure of or failure to safeguard, such information may subject me to civil and/or criminal liability

under applicable laws of the United States.

**4. This Agreement shall be governed by United States Federal Law.**

Fellow (Print Name)

Signature

Date

Address