# UNITED STATES ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES (ARI)

# FOUNDATIONAL SCIENCE RESEARCH UNIT (FSRU)

# FUNDING OPPORTUNITY ANNOUNCEMENT

FOR

# BASIC SCIENTIFIC RESEARCH



# W911NF-25-S-0006 04 February 2025 – 01 July 2025

ISSUED BY: U.S. Army Contracting Command-Aberdeen Proving Ground Research Triangle Park Division P. O. BOX 12211 Research Triangle Park, NC 27709-2211

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## I. OVERVIEW OF THE FUNDING OPPORTUNITY

#### A. Required Overview Content

#### Agency Name:

U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) Foundational Science Research Unit (FSRU)

#### **Issuing Acquisition Office:**

U.S. Army Contracting Command-Aberdeen Proving Ground, Research Triangle Park (ACC-APG-RTP) Division

#### **<u>Research Opportunity Title:</u>**

U.S. Army Research Institute for the Behavioral and Social Sciences Funding Opportunity Announcement for Basic Research (Fiscal Year 2026)

#### **Announcement Type:**

Initial Announcement

#### **Research Opportunity Number:**

W911NF-25-S-0006

#### **Catalog of Federal Domestic Assistance (CFDA) Number and Title:**

12.431 – Basic Scientific Research

#### **Response Dates (Submissions):**

White paper submissions must be received by: **5:00 PM/1700 Eastern Standard Time** (EST) on 9 March 2025

Proposal submissions must be received by: 5:00 PM/1700 Eastern Daylight Time (EDT) on 1 July 2025

#### 2025 Response Dates (Questions):

General questions regarding white papers must be submitted in writing to Dr. Kimberly Wingert, <u>kimberly.m.wingert.civ@army.mil</u>. Questions about a specific research topic area must be submitted in writing to the listed technical POC. All questions regarding white papers must be submitted by: **5:00 PM/1700 Eastern Standard Time (EST) on 23 February 2025.** 

General questions regarding proposals must be submitted in writing to Dr. Kimberly Wingert, <u>kimberly.m.wingert.civ@army.mil</u>. Questions about a specific research topic

area must be submitted in writing to the listed technical POC. All questions regarding proposals must be submitted by: **5:00 PM/1700 Eastern Daylight Time (EDT) on 15** June 2025

A white paper submission is not required to submit a proposal, although it is strongly encouraged. Awards are intended to be obligated between 1 October 2025 and 30 September 2026. Amendments to this FOA will be posted to Federal Business Opportunities (beta.SAM.gov; FBO.gov has been moved to beta.SAM.gov and is now known as Contract Opportunities) and <u>http://www.Grants.gov</u> when they occur. Interested parties are responsible for periodically checking these websites for updates and amendments.

(End of Section)

#### **B.** Additional Overview Information

#### **INTRODUCTION:**

This Funding Opportunity Announcement (FOA) for the Foundational Science Research Unit (FSRU) of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) solicits new proposals for its fiscal year 2026 program of basic research in behavioral and social science. It is issued under the provisions of paragraph 6.102(d) (2) and 35.016 of the Federal Acquisition Regulation (FAR), which provides for the acquisition of basic and applied research and that part of development not related to the development of a specific system or hardware procurement through the competitive selection of proposals and 10 U.S.C. 4001, 10 U.S.C. 4021, and 10 U.S.C. 4022.

Proposals submitted in response to this FOA and selected for award are considered to be the result of full and open competition and in full compliance with the provisions of Public Law 98- 369, Section 2701, "The Competition in Contracting Act of 1984" and subsequent amendments.

ARI is the Army's lead agency for the conduct of research, development, and analyses for the improvement of Army readiness and performance via research advances and applications of the behavioral and social sciences that address personnel, organization, and Soldier and leader development issues. ARI's mission is to drive scientific innovation to enable the Army to acquire, develop, employ, and retain professional Soldiers and enhance personnel readiness. The mission of the Basic Research Program is to execute highrisk, high-reward foundational research to develop state-of-the-art theory, methods, and models to create the innovative concepts required to support the Army's future capabilities and needs related to personnel readiness.

We strongly encourage applicants to propose novel, state-of-the-art, and multidisciplinary approaches that address the stated high-priority research questions. A key consideration in the decision to support a research proposal is that its findings are likely to stimulate new, basic behavioral research, which in turn, will lead to improved performance of Army personnel and their units. ARI will not support proposals through this FOA that are primarily applied research projects (e.g., human factors studies, specific-use technology development and validation, or training program evaluations) or primarily focused on physiology, psychopathology, or behavioral health.

Collaboration is encouraged among institutions of higher education (IHE), non-profit organizations, and commercial organizations. Funding of basic research proposals within ARI areas of interest will be determined by funding constraints and priorities set during each budget cycle.

A proposal should describe its potential contribution(s) to theory along with potential benefits to the Army. **Those contemplating submission of a proposal are strongly encouraged to submit a white paper before submitting a proposal.** Submission of a white paper before a proposal allows for the earliest determination of the potential for funding and minimizes the labor and cost associated with the submission of a proposal that

may have minimal probability of being selected for funding. Costs associated with preparation of a white paper or proposal submission in response to this FOA are not considered allowable direct charges to any resulting award. These costs may be allowable expenses to normal bid and proposal indirect costs specified in FAR 31.205-18. An applicant submitting a proposal is cautioned that only a Government Grants Officer may obligate the Government to any legal instrument involving expenditure of Government funds.

Award decisions are subject to funds availability, and ARI may choose to not execute any award under this FOA due to unavailability of funds or other factors. Due to Government budget uncertainties,

- (1) No specific dollars have been reserved for total awards under this FOA, and
- (2) No award floor or ceiling thresholds have been established for individual awards under this FOA.

(End of Section)

### II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY

#### A. PROGRAM DESCRIPTION

#### SCIENTIFIC PROBLEMS FOR BASIC RESEARCH:

To meet the operational objectives of the U.S. Army over the next two decades, the Army must improve its capability to acquire, develop, employ, and retain Soldiers and leaders who can individually and as part of a group:

- Prepare for and adapt quickly to dynamic missions, unpredictable operational environments, and a wide spectrum of contexts;
- Effectively function autonomously and as part of larger systems in complex, information-rich environments;
- Perform in extended, hybrid, and continuous operations;
- Interact and collaborate effectively in joint-service and multi-national operations.

ARI requests proposals to conduct basic research that will provide a scientific foundation to support these broad capabilities.

The Basic Research program focuses on four strategic areas for advancing personnel science.

- 1. <u>Measurement of Individuals and Collectives</u>: Advanced psychometric theory for deriving valid measurements from complex assessments and continuous streams of data
- 2. <u>Teams and Small Groups:</u> Understanding dynamic restructuring, coordination, and composition processes in teams and promoting optimal team adaptation
- 3. <u>Organizations and Systems</u>: Multilevel theory and methods for complex organizations
- 4. <u>Formal and Informal Learning and Development</u>: Holistic models of individual and collective learning and development across work settings and contexts throughout the career span

To be eligible for an award under this announcement, a prospective awardee must meet certain minimum standards pertaining to financial resources and responsibility, ability to comply with the performance schedule, past performance, integrity, experience, technical capabilities, operational controls, and facilities. In accordance with Federal statutes, regulations, and Department of Defense (DoD) and Army policies, no person shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the Army on grounds of race, color, age, sex, national origin, or disability.

#### **Types of Proposals**

The funding opportunity is divided into three types of proposals for basic research: (1)

Standard Basic Research Proposals and (2) Targeted Opportunities which encompass: a) Early Career Proposals (ECP) and b) Short-Term Innovative Research (STIR) Proposals (both of which are for basic research). ARI will accept all three types in response to this FOA.

- 1. *Standard Proposals*. Most basic research awards are awarded in response to Standard Proposals provided by experienced researchers. In recent years, the most typical period of performance has been for three years, and the mean award total has been approximately \$750,000.
- 2. Targeted Opportunities
  - a. *Early Career Proposals.* To foster the development of innovative and creative researchers, ARI solicits proposals with primary investigators who are early in their research careers and have never received ARI funding as a Principal Investigator. All ARI evaluation criteria will be used to evaluate Early Career Proposals, except the criteria that address the experience of the Principal Investigator (see SECTION II. E of this FOA for evaluation criteria). In all other respects, the evaluation criteria used in this FOA apply equally to both Standard and Early Career Proposals. While there is no specific amount of funding set aside for these proposals, initial budgets should be modest: approximately \$125K for the initial year. To be considered for the Early Career category:
    - i. An Investigator must specify in the proposal abstract and on the proposal cover page that they are requesting consideration under this funding category.
    - ii. Projects should be designed for one year of funding. Note that optional periods of research (one to two additional years) may be included in the proposal and may be funded should the initial work prove promising. These years should be denoted as option years in the proposal.
    - iii. The research must fit at least one of the stated four (4) domains of the FOA Basic Research areas of interest.
    - iv. The Principal Investigator must have received their Ph.D. within five years of the time of proposal submission, and not previously received funding from ARI as a Principal Investigator.
  - b. *Short-Term Innovative Research (STIR) Proposals*. The objectives of the STIR awards are to support rapid, short-term investigations to assess the merit of innovative new concepts in basic research. STIR awards provide an excellent opportunity to showcase new concepts and explore new areas in basic research. STIR awards are aimed at shaping new directions in research and the sciences. To be considered for a Short-Term Innovative Research Award:
    - i. An Investigator must specify in the proposal abstract and on the proposal cover page that they are requesting consideration under

this funding category.

- ii. Projects should be designed for one year of funding.
- iii. The research must fit at least one of the stated four (4) domains of the FOA Basic Research areas of interest.
- iv. Proposals in the amount of \$60,000 or less are sought for STIR awards.
- v. Capital equipment cannot be purchased under a STIR Program award.
- vi. Report preparation costs must not exceed \$100.
- vii. A fee is not permitted under STIR Program awards as they are awarded as grants.
- viii. Due to the relatively small dollar amount and short-term nature of these awards, applicants are encouraged to maximize the benefit derived from this funding by prioritizing labor and employing other cost-saving measures in support of the STIR program effort.

*General Guidelines for All Proposals.* Both single-investigator and collaborative research efforts are encouraged. **Multidisciplinary approaches are especially encouraged** to the extent that the proposal reflects the theories, models, and approaches of multiple disciplines, combined creatively to address the research problem.

Collaborative efforts may involve researchers either at a single institution or in cooperating institutions. Highly innovative proposals addressing high-risk, high-reward topics are strongly encouraged and should include strong methodology and other riskmitigation strategies. Theory development and/or meta-analyses that address theoretical issues in ARI research interest domains will also be considered. The use of military participants is neither necessary nor encouraged, and ARI is unlikely to arrange access to military participants to support basic research investigations. This includes provision or use of extant Army data.

#### **Basic Research Topic Areas of Interest**

Basic research is effort directed toward increasing knowledge and understanding in science and engineering, rather than the practical application of that knowledge and understanding. It typically is funded within Budget Activity 1 and Research Category 6.1. Basic Research is systematic study directed toward a fuller knowledge or understanding of the fundamental aspects of phenomena and/or observable facts. Basic research aims for broad impact rather than to develop specific processes or products for targeted applications. The ARI Foundational Science Research Unit (FSRU) manages the Basic Research Program and maintains close contact with ARI's applied scientists and other relevant agencies within the Army and Department of Defense. These contacts help define issues that require foundational research, ensure that the Basic Research Program is coordinated across Services (Department of Defense), and facilitate the transition of basic research results to applied programs for eventual use by the operational Army.

All proposals will be considered; however, ARI has identified the following four (4) domains as particularly germane to its basic research needs. This list is neither comprehensive nor exclusive and ARI is especially open to proposals that combine or cut across these domains. These domains are:

### 1. Measurement of Individuals and Collectives

- 2. Teams and Small Groups
- 3. Organizations and Systems

#### 4. Formal and Informal Learning and Development

An in-depth description of each domain follows. For additional information on these domains, and other potential areas of interest, applicants may also consult the following reports by the National Research Council of the National Academy of Sciences (Available at <u>http://www.nap.edu</u>):

- "Adult Learning in the Military Context" (2024) supervised by the Board on Behavioral, Cognitive, and Sensory Sciences and the Board on Science Education
- "Measuring Human Capabilities: An Agenda for Basic Research on the Assessment of Individual and Group Performance Potential for Military Accession" (2015) supervised by the Board on Behavioral, Cognitive, and Sensory Sciences
- "The Context of Military Environments: Social and Organizational Factors" (2014) supervised by the Board on Behavioral, Cognitive, and Sensory Sciences

Detailed descriptions of the four broad research domains are provided below. Each domain description includes: (a) a broad overview of the relevant Army problems and the strategic goal of the domain, (b) the primary research objectives, and (c) high-priority research questions.

#### 1. Measurement of Individuals and Collectives

Technical POC: Dr. Katherine Ciarlante, katherine.e.ciarlante.civ@army.mil

The success of the U.S. Army can be largely attributed to the selection, assignment, development, and retention of highly skilled and exceptional Soldiers. To fulfill the Army People Strategy and modernization priorities for the Army and ensure continued success, the U.S. Army needs to place the right Soldier, in the right job, at the right time. To do so, the U.S. Army must continuously identify and refine the core knowledge, skills, and behaviors (KSBs) critical to Soldier success, both across the U.S. Army as a whole and within specific military occupational specialties (MOS), while also improving the ability to understand and assess Soldier effectiveness and performance.

Traditional personnel tests were designed to capture broad, diffuse constructs (e.g., cognitive ability, personality, vocational aptitudes) that aggregate individual experiences over long periods of time often in mass-testing settings (e.g., annual performance, initial training, and career continuance). More recent technological advances afford observing and recording human behavior at increasingly finer-grained scales of resolution (e.g., real-time GPS coordinates, physiological sensors) without the need for direct elicitation of information from participants via surveys and interviews. However, extracting meaningful psychological conclusions from such fine-grained observations has proved challenging, at least with respect to the psychometric models from which traditional personnel tests were developed.

Psychometric models and methods have advanced greatly since the advent of traditional personnel tests. Lagging, however, is adapting and refining such models and methods to better understand human behavior in organizations, particularly with respect to performance in the massively hierarchical, interdependent, and constantly fluid social situations of the environment the military operates in. Such environments are not well-represented by broad, diffuse aggregates (e.g., a single standardized test score). What are needed now, more than ever, are psychometric models and methods for quantifying meaningful patterns of human behaviors in complex social situations.

**Strategic Goal.** The primary goal for the Basic Research program within the Measurement of Individuals and Collectives domain is to fundamentally improve psychological testing and measurement by deriving means of enhancing testing efficiency and increasing overall precision, understanding, and prediction of individual and collective behavior and performance. To further progress to this goal, the basic research program in measurement of individuals and collectives will look to support research to a) advance psychometric theory and methods, b) understand performance and expand the criterion space, and c) expand measurement approaches and assessment methods. To follow are a brief overview of each research objective in the area.

Advance Psychometric Theory and Methods. Novel psychometric theory and methodology is needed understand and accurately assess complex behavior in organizations with a strong need for innovative paradigms and approaches to expand the boundaries of existing test theory. Key to addressing this objective is the development of theory and psychometric quantities beyond those of classical (e.g., reliability, validity) and modern (e.g., item and test information) test theory that explicitly address the limitations of existing methodology. Additional important issues include: (a) psychometric approaches for deriving construct score estimates from dynamic flow data or behavioral streams and to examine complex longitudinal data more accurately, (b) longitudinal modeling techniques and construct validation models that explicitly incorporate time, and (c) new and refined theory related to understanding the impact of emerging technologies and algorithms (e.g., machine learning, generative AI, natural language

processing (NLP)) on psychological testing and measurement, specifically as it relates to bias and fairness in assessment.

- Understand Performance and Expand the Criterion Space. The ability to accurately and comprehensively measure individual-, team-, and organizational-level performance, as well as to identify and understand predictors of performance, is essential for evaluating the effectiveness of Army policies and practices. While many significant advances have been made on the predictor side of understanding predictor-criterion relationships, theory has remained relatively stagnant in the performance space. Significant innovation in performance in complex organizations. This will require an integration of multi-level, contextual, and temporal factors into the understanding and empirical study of performance as well as conceptual explorations of the definition of performance that clarify the differences between performance and related constructs/terms such as effectiveness.
- Expand Measurement Approaches and Assessment Methods. As concerns rise regarding the testing demands placed on Soldiers, there is a strong opportunity and need for innovative measurement techniques that efficiently and accurately assess complex social and behavioral processes via non-traditional methods. By leveraging emerging technologies (e.g., sensors and wearable technology) and non-traditional data sources (e.g., process data), researchers can advance the theory and practice of measurement and expand the "toolkit" of methodologies with which to assess individual and collective behavior and performance. Methodologies of strongest interest include measurement approaches for unobtrusive, efficient, and simultaneous multi-construct measurement and innovative methods for extracting meaningful patterns from archival and real-time dimensional behavioral data. There is also a strong demand for approaches to measuring difficult to assess constructs and dynamic phenomenon, including cognitive and affective processes, that emerge over time.

**High Priority Research Questions** All proposals will be considered for relevance to the topic area and research objectives. Furthermore, the following are provided as high-priority research questions for the Basic Research Program in Measurement of Individuals and Collectives:

- 1. What are the specific limitations of classical and modern test theory and what novel methodologies and psychometric quantities can be developed to overcome these? How can traditional and novel psychometric methods be integrated and combined to improve the testing development and construct validation process?
- 2. What methodologies can be leveraged to increase testing efficiency and reduce survey burden on participants? How can these methodologies (e.g.,

unobtrusive measurement; adaptive sampling techniques; non-traditional data sources) be utilized, independently and in tandem, to decrease testing demands and address sources of bias frequently present in traditional testing models?

- 3. How can we expand our understanding of the criterion space by developing novel theories and measures of performance? What assessment methodology and testing models can be developed to better predict performance and effectiveness in modern organizations?
- 4. How can emerging technologies and AI facilitated methods be used to enhance performance assessment and improve data scope and granularity? What novel methods can be developed, or existing methods be adapted, to extract meaningful patterns from high dimensional behavioral data (e.g., video, audio, physiological data)?
- 5. How do individuals experience and perceive change in their affective, cognitive, and behavioral experiences over time? How can between- and within-individual change be modeled in meaningful and predictive ways?

#### 2. Teams and Small Groups

#### Technical POC: Dr. Alexander Wind, alexander.p.wind.civ@army.mil

Teams are the core element of the Army's organizational structure and are typically comprised of a few junior enlisted Soldiers and a noncommissioned officer (NCO) serving as the team leader. Teams serve to fulfill specialized functions, and a set of teams combines into a squad led by a squad leader, typically an NCO such as a Staff Sergeant. Historically, mission success has been contingent on many individual squads' independent but coordinated contributions. While the importance of this role will continue, evolving contexts and conditions will change how teams and squads are composed, managed, and evaluated. Basic research is needed to continue to support and modernize those processes. Given the nature of teams, advances in scientific understanding are needed in both field work and laboratory settings.

The composition of these groups may be stable for up to a few years, but frequently changes to composition will occur for numerous reasons including individuals' deployment, advance in rank, leaving the service, changing job series, or cycling into a new assignment. Ideally, established extant Army teams deploy together, but frequently at least one of the members of the group will have joined shortly before or during deployment. While progress has been made toward understanding how the composition of teams impacts team processes and performance, less is known about how teams adapt after team member changes and evolve after extended amounts of time serving together as an intact team.

In the future, teams and squads will likely be more heterogeneous in composition with members representing varied capabilities, perhaps from different commands or even services. As technology progresses, some traditional team member functions may be allocated to non-human team members. In an uncertain future operating space, teams may need to be rapidly assembled or reconstituted.

The primary objective within the Teams and Small Groups domain, is to further science to support team assignment, development, and optimization reflective of emerging requirements and characteristics of teams. The Research Objectives of this area are:

- Advanced Composition and Adaptation. Advanced novel or refined multi-trait models of team functioning are needed that better predict team performance and capability of compensatory groupings. While progress has been made in the development of novel methods and multi-trait models of team functioning, these approaches are nascent and focused on a limited number of traits. These models likely require adaptation to specific team goals and contexts. Additionally, frequent changes in team composition, local and organizational policies, and environments necessitate a focus on adaptation as an outcome in these models. Further, although emerging technology has resulted in significant advances in systems models of composition that optimize personnel distribution to yield many good teams within multi-echelon organizations and/or multi-team systems, these models need to be refined, extended, and tested across contexts.
- Team Formation, Development, and Reconstitution. New theories on team formation and maintenance processes are needed, with an emphasis on ad hoc and rapidly-formed teams. While there have been some advances in understanding of how team member changes impact team functioning and performance, the uncertainty of the future operating space results in circumstances in which teams may need to be rapidly assembled or reconstituted, where reconstitution involves mobilization of previously trained teams or creation of new teams with entirely new capabilities to maintain readiness during the short term and for large scale future combat operations. Additionally, advances are needed in our understanding of how time spent in an intact team affects team processes, development, and performance. A deeper understanding of these temporal dynamics is also needed when reconstitution involves the mobilization of previously trained teams. Research is needed on collective training versus training focused on the individual, and the preparation of teams and small groups, and this research will need to account for composition changes that occur over time. Further, the structure of the Army results in a need for new models on personnel modularity in team efficacy and performance.
- **Team Processes and Performance.** The Army is in need of new means to measure, model, and represent team constructs such as shared mental models, collective efficacy, team-specific culture, identity, and trust at the collective and individual contribution levels. Additional methods are needed to study collaboration and interaction between teams in shared and distributed environments, as well as an understanding of how novel team constructs impact these processes and performance outcomes.

High Priority Research Questions. All proposals will be considered for relevance

to the topic area and research objectives. Furthermore, the following are provided as high-priority research questions for the Basic Research Program in Teams and Small Groups:

- 1. What are the mechanisms of developmental trajectories of rapidly formed and ad hoc teams and what conditions and approaches best optimize this process?
- 2. What are the determinants of team success over time? What is the relative importance of composition, continuity of membership, leader behaviors, external support / intervention?
- 3. When would teams benefit most from training focused at the team level versus training focused at the individual level in terms of the benefits that it affords to team development?
- 4. How can we better understand how teams concurrently operate in and interact with multiple physical and non-physical domains of operation (e.g., immediate surroundings, distributed forces, cyber)?
- 5. How can trust be reinforced, repaired, or sustained among team members after the initial emergence of trust decisions and following interactions over time and changes in team composition and structure, and how does this influence team processes and performance outcomes? How does access to an individual and their ability to share information impact these processes?
- 6. How do team culture and identity influence team goals and outcomes?

#### 3. Organizations and Systems

#### Technical POC: Dr. Peter Wang, peter.p.wang.civ@army.mil

The U.S. Army is a very large organization with approximately 450,000 activeduty, 180,000 reservist, 325,000 National Guard personnel, and more than 230,000 civilians (DMDC, Jun 2024). Army Forces are organized into hierarchically nested groupings from teams of four up to corps with tens of thousands of members. The Army must operate within the Department of Defense and in coordination with the other services to provide the military forces needed to deter war and ensure our nation's security. Additionally, the Army must often engage with other federal agencies and increasingly at a multi-national, coalitional level. The composition, foci, and context of all elements in these systems are always changing.

The Army must proactively change and adapt to meet evolving requirements and conditions while maintaining its longstanding identity, culture, and traditions. Soldiers operate as individuals, members of teams, members of teams of teams, and members of the broader Army organization. As such, Soldiers are expected to manage their commitments in different roles. Roles are not static, as members of the Army often move throughout the organization through reassignment or turnover. Standards of behavior are established to promote cooperation, coordination, and discipline among Soldiers, standards that include the Army Values (Leadership, Duty, Respect, Selfless Service, Honor, Integrity, Personal

Courage). At the same time, innovation, creative thinking, and flexibility are needed for problem-solving. The complexity of Army organizational structure means that bottom-up, top-down, and external changes may flow through the organization at different tempos, exerting influence within and across levels. Since the Army also operates jointly with other armed services and agencies, Soldiers must overcome differences in organizational structures, cultures, and norms to coordinate action. Further, the Army must adapt to changes in technological capabilities and societal shifts in values. There has been a general proliferation of conflicting value-laden narratives, which may threaten the strength of identities, organizational commitment, and cohesion. Future operational environments are also projected to involve greater mission complexity as Soldiers deal with greater numbers of factors that affect mission success, and to require increased autonomy from teams who must make decisions without direct communication with coordinated units. Key issues include bolstering Soldier resilience against events in the information space and increased mission difficulty and complexity, as well as promoting sound decision-making that adheres to organizational values in the absence of direct guidance. The Army's performance will depend on its ability to adapt and react, particularly within complex, changing operational environments.

The primary objective within the Organizations and Systems research area is to identify means to leverage theories, methods, and models of organizational functioning to effect deliberate sustained systemic outcomes. To further progress to this goal, the program will look to support research to a) boost novel, empirical research on organizational theories; b) advance deeper or more comprehensive theories of how culture influences behavior within organizations and dynamics; and c) advance deeper or more comprehensive theories of organizational processes. To follow are a brief overview of each research objective in the area.

- Empirically Supported Organizational Theories. Novel, empiricallysupported theories are needed to make substantial advancements in understanding organizational functioning. These include theories that can identify factors influencing effectiveness at different or multiple levels of an organization (e.g., individual, dyad, team, team of teams, organization) and their interactions across levels.
- Organizational Culture and Identity. Understanding the effects of culture, values, and identity on cognitions and behaviors within organizations, as well as overall organizational performance, is a key objective. Important issues include: 1) identifying cultural resources that organizations draw on to promote performance; 2) investigating the inception and dissemination of organizational cultural norms and identities; and 3) identifying how organizational members interpret organizational values and identities to take action.
- **Organizational Processes.** Understanding the processes underlying dynamic, multilevel organizational behaviors is another key objective. Some major themes are top-down vs. bottom-up influences on performance, change over time, and influences from multiple levels of an organization on cognitions and behaviors. Important issues include: 1) the integration of

theoretical approaches to identify how individuals make decisions based on organizational, team, and personal goals, contextual and experiential information, and other factors; 2) novel theories on organizational interventions that account for implementation at different scales, at multiple levels, and over time; 3) situating organizational influences and factors that affect organizational outcomes in changing contexts, such as shifts in values or affordances, to understand organizational functioning over time; and 4) generating novel theories to capture the broader multilevel and multifactored nature of organizations, particularly those with frequent between- and within-organization member changes.

**High Priority Research Questions.** All proposals will be considered for relevance to the topic area and research objectives. Furthermore, the following are provided as high-priority research questions for the Basic Research Program in Organizations and Systems:

- How do members of organizations draw on organizational values and other cultural resources to take action, evaluate the behaviors of other members, and evaluate the organization? How do members engage with perceived mismatches between their organizational identities and the values of society at large, or with competing organizational identities? How do organizational values and identities interact with contextual and individual differences to structure, coordinate, and give meaning to cooperation among individuals, teams, and the organization over time?
- 2. How can organizations bolster commitment among members in the face of contested narratives, adversarial social influence, information overload, and increasing mission difficulty? What aspects of organizational culture and practices could support resilience against these threats without suppressing innovation and creative conflict?
- 3. How do organizations build and cultivate trust from its members and at different levels and with external parties and systems? What is the relative contribution of trust in the organization and trust in team members to outcomes?
- 4. What are novel theories and models that can improve current prediction of behavior within organizations at the individual, team, team-of-teams, and overall organizational levels?
- 5. How can recent advances in measurement, modeling, and analyses of multiteams and multi-systems be leveraged to develop and further approaches to interventions at the organizational level?

#### 4. Formal and Informal Learning and Development

Technical POC: Dr. Kimberly Wingert, kimberly.m.wingert.civ@army.mil

Our military personnel must be demonstrably ready for myriad and varied scenarios. Recently, the operational landscape has evolved to include irregular

warfare, stability requirements, and multi-domain operations across land, sea, air, space, and cyber fronts. Projections all seem to suggest that the trends to greater complexity and scope will continue. As such, there is significant pressure on the Army, its educational institutions, Soldiers, and leaders to identify and optimally utilize all available learning vehicles to prepare for, adapt to, and maintain readiness and combat effectiveness in a complicated and unpredictable future. Traditional Army approaches to personnel training and development, characterized by pull-out training, on-the-job-learning, and drill and scenario exercises, have done well historically to prepare our forces for myriad mission types. However, success in a future operational environment will rely on further scientific advances to augment, complement, and improve our educational models. Distributed learning, self-directed learning, and new educational technologies have high potential to support future learning.

Developmental trajectories of our personnel are also greatly important. Like learning, development is conceptualized as being incremental, iterative, and driven by the individual. Developmental maturation continues throughout one's career and facilitates the individual to take on roles and responsibilities that require interpersonal and intrapersonal capabilities. Leadership roles and responsibilities are a notable example of positions that require those skills. As the Army develops its own leaders, research in development and understanding the trajectories of emerging leaders is a key focal point in this area. To meet the needs of the future, the Army requires leader development models, strategies, and measures to guide the Army to grow the leadership talent needed to face future challenges. Understanding how to prepare leaders to recognize and get the most out of leader development opportunities across domains and sources is crucial to develop leaders efficiently and effectively.

Basic research investments in learning and development will expand the toolkit, empower individual learners, and support decision makers' improved capacity to best structure personnel training and development. The primary goal for the Basic Research program within the Formal and Informal Learning and Development domain is to understand, support, and optimize learning and development of Soldiers and leaders through formal learning settings, operational experience, and self-development. To further progress toward this goal, the basic research program in formal and informal learning and development will look to support research to a) understand adult learning and career-long learning, b) measure and model learning, and c) promote practices and structures that support learning and development. To follow are a brief overview of each research objective in the area.

a) Understand the Adult Learner and Career-long Learning. Developing Soldiers and leaders who are efficient, lifelong, and motivated learners is key to meeting the demands of the future. Active self-directed learning, heutagogical learning, is an emerging theory on adult learning that has great potential to yield adaptive spontaneous learners. Little is known about the mechanics of authentic informal self-directed learning processes nor of the contextual factors that incite and support in situ learning. Outside specific learning events, very little is known about adult learners' approach to meeting long-term learning outcomes. Diffuse development concurrent over many domains through sustained deliberate effort is a key to successful career-span development.

- b) Measure and Model Learning. To study learning in any context, it is important to understand the antecedents, conditions, and the processes of learning. Much of the scholarship on learning is indirect, relies on pre- and post-tests and behavioral outcomes, and says little about the actual processes. These measures give rudimentary feedback on what elements and approaches are most conducive and force more inference into educational design than would be necessary with better data. Furthermore, summative unidimensional data are not as useful to the learner or the instructor than specific contemporaneous feedback that reflects not just learning gains and understanding but also attitudinal, motivational, and engagement levels during the learning phase.
- c) Understand Practices and Structures that Promote Learning and Development. The complexity and unpredictability of the future operational environment will mean application of learning will need to be highly distal to the acquisition phase. Deeper learning is defined in the 2012 National Research Council report, *Education for life and work: Developing transferable knowledge and skills for the 21st century*, as the process by which an individual becomes capable of taking what was learned in one situation and applying it to new situations. Research is needed to update practices to support deeper learning and optimize engagement with material at the cognitive, interpersonal, and intrapersonal levels. This requires a sustained focus on structures of learning environments, understanding individual and collective institutional training, and the best practices for incorporating technology into training.

**High Priority Research Questions.** All proposals will be considered for relevance to the topic area and research objectives. Furthermore, the following are provided as high-priority research questions for the Basic Research Program in Formal and Informal Learning and Development:

- 1. How can we better understand, track, and support, spontaneous, in situ selfdirected learning particularly for sustained, long-term, and diffuse learning goals?
- 2. How can we better understand, train for, and capture adaptation and distal application of learning to real-world performance?
- 3. How do we assess learning, retention, and adaptation over time in operational and self-development realms with precision and accuracy? How do we capture and incorporate contextual factors in our understanding of learning and development?
- 4. What learning methods and theory can be developed to maximize individual and collective learning processes and outcomes? What theory can be

developed to understand the bidirectional relationships between individual and collective learning? How do learning gains disseminate through groups, teams and networks?

(End of Section)

#### **B. FEDERAL AWARD INFORMATION:**

The Army Contracting Command- Aberdeen Proving Ground, RTP Division has the authority to award a variety of instruments on behalf of ARI. The award types are: procurement contracts, grants, and cooperative agreements. The ACC (APG) RTP Division reserves the right to use the type of instrument most appropriate for the effort proposed. **Submissions to this FOA will only yield grants and cooperative agreements.** Applicants should familiarize themselves with these instrument types and the applicable regulations before submitting a proposal. The following are brief descriptions of the possible award instruments:

- 1. **<u>Grant</u>**: A legal instrument, that, consistent with 31 U.S.C. 6304, is used to enter into a relationship in which:
  - a. The principal purpose is to transfer a thing of value to the recipient to carry out a public purpose of support or stimulation authorized by a law or the United States, rather than to acquire property or services for the Department of Defense's direct benefit or use.
  - b. Substantial involvement is not expected between the Department of Defense and the recipient when carrying out the activity contemplated by the grant.
  - c. No fee or profit is allowed.
- <u>Cooperative Agreement</u>: A legal instrument which, consistent with 31 U.S.C. 6305, is used to enter into the same kind of relationship as a grant (see definition "grant"), except that substantial involvement is expected between the Department of Defense and the recipient when carrying out the activity contemplated by the cooperative agreement. The term does not include "cooperative research and development agreements" as defined in 15 U.S.C. 3710a. No fee or profit is allowed.
- 3. <u>Grants and cooperative agreements for institutions of higher education,</u> <u>nonprofit organizations, foreign organizations, and foreign public entities</u> are primarily governed by the following:
  - a. Federal statutes
  - b. Federal regulations
  - c. 2 CFR Part 200
  - d. 2 CFR 1104
  - e. 32 CFR Parts 21, 22, 26, and 28
  - f. DoD Research and Development General Terms and Conditions
  - g. Agency-specific Research Terms and Conditions
- 4. <u>Grants and cooperative agreements for for-profit and nonprofit</u> <u>organizations exempted from Subpart E - Cost Principles of 2 CFR Part</u> <u>200</u>, are primarily governed by the following:

- a. Federal statutes
- b. Federal regulations
- c. 32 CFR Part 34 Administrative Requirements for Grants and Agreements with For-Profit Organizations
- d. 32 CFR Parts 21, 22, 26, and 28
- e. DoD Research and Development General Terms and Conditions
- f. Agency-specific Research Terms and Conditions

#### 5. <u>The following websites may be accessed to obtain an electronic copy of the</u> governing regulations and terms and conditions:

- FAR, DFARS, and AFARS: <u>https://www.acquisition.gov</u>
- Code of Federal Regulations (CFR): <u>http://www.ecfr.gov</u>
- DoD Research and Development General Terms and Conditions: <u>https://www.nre.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions</u>
- Agency-specific Research Terms and Conditions: <u>https://www.arl.army.mil/resources/FOA-forms/#terms-and-conditions</u>

(End of Section)

## C. ELIGIBILITY INFORMATION:

## 1. Eligible Applicants:

Proposals are sought from institutions of higher education, non-profit organizations, and commercial entities, domestic or foreign, for research and development (R&D) in those areas specified in SECTION II. A of this FOA. Foreign owned, controlled, or influenced organizations are advised that security restrictions may apply that could preclude their participation in these efforts. Countries included on the U.S. State Department List of Countries that Support Terrorism are excluded from participation in these efforts.

Government Laboratories, Federal Funded Research and Development Centers (FFRDCs), and U.S. Service Academies are not eligible to participate as prime Recipients under this FOA. If a proposal selected for award includes the involvement of a Government laboratory, Federally Funded Research and Development Center, or U.S. Service Academy, award funds allocated for the involvement of Government laboratories, FFRDCs, and/or U.S. Service Academies will be directly provided from ARI to the respective Government laboratory, FFRDC or U.S. Service Academy via a Military Interdepartmental Purchase Request (MIPR). No award funds will be channeled directly from a prime awardee (e.g., Recipient) to a Government laboratory, FFRDC, or U.S. Service Academy.

## 2. Cost Sharing or Matching:

Generally, there is no requirement for cost sharing, matching, or cost participation to be eligible for award under this FOA. Cost sharing and matching is not an evaluation factor used under this FOA.

(End of Section)

#### D. APPLICATION AND SUBMISSION INFORMATION:

#### 1. Address to View Funding Opportunity Announcement:

Grants.gov (www.grants.gov)

Contract Opportunities (sam.gov)

### 2. Content and Form of Application Submission:

#### Section 1 – General Information

<u>Completeness of Information</u>: Proposals must include all of the information specified in this FOA to prevent delays in evaluation. Be sure to specify the Commercial and Government Entity (CAGE) Code, Unique Entity Identifier (UEI) (formerly Data Universal Number System (DUNS)), and the Taxpayer Identification Number (TIN) with your submission. Completion of the Representations and Certifications as well as registration in the System for Award Management (SAM) are prerequisites before receiving an award.

<u>Classified Submissions</u>: **Do not** submit any proposals that include classified information. ACC-APG-RTP is not allowed to accept classified submissions.

<u>Use of Color in Proposals</u>: All proposals received will be stored as electronic images. Electronic color images require a significantly larger amount of storage space than black- and-white images. As a result, use of color in proposals should be used only when necessary to convey specific information.

<u>Government Property/Government Furnished Equipment and Facilities</u>: Normally, title to equipment or other tangible property purchased with Government funds vests with nonprofit institutions of higher education or with nonprofit organizations whose primary purpose is conducting scientific research if vesting will facilitate scientific research performed for the Government. For-profit organizations are expected to possess the necessary plant and equipment to conduct the proposed research. Deviations may be made on a case-by-case basis to allow for-profit organizations to purchase equipment, but regulatory disposition instructions must be followed.

<u>Post-Employment Conflict of Interest</u>: There are certain post-employment restrictions on former Federal officers and employees, including special Government employees (Section 207 of Title 18, U.S.C.). If an applicant believes a conflict of interest may exist, the applicant should discuss the situation with the Army legal counsel, Mr. Brian Bentley, (571) 256-7844, <u>brian.e.bentley2.civ@army.mil</u>, prior to expending time and effort in preparing a proposal.

<u>Statement of Disclosure Preference</u>: Please complete Form 52 or 52A stating your preference for release of information contained in your proposal. Copies of these forms are available at <u>http://www.arl.army.mil/www/default.cfm?page=218</u>. Additionally, proposals containing data that is not to be disclosed to the public for any purpose or used by the Government except for evaluation purposes shall include the following statement on their cover page:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate this proposal. If, however, an award is made to this applicant as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting award. This restriction does not limit the Government's right to use information contained in this proposal if the information has been obtained from another source without restriction.

The data subject to this restriction are contained in [insert the page numbers or file names associated with the data].

The applicant shall also mark each sheet of data or page number it wants to restrict with the following legend:

"Use or disclosure of data contained on this sheet/page is subject to the restriction on the title page of this proposal."

#### Section 2 – Application Process Overview

The application process is in three stages as follows:

**Stage 1-** Provide a valid Unique Entity Identifier (UEI) (formerly Data Universal Number System (DUNS). Please verify the accuracy of your UEI before registering with the System for Award Management (SAM). Prospective applicants must be registered in SAM at https://www.sam.gov prior to submitting its application.

**Stage 2** - Prospective applicants are strongly encouraged, but not required, to submit white papers prior to the submission of a complete proposal. The purpose of submitting a white paper is to minimize the labor and cost associated with the production of a detailed proposal that has little chance of being selected for funding.

**Stage 3** - Interested applicants are required to submit a proposal. All proposals submitted under the terms and conditions cited in this FOA will be reviewed regardless of whether an applicant submitted a white paper.

#### Section 3 – White Paper Preparation

A white paper should focus on describing details of the proposed research, including how it is innovative and how it could substantially advance the state of the science. Army relevance and potential impact should also be described, as well as an estimate of total cost.

White papers should present the effort in sufficient detail to allow evaluation of the concept's technical merit and its potential contributions to the Army mission.

White Paper Format Requirements:

- Page size: 8.5 x 11 inch
- Margins: 1 inch

- Spacing: Single-spaced
- Font: 12-point Times New Roman
- Number of Pages: No more than five (5) (excluding the cover page, references, and Key Personnel Biographical Information addendum see White Paper Content Requirement section for details)
- All files and forms must be compiled into a single MS Word or PDF file

#### White Paper Content Requirements:

- Cover Page: Include all the information listed below.
  - o ARI FSRU FOA W911NF-25-S-0006 White Paper
  - o Title
  - PI Name/Co-PI Name(s)
  - $\circ$  Institution
  - o Email Address of PI
  - Telephone Number of PI
  - Primary Research Topic Area of Interest
  - Secondary Research Topic Area of Interest (if applicable)
  - Keywords- up to 5 key words / phrases
  - Proposed Cost
  - Intention to seek Early Career or Short-Term Innovative Research Award
- Technical Approach: A detailed discussion of the effort's scientific research objectives, approach, level of effort, and estimated total cost; include the nature and extent of the anticipated results, and if known, the manner in which the work will contribute to the accomplishment of the ARI's mission.
- Requests for Government Support: The type of support, if any that the applicant requests of the Government (such as facilities, equipment, demonstration sites, test ranges, software, personnel, or materials) shall be identified as Government Furnished Equipment (GFE), Government Furnished Information (GFI), Government Furnished Property (GFP), or Government Furnished Data (GFD). Applicant shall indicate any Government coordination that may be required for obtaining equipment or facilities necessary to perform any simulations or exercises that would demonstrate the proposed capability.
- Key Personnel Biographical Information: As an addendum to the white paper, the applicant must include a biographical sketch (up to one page per individual) of all key personnel (i.e., Principal Investigators and Co-Principal Investigators) who will perform the research, highlighting their qualifications and experience.

#### **RESTRICTIVE MARKINGS ON WHITE PAPERS:**

- 1. The applicant must identify any proprietary data the applicant intends to be used only by the Government. The applicant must also identify any technical data or computer software contained in the white paper that is to be treated by the Government as limited rights or restricted rights respectively. In the absence of such identification, the Government will assume to have unlimited rights to all technical data or computer software presented in the white paper. Records or data bearing a restrictive legend may be included in the white paper but must be clearly marked. It is the intent of the Army to treat all white papers as procurement sensitive information before the award and to disclose their contents only to Government related activities only. Classified, sensitive, or critical information on technologies should not be included in a white paper.
- 2. An applicant is cautioned that portions of a white paper may be subject to release under terms of the Freedom of Information Act, 5 U.S.C. 552, as amended.

# NOTE: White papers which fail to follow all requirements (format and content) as stated will not be reviewed and no evaluation will be provided.

#### Section 4 – White Paper Submission

1. A white paper describing the proposed effort may be submitted to Dr. Kimberly Wingert, <u>kimberly.m.wingert.civ@army.mil</u>, and must include the details below.

E-mail subject line: ARI FSRU FOA W911NF-25-S-0006 White Paper

Body of the e-mail:

Primary Research Topic Area of Interest:

Secondary Research Topic Area of Interest (if applicable):

Keywords- up to 5 key words / phrases

Proposed Cost:

Proposed Period of Performance:

Intention to seek Early Career or Short-Term Innovative Research Award (if applicable)

Email Address:

Telephone Number:

2. An applicant preparing a white paper for submission may follow any convenient format desired as long as the submission complies with guidance above in Section 3, "White Paper Preparation".

#### Note: Please submit white papers <u>no later than 5:00 PM/1700 Eastern</u> Standard Time (EST) on 9 March 2025

# White papers submitted later than this date are not guaranteed a review or response.

#### Section 5 – White Paper Review

ARI will receive and consider all white papers submitted by the deadline and will provide a response with either "encouraged to submit a proposal" or "not encouraged to submit a proposal."

#### Section 6 - Preparation of Proposals

#### PROPOSAL PREPARATION INSTRUCTIONS:

<u>General Information</u>: The proposal is the only vehicle available to the applicant for receiving consideration for award. The proposal must stand on its own merit; only information provided in the proposal can be used in the evaluation process leading to an award. The proposal should be prepared simply and economically, providing straightforward, concise delineation of capabilities necessary to perform the proposed work. The technical volume must be accompanied by a fully supported cost volume as cost and technical considerations are reviewed simultaneously; the cost volume should assume a start date of no earlier than 6 months after proposal submission. In preparing proposals, it is important that the applicant keep in mind the characteristics of a proposal acceptable for evaluation. A proposal must include all the information specified in this announcement in order to receive consideration. All proposals must include:

- 1. An Abstract, Background, Application Potential, Technical Approach, Reference List, Curriculum Vitae/Resumes of proposed researchers, and cost information section, as described below.
- 2. Contact information, such as e-mail addresses and telephone numbers, for both the Principal Investigator and the Institutional Representative to allow technical and contracting questions to be addressed.
- 3. Institutional endorsement, signature of the proposed Principal Investigator, timeframes for all phases of the project, detailed accounts of the proposed work, and cost by task.
- 4. Provide the name, address, and phone number of the applicant's cognizant Defense Contract Audit Agency (DCAA) office, if known. All applicants must be registered in the System for Award Management (SAM) before an award can be made. Applicants must also provide their Unique Entity Identifier (UEI; formerly Dun and Bradstreet Data Universal Numbering System (DUNS)).

Proposals should be very well written, and the applicant's intention should be clear to technical reviewers who, while having expertise in behavioral sciences, may lack concentrated knowledge in the proposed domain. Proposals should be sufficiently detailed to be responsive to the criteria, described below, for evaluation.

<u>Proposal Format and Content</u>: To ensure all proposals receive proper consideration, the Government-recommended proposal format shown below (Volume I Technical) should be followed. This format can most easily be incorporated as the proposal table of contents and serves as a final checklist as well. **Proposals must address at least one of the four (4) domains for basic research cited in SECTION II. A of this FOA.** 

Proposal documents (excluding illustrations, tables, and required forms) must use the following page format:

- Page size: 8.5 x 11 inch
- Margins: 1 inch
- Spacing: Single-spaced
- Font: 12-point Times New Roman
- Number of Pages: No more than twenty-five (25) (excluding the cover page, table of contents, proposal reference list, curriculum vitae, cost information and institutional information sections)

# NOTE: Proposals which fail to follow all requirements (format and content) as stated will not be reviewed and no evaluation will be provided.

## **VOLUME I – TECHNICAL**

- i Cover Page
- ii Table of Contents
- iii Abstract
- 1. Background
- 2. Application Potential
- 3. Technical Approach
- 4. Reference List
- 5. Curriculum Vitae/Resumes of Key Personnel
- i. Cover Page: A cover page is required. Proposals will not be processed without either:
  - A SF 424 R&R Form (required for assistance agreement proposals submitted online via Grants.gov (see Section 6 – Submission of Complete Research Proposals)

The cover page should include the FOA number, Research Area(s) of Interest (Domains 1-4), name and telephone number for the principal points of contact (both technical and contractual), proposed project title, and any other information that identifies the proposal. The cover page should also contain the proprietary data disclosure statement, if applicable (ARO FORM 52 or 52A). The title of the proposed project should be brief, scientifically representative, intelligible to a scientifically literate reader, and suitable for use in the public domain. Should the project be carried out at a branch campus or other component of the submitting organization, that branch campus or component should be identified in the space provided (Block 12 on the SF 424 R&R).

The proposed duration for which support is requested should be consistent with the nature and complexity of the proposed activity and associated budget. The Federal awarding agency reserves the right to make awards with shorter or longer periods of performance. Specification of a desired starting date for the project is important and helpful. However, requested effective dates cannot be guaranteed.

Pursuant to 31 U.S.C. 7701, as amended by the Debt Collection Improvement Act of 1996 [Section 31001(I)(1), Public Law 104-134] and implemented by 32 CFR 22.420(d), federal agencies shall obtain each awardees' Taxpayer Identification Number (TIN). The TIN is being obtained for purposes of collecting and reporting on any delinquent amounts that may arise out of an awardees' relationship with the Government.

Applicants must provide their organization's Unique Entity Identifier (UEI; formerly Data Universal Number System (DUNS)). See Section II.D.3 of this FOA for requirements pertaining to the Unique Entity Identifier.

Applicants must provide their assigned Commercial and Government Entity (CAGE) code. The CAGE code is a 5-character code assigned and maintained by the Defense Logistics Service Center (DLSC) to identify a commercial plant or establishment.

- **ii. Table of Contents:** It is highly recommended that the applicant follow the above table of contents (Volume I, "Technical") and use it for a final quality-control checklist.
- iii. Abstract: The abstract allows the applicant to present briefly and concisely the important aspects of its proposal. It should summarize the proposed research objectives, expectations, and the basic approaches to be used in the proposed effort. The abstract <u>must</u> identify implications for applied research if the project is successful. The abstract should be 250 words or less. Abstracts longer than 250 words will not be read.

On the abstract page, include 5 keywords / key phrases that best describe the proposed research. To facilitate reviewer assignment, consider addressing methodical, analytical, or other aspects of the proposed research for which specialized expertise would be useful. The keywords do not count toward the 250-word abstract limit.

- 1. **Background:** This section should describe the research problem, discuss relevant theory, and summarize existing research. It is important that the proposal identify specific, relevant hypotheses following discussion of theory. When integrating theories or research domains, an overarching framework supporting such integration should be described. When appropriate, a graphic depiction of the conceptual model and hypotheses may be provided.
- 2. Application Potential: While research funded under this FOA must be basic research (see DoD FMR 7000.14-R, Volume 2B, Chapter 5), it should be relevant to the Army mission, and ideally would be considered use-inspired basic research.

The basic research proposal should describe how possible results may support research that would be meaningful to the Army. An applicant should reference the most relevant sections of the FOA and link these sections to the proposed effort. An applicant may incorporate a separate section titled Application Potential or Army Relevance to highlight these connections or include this information within the Background section.

3. Technical Approach: The technical approach should follow and expand upon the background section and provide a detailed description of the proposed research. This account should be much like the methods section of a research paper. The technical approach should include a description of the data to be collected, the methods for collecting the data, the number (e.g., using power analysis) and source of participants, and how they will be acquired, the research design, the measures to be used, and the analysis plan. Proposals for secondary research (e.g., meta-analyses) should provide estimates of the likely number of primary studies and/or effects available in the research literature for analysis. If the intermediate or final product of research will include training packages, simulation models, or other software-based devices, the proposal should relate the product to the research hypotheses and provide sufficient detail to permit understanding and evaluation.

The technical approach should detail and set a schedule for the major tasks to be performed and products to be produced. In the case of a one-year proposal, the research plan should be divided by quarters of the year. In the case of multi-year proposals, it should be divided semi-annually or by major tasks within a year. The technical approach should specifically identify what tasks will be performed by which party and why each subcontractor, if any, was selected to perform its task(s).

- 4. **Reference List:** All cited references must be listed. Do not include publications that are not referenced. The references list must be in American Psychological Association format, APA 7th Edition.
- 5. Curriculum Vitae/Resumes of Key Personnel: Curriculum vitae or résumés should be included for all proposed researchers with special emphasis on the Principal Investigator, Co- Principal Investigator(s), and Consultants; documents are limited to five (5) pages per investigator to include name, a brief biography, and a list of recent, relevant publications.

#### **VOLUME II – COST**

The cost volume must estimate the total cost broken down by month for the duration of the basic research proposal; the cost proposal should assume a start date of no earlier than six months after proposal submission. The cost volume must also list the number of personnel hours, per year and the total amount for the life of the award, broken out by personnel type (e.g., senior scientist, full associate or assistant professor, post doc, research associate, graduate or undergraduate student, information technology personnel, administrative personnel, etc.), and the rate per hour for each such category. The cost volume must justify the need for identified personnel. The cost volume must identify and describe miscellaneous expenses. All Applicants should budget one trip by

PI and key personnel for a kick-off meeting and a project close-out meeting. For multiyear efforts, one trip per year should be budgeted to present the progress of the proposed research. Applicants who are outside the Washington, DC area should plan for these trips to occur at the ARI offices in Ft. Belvoir, VA.

The cost volume shall justify the need for and amount of major direct expense categories, including (but not limited to) equipment, travel, and participant recruitment costs. The cost estimate for the proposed effort should sufficiently detail elements of cost and the need for these items to allow for meaningful evaluation. The cost volume should clearly align with the planned methodology presented in the technical approach section. A cost estimate should be detailed for each task of the proposed work and should include the following:

- a. A complete detail of direct labor to include, by discipline, labor hours and rates
- b. Fringe benefits rate and base
- c. An itemized list of equipment showing the cost of each item and justification for inclusion
- d. Description and cost of expendable supplies
- e. Complete detail of travel to include number of people and duration of travel, reason/need for travel, destination, airfare, per diem, rental car, etc. Note that in recent years, travel costs for one conference per year to present work from the funded research effort has been a typical request. Include one trip per project year for key personnel to Ft. Belvoir, VA for kick-off meeting, in-progress reviews, and project close-out.
- f. Complete detail of any subawards to include labor categories, skill levels, and labor rates and hours
- g. Other direct costs (reproduction, computer, etc.)
- h. Indirect cost rates and bases with an indication whether rates are fixed or provisional and the time frame to which they are applied
- i. Fee is not allowed on grants or cooperative agreements
- j. Any documentation which supports all items above
- k. Applicants should furnish the name and telephone number of their cognizant audit agency

#### COST PROPOSAL PREPARATION:

- 1. Grants and Cooperative Agreement awards will be cost reimbursable without profit or fee.
- 2. <u>Cost Proposal Content</u>: A proposal should represent an applicant's best response to the solicitation, including cost information. Any inconsistency, whether real or apparent, between promised performance and cost or price data must be fully explained in the proposal. Failure to explain any significant inconsistencies may demonstrate an applicant's lack of understanding of the nature and scope of the work

required. Accordingly, the cost volume must be sufficient to establish the reasonableness, realism, and completeness of the proposed cost/price. Further, any modifications made to the initial proposal resulting in a change in the cost volume must likewise be thoroughly supported in writing regardless of whether such changes are made during negotiations or at the time of a proposal revision. The estimate should be detailed for each task of the proposed work. The cost volume should be limited to the minimum number of pages necessary to satisfy the specific requirements set forth herein. Submission of volumes of computer-generated data to support the cost volume is not necessary or desired. If computer-generated data is essential to support the cost volume, it may be submitted as an addendum and must be clearly cross-referenced to the material it supports in the cost volume.

Each proposal must contain a budget for each year of support requested and a cumulative budget for the full term of requested support. The ARO budget form (ARO FORM 99) may be reproduced as needed. Locally produced versions may be used, but you may not make substitutions in prescribed budget categories nor alter or rearrange the cost categories as they appear on the form. The proposal may list funds under any of the categories listed so long as the item is considered necessary to perform the proposed work and is not precluded by applicable cost principles. In addition to the forms, the budget should include no more than five (5) pages of budget justification narrative for each year.

A signed summary budget page must be included. The documentation pages should be titled "Budget Explanation Page" and numbered chronologically starting with the budget form. The need for each cost element should be explained clearly.

All cost data must be current and complete. Costs proposed must conform to the following principles and procedures.

Before award it must be established that an approved accounting system and financial management system exist for an applicant.

The following specific information is required:

- 1. Summary by cost element
- 2. Labor summary for total proposal by labor categories, proposed hours per labor category, and hourly rates per labor category
- 3. Explanation of how labor rates are computed including base rates (actuals), fringe, and escalation, if any
- 4. Interdivisional transfers (detailed breakout of costs), if applicable
- 5. Identification of indirect rates by fiscal year and explanation of how established and base to which they apply
- 6. Bill of materials detailing items by type, quantity, unit price, total amount, and source of estimate (provide vendor written quotes)
- 7. Summary of all travel by destination, purpose, number of people and days, air fare, per diem, car rental, etc.
- 8. Consultant(s) by name, hourly rate, and number of hours (furnish copy of

consulting agreement and identify prior agreement(s) under which the consultant commanded proposed rate)

- 9. Computer use by type, rate, and quantity
- 10. Other direct costs by type, amount, cost per unit, and purpose (specifically identify any costs for printing orpublication)
- 11. Forecast of monthly and cumulative dollar commitments for the proposed performance period
- 12. Sub-awardee's proposal, with prime applicant's price/cost analysis of subawardee's proposal (if subaward was not competed, includejustification)

<u>Sub-awardee Cost Proposals</u>: Sub-awardees' cost proposals must be similarly structured. All sub-awarded work must be properly identified as such. If a sub-awardee elects to submit an abbreviated proposal to an applicant, it is the applicant's responsibility to see that the sub-awardee simultaneously submits a complete detailed proposal properly identified directly to the Government Contracting or Grants Officer. An applicant's proposal must:

- 1. Identify principal items/services to be sub-awarded
- 2. Identify prospective sub-awardees and the basis on which they were selected (if non- competitive, provide selected source justification)
- 3. Identify the type of contractual arrangement contemplated for each subaward and the rationale for the same
- 4. Identify the cost or pricing data or information other than cost or pricing data submitted by each sub-awardee
- 5. Provide an analysis concerning the reasonableness, realism, and completeness of each sub-awardee's proposal; if the analysis is based on a comparison with prior research efforts, identify the basis on which the prior costs or prices were determined to be reasonable

#### Section 7. Conference and Symposia Grants

- A. Introduction. The Army supports conferences and symposia (as defined in the DoD Travel Regulations) in areas of science that bring experts together to discuss recent research or educational findings or to expose other researchers or advanced graduate students to new research and educational techniques. The Army encourages the convening in the United States of major international conferences, symposia, and assemblies of international alliances.
- B. Eligibility. Notwithstanding the Army's authority to provide grant support for such events, only non-commercial scientific, technical, or professional organizations that qualify for tax exemption may receive a conference/symposia grant. Those who meet this requirement should also be aware that the DoD does not permit "co-sponsorship" (as defined in DoD 5500.07-R) absent additional high-level staffing and approval. In other words, the conference grant support identified in this FOA is NOT DoD sponsorship or co-sponsorship since ARI is neither an organizer, nor

provider, of any substantial logistical support for the conferences addressed in this section.

- C. Conference Support. Conference support proposals should be submitted a minimum of six (6) months prior to the date of the conference. It is anticipated that support for conferences and symposia may take multiple forms including financial support for the meeting, travel support for speakers, or travel support to allow attendance and participation by advanced graduate students and junior faculty.
- D. Technical Proposal Preparation. The technical portion of a proposal for support of a conference or symposium should include:
  - (1) A one page or less summary indicating the objectives of the project,
  - (2) The topics to be covered,
  - (3) The location, probable date(s), and why the conference is considered appropriate at the time specified,
  - (4) An explanation of how the conference and requested support will relate to the research interests of the Army as identified in Section A of this FOA and how it will contribute to the enhancement and improvement of scientific, engineering, and/or education in general and activities as outlined earlier in the research areas of this FOA,
  - (5) The name of chairperson(s)/PI(s) and their biographical information,
  - (6) If applicable, a list of proposed participants,
  - (7) The methods of announcement or invitation,
  - (8) A summary of how the results of the meeting will be disseminated, and
  - (9) A signed cover page.
- E. Cost Proposal Preparation. The cost portion of the proposal should show:
  - (1) Total projected conference costs by major cost elements,
  - (2) Anticipated sources of conference income and amount from each,
  - (3) Anticipated use of funds requested.
- F. Support for Federal Employee Attendance. Funds provided cannot be used for payment to any federal government employee for support, subsistence, or services in connection with the proposed conference or symposium.
- G. Cognizant POC. It is highly recommended that potential applicants contact the appropriate POC identified earlier in the research areas of this FOA for advice and assistance before preparation of a conference/symposia proposal.

#### Section 8 – Submission of Proposals

Proposals must be submitted through the applicant's organizational office having
responsibility for Government business relations. The proposal must contain the signature of an authorized official. All signatures must be that of an official(s) authorized to commit the organization in business and financial affairs. The cover of the proposal should be marked with the FOA Solicitation Number W911NF-25-S-0006 along with the name of the basic research scientific area(s) of interest (see Section II. A of this FOA). Applicants are requested to provide their e-mail addresses upon submission of a proposal and also the name, address, and telephone number of their cognizant Defense Contract Audit Agency (DCAA) office, if known.

# Proposals for Grants or Cooperative Agreements (assistance) MUST be submitted online via <u>Grants.gov</u>. Further, a copy of any proposal submitted must also be furnished to Dr. Kimberly Wingert, kimberly.m.wingert.civ@army.mil

#### GRANT AND COOPERATIVE AGREEMENT PROPOSAL SUBMISSION:

- (1) Proposals must be submitted via Grants.gov.
- (2) Grants.gov Registration must be accomplished prior to application submission in Grants.gov.

Each organization that desires to submit applications via Grants.Gov must complete a one-time registration. There are several one-time actions your organization must complete in order to submit applications through Grants.gov (e.g., obtain a Unique Entity Identifier, register with the SAM, register with the credential provider, register with Grants.gov and obtain approval for an authorized organization representative (AOR) to submit applications on behalf of the organization). To register please see <a href="https://www.grants.gov/register">https://www.grants.gov/register</a>

Please note the registration process for an Organization or an Individual can take between three to five business days or as long as four weeks if all steps are not completed in a timely manner.

Questions relating to the registration process, system requirements, how an application form works, or the submittal process should be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

NOTE: All web links referenced in this section are subject to change by Grants.gov and may not be updated here.

(3) Specific forms are required for submission of a proposal. The forms are contained in the Application Package available at <u>http://www.grants.gov</u> under the specific opportunity you are submitting under. When viewing an opportunity, select the "Package" tab and then select "View." A Grant Application Package and Application Instructions are available for this FOA through the Grants.gov Apply portal under CFDA Number 12.431/Funding Opportunity Number W911NF-25-S-0006. To apply, select "Apply" and then "Apply Now Using Workspace."

\*NOTE: Effective 31 December 2017, applicants must apply online at

Grants.gov using the application Workspace. For access to complete instructions on how to apply for opportunities using Workspace, refer to <u>https://www.grants.gov/applicants/workspace-overview</u>.

The following documents are <u>mandatory</u>: the (1) Application for Federal Assistance (R&R; SF 424 (R&R)), and (4) Attachments form.

- (4) The SF 424 (R&R) form is to be used as the cover page for all proposals submitted via Grants.gov. The SF 424 (R&R) must be fully completed. AOR usernames and passwords serve as "electronic signatures" when your organization submits applications through Grants.gov. By using the SF 424 (R&R), proposers are providing the certification required by 32 CFR Part 28 regarding lobbying (see Section II.F.2.a.ii of this FOA). Block 11, "Descriptive Title of Applicant's Project," must reference the research topic area being addressed in the effort by identifying the specific paragraph from Section II.A of this FOA.
- (5) The Attachments form must contain the documents outlined in Section II.D.2.e.ii entitled "Table of Contents". All documents must be combined into separate and single PDF formatted files using the Table of Contents names. Include "W911NF-25-S-0006" in the title so the proposal will be distinguished from other FOA submissions, and upload each document to the mandatory Attachments form.
- (6) The applicant must include with its proposal submission the representations required by Section II.F.2.a.ii of this FOA. The representations must include applicant POC information and be signed by an authorized representative. Attach the representations document to an available field within the Attachments form. Note: If the applicant's online SAM Representations and Certifications include its response to the representations, a hard copy representation is not required with proposal submission.
- (7) The Grants.gov User Guide at:

<u>https://www.grants.gov/help/html/help/index.htm</u> will assist AORs in the application process. Remember that you must open and complete the Application for Federal Assistance (R&R; SF 424 (R&R)) first, as this form will automatically populate data fields in other forms. If you encounter any problems, contact customer support at 1-800-518-4726 or at support@grants.gov. If you forget your user name or password, follow the instructions provided in the Credential Provider tutorial. Tutorials may be printed by right-clicking on the tutorial and selecting "Print".

(8) As it is possible for Grants.gov to reject the proposal during this process, it is strongly recommended that proposals be uploaded at least two days before any established deadline in the FOA so that they will not be received late and be ineligible for award consideration. It is also recommended to start uploading proposals at least two days before the deadline to plan ahead for any potential technical and/or input problems involving the applicant's own equipment.

(9) Please also email a courtesy copy of the grant proposal to kimberly.m.wingert.civ@army.mil.

# <u>Section 9 – Unique Entity Identifier and System for Award Management (SAM)</u>

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 System for Award Management (SAM) at <u>https://www.sam.gov</u> prior to submitting its application; (ii) provide a valid UEI 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 UEI (<u>https://www.gsa.gov/about-us/organization/federal-acquisition-service/fasinitiatives/integrated-award-environment/iae-systems-information-kit/unique-entityidentifier-update) and SAM requirements.</u>

# 3. Submission Dates and Times

White paper submissions must be received by: 5:00 PM/1700 Eastern Standard Time (EST) on 9 March 2025

Proposal submissions must be received by: 5:00 PM/1700 Eastern Daylight Time (EDT) on 1 July 2025

# **Response Dates (Questions):**

General questions regarding white papers must be submitted in writing to Dr. Kimberly Wingert, <u>kimberly.m.wingert.civ@army.mil</u>. Questions about a specific research topic area must be submitted in writing to the listed technical POC. All questions regarding white papers must be submitted by: **5:00 PM/1700 Eastern Standard Time (EST) on 23 February 2025.** 

General questions regarding proposals must be submitted in writing to Dr. Kimberly Wingert, <u>kimberly.m.wingert.civ@army.mil</u>. Questions about a specific research topic area must be submitted in writing to the listed technical POC. All questions regarding proposals must be submitted by: **5:00 PM/1700 Eastern Daylight Time (EDT) on 15 June 2025** 

It is the applicant's responsibility to assure that a white paper or proposal submission is received by the respective date and time specified above. If your white paper or proposal submission is not received at the initial point of entry to the Government (received through web-based system, e-mail or post-marked if applicable) by the exact date and time specified above, it will be determined late and will not be evaluated. The submission of a courtesy copy of a proposal does not fulfill the timeliness requirement.

Grants.gov: After a proposal is submitted to Grants.gov, the AOR will receive a series

of three emails from Grants.gov. The first two emails will be received within 24 to 48 hours after submission. The first email will confirm time of receipt of the proposal by the Grants.gov system and the second will indicate that the proposal has either been successfully validated by the system prior to transmission to the grantor agency or has been rejected due to errors. A third email will be received once the grantor agency has confirmed receipt of the proposal. Reference the Grants.gov User Guide at <u>https://www.grants.gov/help/html/help/index.htm</u> for information on how to track your application package.

# For the purposes of this FOA, an applicant's proposal is not considered received by ARI until the AOR receives email #3.

# 4. Intergovernmental Review:

Not Applicable

# 5. Funding Restrictions:

There are no funding restrictions associated with this FOA.

# 6. Other Submission Requirements:

Information to be Requested from Successful Applicants: Applicants whose proposals are accepted for funding may be contacted before award to provide additional information required for award. The required information is normally limited to clarifying budget explanations, representations, certifications, and some technical aspects.

(End of Section)

### **E. APPLICATION REVIEWINFORMATION:**

# 1. Criteria: Proposals will initially be evaluated as to whether they constitute basic or applied research. Proposals deemed applied research will not be considered further.

Basic research is efforts directed toward increasing knowledge and understanding in science and engineering, rather than the practical application of that knowledge and understanding. It typically is funded within Basic Research Budget Activity 1 and Research Category 6.1. Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific application of processes or products in mind, whereas applied research provides a systematic expansion and application of knowledge to design and develop useful strategies, techniques, methods, tests, technologies, or measures that provide the means to meet a recognized and specific Army need.

Proposals for basic research received in response to this FOA will be evaluated by scientific peers internal and external to the Army using the factors/criteria listed below. ARI may solicit input on technical aspects of proposals from non-Government consultants/experts who are strictly bound by non-disclosure requirements.

Of the criteria listed below, factor/criterion (a) is most important; the other factors/criteria are of equal importance to one another. All evaluation factors/criteria, other than cost, when combined, are significantly more important than cost or price. Proposals with severe deficiency on any factor will not be considered for funding. The evaluation factors are:

- a. Scientific and Technical Merit. Addresses technical soundness of the proposed work and the quality of the science. While the Basic Research Program seeks cutting-edge research, there will be an evaluation of risk-mitigation strategies and support from the extant scientific literature for proposed methods, particularly for approaches that deviate from other work in the area. Enough detail must be provided for accurate evaluation, particularly for the earliest one to two years of a multi-year award.
- b. Impact. Addresses the potential scientific significance and impact on ARI's Basic Research program's mission and stated research interests as well as to current and projected Army needs. Evaluation will consider the potential for leap ahead gains. Evaluation will look for explicit connection to the section, "Basic Research Topic Areas of Interest," in this document. Of highest import is connection and contribution to the stated primary objectives.
- c. **Qualifications.** Addresses the qualifications, capabilities, and experience of the proposed research team of principal investigator and key personnel. Lower levels of PI experience will not negatively affect Early Career proposals. Evaluation will also consider institutional resources and potential to support

award administration and proposed work.

d. **Cost.** Addresses the level of support requested. Will be considered for realism, affordability, and appropriateness, and may be grounds for rejection independent of evaluation on other factors.

**Review and Selection Process:** 

- a. All proposals are treated as privileged information prior to award and the contents are disclosed to Government employees or designated support contractors only for the purpose of evaluation. The applicant must indicate on the appropriate proposal form (ARO Form 52 or 52A) any limitation to be placed on disclosure of information contained in the proposal to non-Government evaluators.
- b. Each proposal will be evaluated based on the evaluation criteria in Section II.E.1 of this FOA rather than against other proposals for research in the same general area. Each evaluated proposal will receive a recommendation of "select" or "do not select" as supported by the evaluation.

#### 2. Recipient Qualification

- a. Grant, Cooperative Agreement:
  - i. The Grants Officer is responsible for determining a recipient's qualification prior to award. In general, a Grants Officer will award grants or cooperative agreements only to qualified recipients that meet the standards in 32 CFR 22.415. To be qualified, a potential recipient must:
    - Have the management capability and adequate financial and technical resources, given those that would be made available through the grant or cooperative agreement, to execute the program of activities envisioned under the grant or cooperative agreement;
    - (2) Have a satisfactory record of executing such programs or activities (if a prior recipient of an award);
    - (3) Have a satisfactory record of integrity and business ethics; and
    - (4) Be otherwise qualified and eligible to receive a grant or cooperative agreement under applicable laws and regulations.

Applicants are requested to provide information with proposal submissions to assist the Grants Officer's evaluation of recipient qualification.

ii. In accordance with Office of Management and Budget (OMB) guidance

in parts 180 and 200 of Title 2, CFR, it is DoD policy that DoD Components must report and use integrity and performance information in the Federal Awardee Performance and Integrity Information System (FAPIIS), or any successor system designated by OMB, concerning grants, cooperative agreements, and OTs for research as follows: If the total Federal share will be greater than the simplified acquisition threshold on any Federal award under a notice of funding opportunity (see 2 CFR 200.88 Simplified Acquisition Threshold):

- The Federal awarding agency, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, will review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS) (see 41 U.S.C. 2313);
- (2) An applicant, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM;
- (3) The Federal awarding agency will consider any comments by the applicant, in addition to the other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by applicants as described in 2 CFR 200.205 Federal awarding agency review of risk posed by applicants.

(End of Section)

# F. AWARD ADMINISTRATION INFORMATION:

#### 1. Award Notices

Applicants whose proposals are recommended for award may be contacted by a Grant Specialist to discuss additional information required for award. This may include representations and certifications, revised budgets or budget explanations, certificate of current cost or pricing data, sub-awarding plan for small businesses, and/or other information as applicable to the proposed award. The anticipated start date will be determined at that time.

The notification email is not an authorization to commit or expend funds. The Government is not obligated to provide any funding until a Government Contracting/ Grants Officer signs the award document.

The award document signed by the Government Grants Officer is the official and authorizing award instrument. The authorizing award instrument, signed by the Grants Officer, will be emailed to the PI and AOR.

#### 2. Administrative and National Policy Requirements

#### a. Required Representations and Certifications:

i. Grant and Cooperative Agreement Proposals:

 Grant awards greater than \$100,000 require a certification of compliance with a national policy mandate concerning lobbying. Statutes and Government-wide regulations require the certification to be submitted prior to award. When submitting your grant through Grants.gov, by completing blocks 18 and 19 of the SF 424 (R&R) Form, the grant applicant is providing the certification on lobbying required by 32 CFR Part 28; otherwise, a copy signed by the AOR must be provided. Below is the required certification:

CERTIFICATION AT APPENDIX A TO 32 CFR PART 28 REGARDING LOBBYING: Certification for Contracts, Grants, Loans, and Cooperative Agreements. The undersigned certifies, to the best of his or her knowledge and belief, that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- (b) 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 this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit SF-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(2) In accordance with Section 743 of P.L. 113-235, 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 REQUIRE 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 subrecipients seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting those employees, contractors, subrecipients 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.

(3) Recipients are required to submit the following representation with the application package IAW the instructions at Section II.D.2.f.ii of this FOA:

# 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 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 2021) 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 <a href="https://www.onr.navy.mil/en/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions">https://www.onr.navy.mil/en/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions</a> for additional national policy requirements that may apply.

## i. PROTECTION OF HUMAN SUBJECTS

- (1) For Assistance Instruments:
  - (a) The recipient must protect the rights and welfare of individuals who participate as human subjects in research under this award and comply fully with the requirements at 32 CFR part 219, Department of Defense Instruction (DoDI) 3216.02, 10 U.S.C. 980, the National Policy Requirements Concerning Live Organisms Terms and Conditions (Section A.1., Human Subjects, at 81 Federal Register 78380, Appendix C to Part 1122), and when applicable, Food and Drug Administration (FDA) policies and regulations.
  - (b) The recipient must not begin performance of research involving human subjects, also known as human subjects research (HSR), that is covered under 32 CFR part 219, or that meets exemption criteria under 32 CFR 219.104(d), or expend funding on such effort, until the recipient receives a formal notification of approval from the cognizant DoD Human Research Protection Official (HRPO). Approval to perform HSR under this award is received after the HRPO has performed a review of the recipient's documentation of planned HSR activities and has officially furnished a concurrence with the recipient's determination as presented in the documentation.
  - (c) In order for the HRPO to accomplish this concurrence review, the recipient must provide sufficient documentation to enable his or her assessment as follows:

- i. If the HSR meets one or more exemption criteria under 32 CFR 219.104(d), the documentation must include a citation of the exemption category/ies under 32 CFR 219.104(d) and a rationale statement.
- ii. If the recipient's activity is determined as "non-exempt research involving human subjects," the documentation must include:
  - a) Documentation of Assurance of Compliance (a written assurance that an institution will comply with requirements of 32 CFR Part 219, as well as the terms of the assurance) appropriate for the scope of work or program plan; and
  - b) Institutional Review Board (IRB) approval, as well as all documentation reviewed by the IRB to make their determination.
- (d) The HRPO retains final judgment on what activities constitute HSR, whether an exempt category applies, whether the risk determination is appropriate, and whether the planned HSR activities comply with the requirements in paragraph (a) of this section.
- (e) The recipient must notify the Grants Officer/Agreements Officer immediately of any suspensions or terminations of the Assurance of Compliance.
- (f) DoD staff, consultants, and advisory groups may independently review and inspect the recipient's research and research procedures involving human subjects and, based on such findings, DoD may prohibit research that presents unacceptable hazards or otherwise fails to comply with DoD requirements.
- (g) Definitions for terms used in this section are found in DoDI 3216.02.

The Army Research Institute HRPO is:

Dr. Erica Michael, Senior Research Psychologist U.S. Army Research Institute 6000 6th Street Fort Belvoir, VA 22060-5586 (703) 545-9590, erica.b.michael.civ@army.mil

#### ii. ANIMAL USE

- (1) Assistance Instruments:
  - (a) Prior to initiating any animal work under the award, the recipient must:
    - (i) Register the recipient's research, development, test, and evaluation or training facility with the Secretary of Agriculture

in accordance with 7 U.S.C. 2136 and 9 CFR section 2.30, unless otherwise exempt from this requirement by meeting the conditions in 7 U.S.C. 2136 and 9 CFR parts 1-4 for the duration of the activity.

- (ii) Have the recipient's proposed animal use approved in accordance with DoDI 3216.01, Use of Animals in DoD Programs by a DoD Component Headquarters Oversight Office.
- (iii)Furnish evidence of such registration and approval to the grants officer.
- (b) The recipient must make the animals on which the research is being conducted, and all premises, facilities, vehicles, equipment, and records that support animal care and use available during business hours and at other times mutually agreeable to the recipient, the United States Department of Agriculture Office of Animal and Plant Health Inspection Service (USDA/APHIS) representative, personnel representing the DoD component oversight offices, as well as the grants officer, to ascertain that the recipient is compliant with 7 U.S.C. 2131 et seq., 9 CFR parts 1-4, and DoDI 3216.01.
- (c) The recipient's care and use of animals must conform with the pertinent laws of the United States, regulations of the Department of Agriculture, and regulations, policies, and procedures of the DoD (see 7 U.S.C. 2131 et seq., 9 CFR parts 1-4, and DoDI 3216.01).
- (d) The recipient must acquire animals in accordance with DoDI 3216.01.

#### iii. BIOLOGICAL SAFETY PROGRAM REQUIREMENTS:

- (1) <u>Assistance Instruments</u>: Awards may be subject to biological safety program requirements IAW:
  - (a) Army Regulation (AR) 385-10, Chapter 20 https://armypubs.army.mil/epubs/DR\_pubs/DR\_a/pdf/web/ARN16777\_ ARN16343 AR385 10 FINAL.pdf
  - (b) Department of Army (DA) Pamphlet (PAM) 385-69 on safety standards for microbiological and biomedical laboratories. This pamphlet requires the mandatory use of the latest edition of the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) and National Institutes of Health's (NIH) Biosafety in Microbiological and Biomedical Laboratories (BMBL) https://armypubs.army.mil/epubs/DR pubs/DR a/pdf/web/p385 69.pdf

(c) DoD Manual 6055.18-M, Enclosure 4, Section 13 https://www.hsdl.org/?view&did=24365

#### iv. MILITARY RECRUITING:

- (1) <u>Assistance Instruments</u>: 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 subelement 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.

#### v. DRUG-FREE WORKPLACE:

 <u>Assistance Instruments</u>: The recipient must comply with drug-free workplace requirements in 32 CFR Part 26, which is the DoD implementation of 41 U.S.C. 701, "Drug-free workplace requirements for Federal contractors."

#### vi. DEBARMENT AND SUSPENSION:

(1) <u>Assistance Instruments</u>: 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 subawards that are implemented in DoD Research and Development General Terms and Conditions.

#### vii. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION:

- <u>Assistance Instruments</u>: The recipient must report information about subawards and executive compensation as specified in the award term in Appendix A to 2 CFR Part 170, "Reporting subaward and executive compensation information," modified as follows:
  - (a) To accommodate any future designation of a different Government wide Web site for reporting subaward information, the Web site "http://www.fsrs.gov" cited in paragraphs a.2.i. and a.3 of the award provision is replaced by the phrase "http://www.fsrs.gov or successor OMB-designated Web site for reporting subaward 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" cited in paragraph b.2.i. of the award provision is replaced by the phrase "https://www.sam.gov or successor OMB-designated Web site for reporting information on total compensation"

#### x. CONFLICT OF INTEREST/CONFLICT OF COMMITMENT REVIEW:

This announcement requires all current and pending research support, as defined by Section 223 of the FY21 National Defense Authorization Act, must be disclosed at the time of proposal submission, for all covered individuals. 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 funded project. Covered Individuals are those who are listed as key personnel on proposals, including but not restricted to, the principal investigator or co-principal investigator.

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 materials statement within the meaning of the False Claims Act, 31 U.S.C. 3729, and constitute a violation of Federal law.

ARI may conduct a pre-award conflict of interest/conflict of commitment review, as defined in the National Security Presidential Memorandum- 33, of any proposal selected for funding. Applicants are advised that any significant conflict of interest/conflict of commitment identified may be a basis for the rejection of an otherwise awardable proposal.

# 3. Reporting

a. Reporting requirements, including number and types, will be specified in the award document. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed upon before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. A final report that summarizes the project and tasks will be required at the conclusion of the performance period for the award.

*Reporting and Meeting Requirements*. In addition to other requirements that the award proposal may specify, all awards shall be held to the following reporting and meeting requirements:

- a. Kick-off meeting: A kick-off meeting will be scheduled within one (1) month of award; the kick-off meeting is anticipated to be held at Ft. Belvoir, VA.
- b. Quarterly Progress Reports: Brief letter-style quarterly reports will be filed with the Grants Officer's Representative (GOR), or Cooperative Agreement Manager (CAM) as applicable summarizing progress during the prior quarter, activities projected for the following quarter, challenges and difficulties encountered, status report on level of effort, grant funds expended during the prior quarter, cumulative funds remaining, anticipated expenses for the upcoming quarter, and bibliometric information.
- c. Annual Interim Progress Review Briefing: Meeting to be conducted once a year at Ft. Belvoir or other location on a date to be determined.
- d. Site Visit: At the discretion of the government, the GOR/CAM or other ARI representative may make a site visit to the location where research is being performed. Site visits will be coordinated and arranged with the Principal Investigator.
- e. Interim Progress Report(s): Interim reports will be required on a periodic basis for all multi-year awards. The proposed schedule of interim reports should conform to major tasks in the proposal.
- f. Annual Research Summary: Annual Research Summaries are due at the end of each fiscal year, unless otherwise specified, while the award is in force.

Formats for the written summary and briefing slides will be provided by ARI. A final annual research summary will be due in conjunction with the final report.

- g. Final Project Review Meeting: A project close-out meeting will be scheduled in the final quarter of the award to review results and conclusions of the research effort; the close-out meeting is anticipated to be held at Ft. Belvoir, VA.
- h. Final Technical Report: Draft report is due no later than 3 months prior to end of award.
- i. Journal Articles, Book Chapters, and Books: Copies of journal articles, book chapters, and books are requested simultaneous with final acceptance.
- j. Data and Associated Files: Cleaned, de-identified data files in SPSS, SAS, or comma- delimited text formats along with associated syntax and dictionary files shall be provided on CD, DVD, or other format deemed appropriate by GOR or CAM as appropriate with the final report.
- b. If the total Federal share exceeds \$500,000 on any Federal award under a notice of funding opportunity, the post-award reporting requirements reflected in Appendix XII to 2 CFR 200 will be included in the award document. This requirement also applies to modifications of awards that: 1) increase the scope of the award, 2) are issued on or after January 1, 2016, and 3) increase the federal share of the award's total value to an amount that exceeds \$500,000.

(End of Section)

# G. FEDERAL AWARD AGENCY CONTACTS:

Questions of a technical nature are to be directed to: ARI (FSRU) Point of Contact:

Dr. Kimberly Wingert, (703) 383-4867, kimberly.m.wingert.civ@army.mil

Questions of a business nature are to be directed to: ACC (APG) RTP Division Point of Contact:

Ms. Wilveria Sanders, (919) 549-4328, wilveria.a.sanders.civ@army.mil

Comments or questions submitted should be concise and to the point, eliminating any unnecessary verbiage. The e-mail subject line should cite "ARI FSRU FOA W911NF-25-S-0006." Additionally, the relevant part and paragraph of the Funding Opportunity Announcement (FOA) should be referenced.

(End of Section)

#### H. OTHER INFORMATION:

Below is a sample of the cost proposal informational requirements for a grant and cooperative agreement.

## <u>GRANT & COOPERATIVE AGREEMENT PROPOSALS (ASSISTANCE</u> <u>INSTRUMENTS</u>)

Before award, it must be established that an approved accounting system and financial management system exist.

- A) Direct Labor: Show the current and projected salary amounts in terms of manhours, man-months, or annual salary to be charged by the Principal Investigator(s), faculty, research associates, postdoctoral associates, graduate and undergraduate students, secretarial, clerical, and other technical personnel either by personnel or position. State the number of man-hours used to calculate a man-month or manyear. For proposals from universities, research during the academic term is deemed part of regular academic duties, not an extra function for which additional compensation or compensation at a higher rate is warranted. Consequently, academic term salaries shall not be augmented either in rate or in total amount for research performed during the academic term. Rates of compensation for research conducted during non-academic (summer) terms shall not exceed the rate for the academic terms. When part or all of a person's services are to be charged as project costs, it is expected that the person will be relieved of an equal part or all of his or her regular teaching or other obligations. For each person or position, provide the following information:
  - (1) The basis for the direct labor hours or percentage of effort (e.g., historical hours or estimates)
  - (2) The basis for the direct labor rates or salaries: Labor costs should be predicted upon current labor rates or salaries. These rates may be adjusted upward for forecast salary or wage cost-of-living increases that will occur during the agreement period. The cost proposal should separately identify the rationale applied to base salary/wage for cost-of-living adjustments and merit increases. Each must be fully explained.
  - (3) The portion of time to be devoted to the proposed research, divided between academic and non-academic (summer) terms, when applicable
  - (4) The total annual salary charged to the research project
  - (5) Any details that may affect the salary during the project, such as plans for leave and/or remuneration while on leave

Fringe Benefits and Indirect Costs (Overhead, General and Administrative, and Other): The most recent rates, dates of negotiation, and the base(s) and periods to

which the rates apply must be disclosed and a statement included identifying whether the proposed rates are provisional or fixed. If the rates have been negotiated by a Government agency, state when and by which agency. A copy of the negotiation memorandum should be provided. If negotiated forecast rates do not exist, applicants must provide sufficient detail to enable a determination to be made that the costs included in the forecast rate are allocable according to 2 CFR Part 200, applicable OMB Circulars, and/or FAR/DFARS provisions. Applicants' disclosure should be sufficient to permit a full understanding of the content of the rate(s) and how it was established. As a minimum, the submission should identify:

- (1) All individual cost elements included in the forecast rate(s);
- (2) Bases used to prorate indirect expenses to cost pools, ifany;
- (3) How the rate(s) were calculated;
- (4) Distribution basis of the developed rate(s);
- (5) Bases on which the overhead rate is calculated, such as "salaries and wages" or "total costs," and
- (6) The period of the applicant's fiscal year
- B) Permanent Equipment: If facilities or equipment are required, a justification for why this property should be furnished by the Government must be submitted. State the organization's inability or unwillingness to furnish the facilities or equipment. Applicants must provide an itemized list of permanent equipment showing the cost for each item. Permanent equipment is any article or tangible nonexpendable property having a useful life of more than one year and an acquisition cost of \$5,000.00 or more per unit. The basis for the cost of each item of permanent equipment included in the budget must be disclosed, such as:
  - (1) Vendor Quotes: Show name of vendor, number of quotes received and justification, if intended award is to other than lowest bidder
  - (2) Historical Cost: Identify vendor, date of purchase, and whether or not cost represents lowest bid; include reason(s) for not soliciting current quotes
  - (3) Engineering Estimate: Include rationale for quote and reason for not soliciting current quotes; if applicable, the following additional information shall be disclosed in the applicant's cost proposal:
    - Special test equipment to be fabricated by the awardee for specific research purposes and its cost
    - Standard equipment to be acquired and modified to meet specific requirements, including acquisition and modification costs, listed separately
    - Existing equipment to be modified to meet specific research requirements,

including modification costs; do not include equipment the organization will purchase with its funds if the equipment will be capitalized for Federal income tax purposes; proposed permanent equipment purchases during the final year of an award shall be limited and fully justified

- Grants and cooperative agreements may convey title to an institution for equipment purchased with project funds. At the discretion of the Grants Officer, the agreement may provide for retention of the title by the Government or may impose conditions governing the equipment conveyed to the organization. The Government will not convey title to commercial contractors.
- C) Travel: Forecasts of travel expenditures (domestic and foreign) that identify the destination and the various cost elements (airfare, mileage, per diem rates, etc.) must be submitted. The costs should be in sufficient detail to determine the reasonableness of such costs. Allowance for air travel normally will not exceed the cost of round-trip, economy air accommodations. Specify the type of travel and its relationship to the research project. Additional travel may be requested for travel to Army laboratories and facilities to enhance agreement objectives and to achieve technology transfer.
- D) Materials, Supplies, and Consumables: A general description and total estimated cost of expendable equipment and supplies are required. The basis for developing the cost estimate (vendor quotes, invoice prices, engineering estimate, purchase order history, etc.) must be included. If possible, provide a material list.
- E) Publication, Documentation, and Dissemination: The budget may request funds for the costs of preparing, publishing, or otherwise making available to others the findings and products of the work conducted under an agreement, including costs of reports, reprints, page charges, or other journal costs (except costs for prior or early publication); necessary illustrations, cleanup, documentation, storage, and indexing of data and databases; and development, documentation, and debugging of software.
- F) Consultant Costs: Applicants normally are expected to utilize the services of their own staff to the maximum extent possible in managing and performing the project's effort. If the need for consultant services is anticipated, the nature of proposed consultant services should be justified and included in the technical proposal narrative. The cost proposal should include the names of consultant(s), primary organizational affiliation, each individual's expertise, daily compensation rate, number of days of expected service, and estimated travel and per diem costs.
  - Computer Services: The cost of computer services, including computer-based retrieval of scientific, technical, and educational information, may be requested. A justification/explanation based on the established computer service rates at the proposing organization should be included. The budget also may request costs, which must be shown to be reasonable, for leasing automatic data processing equipment. The purchase of computers or associated hardware and software should be requested as items of equipment.

- II) Subawards (subgrants): A precise description of services or materials that are to be awarded by a subaward must be provided. For subawards totaling \$10,000.00 or more, provide the following specific information:
  - (1) A clear description of the work to be performed
  - (2) If known, the identification of the proposed subawardee and an explanation of why and how the subawardee was selected or will be selected
  - (3) The identification of the type of award to be used (cost reimbursement, fixed price, etc.)
  - (4) Whether or not the award will be competitive and, if noncompetitive, rationale to justify the absence of competition
  - (5) A detailed cost summary
- G) Other Direct Costs: Itemize and provide the basis for proposed costs for other anticipated direct costs such as communications, transportation, insurance, and rental of equipment other than computer related items. Unusual or expensive items shall be fully explained and justified.
- H) Profit/Fee: Profit/fee is not allowed for the recipient of an assistance instrument (grant or cooperative agreement) or a subawardee/subrecipient under an assistance instrument. A subaward is an award of financial assistance in the form of money, or property in lieu of money, made under a DoD grant or cooperative agreement by a recipient to an eligible subrecipient. The term includes financial assistance for substantive program performance by the subrecipient of a portion of the program for which the DoD grant or cooperative agreement was made.
- I) Small Business Subcontracting Plan: Small Business Subcontracting Plan requirements do not apply to assistance instruments.

CONTRACT FACILITIES CAPITAL COST OF MONEY: If cost of money is proposed, a completed Contract Facilities Capital Cost of Money (FCCM; DD Form 1861) is required.

Acronyms:

ACC (APG) RTP -	Army Contracting Command (Aberdeen Proving Ground)
	Research Triangle Park Division
AOR –	Authorized OrganizationRepresentative
ARI –	Army Research Institute for the Behavioral and Social Sciences
ARL –	Army Research Laboratory
CAGE -	Commercial and Government Entity
CFDA-	Catalogue of Federal Domestic Assistance
CFR –	Code of Federal Regulations
COM –	Cost of Money

CONUS –	Continental United States
CPFF –	Cost Plus Fixed Fee
D&B-	Dun and Bradstreet, Inc.
DCAA –	Defense Contract Audit Agency
DCMA –	Defense Contract Management Agency
DD –	Department of Defense
DFARS –	Defense Federal Acquisition Regulation Supplement
DLSC –	Defense Logistics Service Center
DoD –	Department of Defense
DoDI–	Department of Defense Instruction
DUNS –	Data Universal Numbering System
EIN –	Employer Identification Number
FAPIIS –	Federal Awardee Performance and Integrity Information
	System
FAR –	Federal Acquisition Regulation
FCCM –	Facilities Capital Cost of Money
FFP –	Firm Fixed Price
FFRDC –	Federally Funded Research and Development Center FOIA
	Freedom of Information Act
FOA –	Funding Opportunity Announcement
FSC –	Federal Service Code
FY–	Fiscal Year
G&A –	General and Administrative
GFD –	Government Furnished Data
GFE –	Government Furnished Equipment
GFI –	Government Furnished Information
GFP –	Government Furnished Property
GSA –	General Services Administration
HBCU/MI –	Historically Black College or University/Minority
	Serving Institution
IAW –	In Accordance With
IR&D –	Independent Research and Development
MIPR –	Military Interdepartmental Purchase Request
ODC –	Other Direct Cost
OMB –	Office of Management and Budget
OPSEC –	Operations Security
PDF –	Portable Document Format
PI –	Principal Investigator
PL –	Public Law
PWS –	Performance Work Statement
R&D –	Research & Development
SAM –	System for Award Management
SF –	Standard Form
TIA – TIN	Technology Investment Agreement
TIN – TPOC –	Taxpayer Identification Number Technical Point of Contact
UIC –	Unit Identification Code
UIC – USC –	United States Code
030-	

XML – Extensible Markup Language