Participating NIAID Divisions:

1. Division of Allergy, Immunology, and Transplantation (DAIT)
2. Division of Microbiology & Infectious Diseases (DMID)

Issuing Office: Office of Acquisitions, DEA, NIAID, NIH, 5601 Fishers Lane, Room 3D32, MSC 9821, Bethesda, MD 20892-9821

Issuing Contracting Officer: George Kennedy
kennedyg@mail.nih.gov
(240) 669-5170

This solicitation contains opportunities to submit a proposal under the following distinct Research Areas, which are identified below:

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* Proposals must be received by 3:00 PM Eastern Time on the date specified herein. Please see the Proposal Submission Instructions for more information.
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I. **BROAD AGENCY ANNOUNCEMENT INFORMATION**

You are invited to submit a proposal in accordance with the requirements of this BROAD AGENCY ANNOUNCEMENT (BAA). The BAA is governed by Federal Acquisition Regulation (FAR) 6.102 and FAR 35.016, as well as the NIH Policy Manual, Manual Chapter 6035, Broad Agency Announcements. A BAA may be used as a solicitation mechanism for basic and applied research directed toward advancing the state-of-the-art or increasing knowledge or understanding and that part of development not related to the development of a specific system or hardware procurement. BAAs are general in nature, identifying areas of research interest, and shall only be used when meaningful proposals with varying technical/scientific approaches can be reasonably anticipated.

**This solicitation contains multiple distinct Research Areas.** Offerors may submit a proposal in response to one, any combination of, or all of the Research Areas contained herein. **Offers submitted in response to this BAA must present separate detailed technical and business proposals designed to meet the Technical Objectives described for each Research Area proposed.** The Statement of Work (SOW), including the specific technical requirements and performance specifications, shall be developed and proposed by the Offeror, not the Government.

Proposals are NOT evaluated against each other since they are not submitted in accordance with a common Statement of Work issued by the Government. Instead, Research and Technical Objectives are provided in the BAA that describe individual Research Areas in which the Government is interested. Proposals received in response to the BAA are evaluated in accordance with the Evaluation Factors for Award specified in this announcement. The Government reserves the right to conduct discussions with all, some, one, or none of the proposals received in response to this BAA. If discussions are conducted, NIAID reserves the right to suggest modifying, adding or deleting milestones, decision points, research plans, processes, schedules, budget or product. The Government also reserves the right to make awards without discussions. Additionally, the Government reserves the right to accept proposals in their entirety or to select only portions of proposals for award. Multiple awards are anticipated. The selection for award under this BAA will be based upon the evaluation factors, importance to the agency programs, and the availability of funds.

II. **CONTRACTING OFFICER POINTS OF CONTACT**

This BAA contains Research Areas issued by multiple Divisions within the National Institute of Allergy and Infectious Diseases. The Contracting Officer points of contact for questions related to specific Research Areas issued by the Division of Allergy, Immunology, and Transplantation (DAIT) and Division of Microbiology and Infectious Diseases (DMID) are identified below:

**Division of Allergy, Immunology, and Transplantation (DAIT)**

*Research Area 001: Adjuvant Development Program*

  Tom Bahrami, M.B.A.
  Contracting Officer
  Phone: (240) 669-5147
  E-mail: bahramit@niaid.nih.gov

*Research Area 002: Development of Radiation/Nuclear Medical Countermeasures; Research Area 003: Development of Radiation/Nuclear Predictive Biomarkers and Biodosimetric Devices*

  Liem Nguyen
  Contracting Officer
III. RESEARCH AREAS AND TECHNICAL OBJECTIVES

1. DIVISION OF ALLERGY, IMMUNOLOGY, AND TRANSPLANTATION (DAIT), ADJUVANT DEVELOPMENT PROGRAM

A. BACKGROUND:

The National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH) and other agencies in the Department of Health and Human Services (DHHS) support extramural research to develop new products to protect the public from the health consequences of infectious pathogens, including emerging infectious diseases, defined as pathogens that have newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range. As part of this mission, NIAID supports the development of new vaccine adjuvants that stimulate immune responses to: protect against pathogenic infection; specifically activate the appropriate arms of the immune system; and result in stronger, more protective vaccines against emerging infectious diseases.

In 2010, NIAID convened a Blue Ribbon Panel to develop an NIAID Strategic Plan for Research on Vaccine Adjuvants (http://www.niaid.nih.gov/sites/default/files/NIAID-StrategicPlanVaccineAdjuvants.pdf) to guide its adjuvant discovery, development and translational research programs. The NIAID Division of Allergy, Immunology and Transplantation (DAIT), has an interest in supporting the development of adjuvants through this Broad Agency Announcement (BAA), which solicits proposals for a renewed research program that includes the preclinical testing and development of new adjuvant candidates to advance novel adjuvant:vaccines towards licensure for human use. These novel adjuvants will stimulate innate and/or adaptive immune responses. For the purpose of this BAA, adjuvants are defined according to the U.S. Food and Drug Administration (FDA) as “agents added to, or used in conjunction with, vaccine antigens to augment or potentiate (and possibly target) the specific immune response to the antigen.”

Currently, only three adjuvants have been approved for use in the United States – (1) alum (several aluminum salts), (2) 4’-monophosphoryl lipid A (MPL), a derivative of lipopolysaccharide, adsorbed to alum (AS04), and (3) MF59, an oil-in-water emulsion of squalene oil. Additional research is needed to address limitations of current vaccines including the search for new vaccine adjuvants, which (a) effectively and safely induce selective immune mechanisms associated with protection against specific diseases; (b) can be delivered by different vaccination routes; (c) can
safely and effectively be used in special populations; (d) enhance currently used vaccines; and (e) mediate long-term immunological memory.

DAIT supports three adjuvant programs: 1) Adjuvant Discovery Program which began in 2003 and was renewed in 2009 and 2014 (BAA-NIAID-DAIT-NIH-AI-2013168); 2) Molecular Mechanisms of Combination Adjuvants began in 2016 (RFA-AI-15-005) and 3) the Adjuvant Development Program, which began in 2008, was renewed in 2013 (BAA-NIAID-DAIT-NIHAI2012146) and currently supports four awards:

HHSN272201300029C Leidos, Frederick, MD
HHSN272201300028C NanoBio Corporation, Ann Arbor, MI
HHSN272201300022C Tulane University, New Orleans, LA
HHSN272201300023C University of Washington, Seattle, WA

These awards are due to expire in September 2018.

The purpose of this solicitation is to renew the Adjuvant Development Program to advance novel adjuvants towards licensure for human use. This initiative supports the development of adjuvants through immunological characterization studies and compound optimization, up to and including IND-enabling studies, for a period not to exceed 5 (five) years. The main emphasis will remain on testing and further development of adjuvants for human licensure as components of licensed or investigational vaccines to protect against one or more non-HIV disease pathogens relevant to human disease. This solicitation supports the development of adjuvants for: 1) novel vaccines against diseases for which no licensed vaccines are currently available; 2) more effective vaccines to replace or supplement those with suboptimal efficacy (e.g., Bacille Calmette-Guerin vaccine for tuberculosis), lack of long-term efficacy (e.g., acellular pertussis vaccine), limited efficacy in special populations or “non-responders” (e.g., vaccines against Hepatitis B); or 3) adjuvants that lessen the need for multiple boosting as is currently the norm for many pediatric vaccines. NIAID is particularly interested in the development of early childhood vaccines with adjuvants other than Alum that would favor a Th1 immune response. In the past, the Adjuvant Development Program has supported the development of adjuvant:HIV immunogen combinations. In this iteration, the offeror shall not propose studies involving HIV. The government may add adjuvant:HIV immunogen-combinations to the research supported under this solicitation, subject to Contractor interest.

The goal of Research Area 001, below, is to support the development of one adjuvant per award by conduct of one or more of the activities illustrated in the research area description below.

B. RESEARCH AREA (DAIT: ADJUVANT DEVELOPMENT PROGRAM)

| Research Area 001 – Adjuvant Development Program |

Budget and Award Information

The NIAID estimates that the average annual total cost (direct and indirect costs combined) is approximately $2.0M per award. It is anticipated that the total cost for the award(s) may vary depending upon the scope of the project and the technical objectives of the award(s). Total proposed costs and the length of time for which funding is requested should be consistent with the
nature and complexity of the proposed research. The period of performance proposed by an offeror should not exceed five (5) years. The NIAID plans to award up to five (5) contracts.

Awards are anticipated to be made in or around September 2018.

**Technical Objectives**

The objective of this solicitation is to support the development of one adjuvant:vaccine combination (one adjuvant for one or more licensed or investigational vaccines) toward licensure for human use within the five-year contract period of performance through carrying out one or more of the following activities as specified in the negotiated Statement of Work. For the purpose of this solicitation, an adjuvant is defined as a single immunostimulatory compound or a combination of synergistic stimulatory compounds. For this Research Area an offeror may propose to carry out work that by its nature is not innovative but is essential to move a field forward.

Offerors may submit more than one proposal. Each proposal must address the study of one adjuvant:vaccine combination (one adjuvant for one or more vaccines) against one or more non-HIV disease pathogens relevant to human disease. The development of either preventative or therapeutic adjuvant:vaccines against one or more non-HIV disease pathogen relevant to human disease is acceptable. Each individual proposal shall include development or further optimization of **only one** adjuvant. For the primary contract, adjuvants shall focus on currently licensed or investigational vaccines to protect against one or more non-HIV disease pathogens relevant to human disease.

Depending on the developmental stage at which an adjuvant is entered into the Program, the offeror may choose to perform some or all of the IND-enabling studies. The Contractor shall be responsible for:

- Optimization of only one adjuvant (for one or more vaccines) for enhanced safety and efficacy; this may include structural alterations or modifications to formulation or delivery.
- Establishment of an immunological profile of activity and immunotoxicity that will be of use to evaluate the capability of the adjuvant to advance to human testing.
- Conduct of Preclinical IND-enabling studies such as pilot lot or cGMP manufacturing of adjuvant or adjuvant:vaccine, toxicology, stability testing, and pharmacokinetics/absorption, distribution, metabolism and excretion studies.
- Development of Timelines and Milestones for the proposed activities (may be revised during negotiations with NIAID if proposal deemed meritorious by the review panel).

Depending on the developmental stage at which an adjuvant is entered into the Program, the offeror may choose to propose additional IND-enabling studies. Examples of such studies are provided in Section III.1.C. **DAIT: ADJUVANT DEVELOPMENT PROGRAM – Additional Technical Proposal Instructions**, under 1.(b) of the Product Development Plan.

**Technical Approach**

A. For the purposes of this solicitation, proposals shall meet the following requirements:

1. Each proposal must focus on the development or further optimization of only one adjuvant candidate for one or more licensed or investigational vaccines.

2. Adjuvant studies must focus on one or more non-HIV disease pathogen(s) relevant to human disease.
3. The adjuvant has been previously identified as minimally reactogenic and characterized as safe after administration in an animal model. For example, safety could be documented by assessing acute morbidity/mortality, weight loss, injection site reactogenicity, pyrogenicity, respiratory distress or other related indicators of health in animals receiving the adjuvant.

4. Inclusion of data demonstrating that the adjuvant functions by stimulating the innate and/or adaptive immunity.

5. Inclusion of documented evidence demonstrating a mechanism of action for the adjuvant, such as activation of signal transduction pathways for dendritic cells, promotion of antibody production by B cells, or induction of Th1 or Th2 cytokines.

6. Documentation that the adjuvant safely augments the ability of a vaccine to protect against pathogen challenge in an in vivo animal model. The evidence of protection must be obtained from studies performed under well-controlled and documented experimental conditions, with a statistically significant better outcome than found under appropriate control conditions. If protection studies have not been conducted because appropriate containment facilities are not available, evidence of immune responses to the adjuvant that may be surrogates of immune responses for the protection in vivo will be acceptable.

7. Inclusion of data confirming that the adjuvant has immune-enhancing activity with human primary cells or tissues.

8. Documented evidence of access to all required materials and methods.

This contract will NOT provide funds to support the following activities:

- The further development of an adjuvant:vaccine candidate supported by the previous NIAID Adjuvant Development BAA-NIAID-DAIT-NIHAI2012146.
- The further development of an adjuvant that has been previously licensed in the U.S. for use with any vaccine.
- The development of adjuvants as stand-alone agents.
- The design and conduct of clinical trials (see http://clinicaltrials.gov/ct2/about-studies/glossary for the NIH definition of a clinical trial).
- The discovery and initial characterization of adjuvant candidates.
- More than one adjuvant in a proposal.
- The discovery or development of adjuvants or vaccines to prevent or treat cancer, allergic diseases or autoimmunity.
- Platform development such as vehicle or delivery systems.
- The development and/or optimization of a pathogen-specific vaccine component.

-- END OF RESEARCH AREA 001 --

C. DAIT: ADJUVANT DEVELOPMENT PROGRAM - Additional Technical Proposal Instructions:

The following information supplements Section IV – Instructions, Conditions, and Notices to Offerors, of this solicitation, and should be used for preparing proposals in response to Research Area 001. Separate and distinct proposals must be submitted for each Research Area to which you
offerors may submit proposals for more than one adjuvant. however, separate technical and business proposals are required for each adjuvant.

1. product development plan

(a) overview

provide a summary of the product development plan for the adjuvant selected for further development, outlining its intended use and specifications, approaches for carrying out each stage of the overall product development pathway, and clearly defined milestones and timelines necessary to complete and deliver an adjuvant suitable for future clinical studies within the 5-year contract performance period. include a gantt chart with tasks, milestones and decision gate criteria and also describe alternate strategies to address potential pitfalls.

(b) product development activities

although it is the responsibility of the offeror to propose a statement of work, examples of the types of product development activities that are within the scope of this baa include:

1. research and development: design, conduct and complete non-clinical research and development studies to:
   a. evaluate the safety, pharmacokinetics/pharmacodynamics, bioavailability, formulation, dose, route of administration, and dose schedule of the adjuvant:vaccine, including in vitro and in vivo testing in an animal model(s), including non-human primates if appropriate, following fda guidance and good laboratory practice guidelines (glp: as defined in the u.s. code of federal regulations- 21cfr:58). fda guidance for non-clinical studies may be found at the following site: www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM292340.pdf. animal studies must comply with the requirements as stated in the u.s. code of federal regulations – cfr 601.90-95, subpart h, “approval of biological products when human efficacy studies are not ethical or feasible.”
   b. develop, characterize, and qualify and/or validate reagents and assays required for evaluation of the adjuvant:vaccine.
   c. establish immunological parameters and methods to predict and evaluate safety and efficacy in vitro and for future use in human subjects.
   d. modify the adjuvant to improve its immunological activity and reduce potential toxicity in humans.
   e. demonstrate that the adjuvant has immune enhancing activity with human primary cells or tissues.

2. process development and pilot lot manufacturing
a. Develop and establish master and working cell banks in compliance with current Good Manufacturing Practices guidelines (cGMP: as defined in the U.S. Code of Federal Regulations-21 CFR:58, 210, 211, 610, 820 and applicable guidance’s, such as Draft Points to Consider in the Characterization of Cell Lines Used to Produce Biologicals (1993) http://www.fda.gov/BiologicsBloodVaccines/GuidanceComplianceRegulatoryInformation/OtherRecommendationsforManufacturers/default.htm, see “Points to Consider”).

b. Conduct process development activities that lead to the manufacture of cGMP grade adjuvant and adjuvant:vaccine.

c. Establish a well-documented and controlled production process.

d. Manufacture non-cGMP pilot lots to demonstrate the reliability and reproducibility of the production process, and produce cGMP pilot lots of the adjuvant and the adjuvant:vaccine in amounts sufficient to carry out required non-clinical studies.

e. Conduct long-term stability studies of cGMP adjuvant or adjuvant:vaccine.

2. Statement of Work:

Describe the work requirements needed to advance a novel adjuvant:vaccine towards licensure for human use, including performance specifications.

(B) REGULATORY COMPLIANCE, QUALITY ASSURANCE AND DATA MANAGEMENT SYSTEMS

As required for the implementation of the Product Development Plan, the Contractor shall:

1. Adhere to FDA regulations and guidance, including requirements for the conduct of animal studies and assays under GLP and the manufacturing of the adjuvant or adjuvant:vaccine under cGMP. The Contractor shall maintain quality assurance documentation to support adherence in these areas.

2. Arrange for independent regulatory audits, as needed or as requested by the Contracting Officer’s Representative and the Contracting Officer. Audits may be requested to ensure that Contractor and/or subcontractor facilities and all planned procedures comply with the FDA regulations and guidance that are required to meet GLP and cGMP standards. All Contractor and/or subcontractor records and staff shall be available for site visits or audits. The Contractor shall provide interim and final audit reports to the Contracting Officer’s Representative and the Contracting Officer within thirty (30) calendar days of the completion of the audit. The NIAID reserves the right to conduct independent audits of the Contractor and its subcontractors as to evaluate compliance with the FDA regulations and guidance, including those required to meet GLP and cGMP standards.

3. Develop and implement data management and quality control systems/procedures, including the transmission, storage, confidentiality, and retrieval of all study data.

4. Provide statistical design and analysis of data resulting from the research undertaken.
5. Provide raw data or specific analyses of data generated with contract funding to the Contracting Officer’s Representative.

(C) SCIENTIFIC AND TECHNICAL PERSONNEL

The Contractor shall provide a scientific and technical team of investigators with the expertise needed for the management and implementation of the Product Development Plan to be performed under this contract, including research, manufacturing, regulatory, statistical, management, and administrative activities. The Contractor’s team must include strong scientific leadership, as well as significant experience and expertise in the management, design, and execution of a research and development program focused on product development, manufacturing, and testing in vertebrate animals. Also to be included is a Principal Investigator with responsibility for project oversight.

(D) PROJECT MANAGEMENT

The Technical Proposal must include a Project Management Plan addressing the following:

1. Include a Project Manager with responsibility for monitoring and tracking day-to-day progress and timelines, and coordinating communication, project activities, projects undertaken by subcontractors, and costs incurred.

2. Describe how the project will be staffed, organized, and managed, including a detailed description of the responsibilities for all proposed administrative personnel who will be assigned to the contract, and an administrative framework indicating clear lines of authority and responsibility for all personnel including proposed subcontractors and consultants.

3. Describe project management systems that will be used to track activities and to keep multiple activities on time and budget.

4. Outline how the PI will communicate and interact with the Contracting Officer’s Representative and the Contracting Officer and how the PI will communicate, monitor, and manage the project both internally and externally (at subcontractor facilities).

5. Provide a plan for soliciting, evaluating, negotiating, awarding, and managing any proposed subcontracts in accordance with FAR Clause 52.244-2.

6. Describe experience and education of contract management staff in the acquisition and management of subcontracts under Federal contracts.

7. Describe experience with identification and remediation of subcontractor performance problems or noncompliance with subcontract terms and conditions.

8. Provide documentation that the offeror has intellectual property protection and/or proprietary freedom to develop the adjuvant:vaccine.

(E) FACILITIES, EQUIPMENT, TRAINING AND OTHER RESOURCES
1. The Contractor shall provide the equipment, facilities, training and other resources required to implement the Product Development Plan in compliance with all Federal and NIH regulations. Depending on the stage of development of the adjuvant, this may include:

   a. The performance of IND-enabling assays and animal studies under GLP. Production, characterization and release testing of the adjuvant or the adjuvant:vaccine under cGMP conditions.
   b. The care and housing of laboratory animals, including appropriate veterinary coverage, the physical plant housing all animals and laboratories, and required safety and security procedures.
   c. Adherence to NIH regulations on human subjects research.
   d. The use of facilities and resources to conduct work in accordance with the Biosafety Level (BSL) 2 and 3 guidelines (http://www.cdc.gov/biosafety/) and in accordance with the Biosafety in Microbiology and Biomedical Laboratories (BMBL) Guidelines, Centers for Disease Control and Prevention and the National Institutes of Health, fifth Edition (http://www.cdc.gov/biosafety/publications/index.htm).
   e. The handling, storing, and shipping of potentially dangerous biological and chemical agents, including Select Agents, under biosafety levels required for working with the biological agents under study. The Biosafety in Microbiology and Biomedical Laboratories, 5th edition is available at: http://www.cdc.gov/biosafety/publications/index.htm. The Centers for Disease Control and Prevention (CDC) Select Agent program can be found at: http://www.selectagents.gov/.

2. The Contractor is required to undertake all studies with approval from its Institutional Biosafety Committee. The Contractor shall provide copies of materials submitted for Institutional Biosafety Committee Review and documentation of approval of experiments to the Contracting Officer’s Representative with each annual report.

(F) CONTRACT REVIEW MEETINGS

1. Annual Review Meetings

Annually, the Contracting Officer’s Representative will plan, conduct and be responsible for logistical arrangements for an annual review meeting of all Contractors, to be held at a site chosen by the Contracting Officer’s Representative. All Contractor PIs, Project Managers, key investigators including subcontractor personnel, the Contracting Officer’s Representative, the Contracting Officer, and other designated NIAID staff shall attend these meetings. The Contracting Officer’s Representative may invite other Extramural Program Staff from NIH to attend these meetings. The agenda will be prepared by the Contracting Officer’s Representative. Meetings will be closed to the general public and shall involve oral and electronic presentations by the Contractors, including: updates on results of activities undertaken or completed since the last review meeting; updates on the predicted timeline, including an updated Gantt chart; a description of any problems encountered or anticipated; a discussion of approaches to overcoming problems; and a description of activities to be undertaken in the coming year.

2. Site Visits

Within sixty (60) calendar days of the effective date of the contract, the Contractor shall plan, conduct and be responsible for the logistical arrangements for a post award kickoff
meeting at the Contractor’s site. The Principal Investigator, Project Manager, all key investigators, key subcontractor personnel, the Contracting Officer’s Representative and the Contracting Officer shall attend this meeting. Other NIAID staff, as designated by the Contracting Officer’s Representative, may also attend this meeting. The purpose of this meeting shall be to review the Product Development Plan and to coordinate activities and communication between the Contractor and the NIAID. The Principal Investigator shall provide a copy of any slide presentations to the Contracting Officer’s Representative. The Contracting Officer and Contracting Officer’s Representative may request site visits at the Contractor site(s) annually or as needed.

3. Quarterly Teleconferences

The Contractor shall plan and conduct a teleconference meeting with the Contracting Officer’s Representative each quarter of the contract period of performance, to discuss technical progress and financial invoices. One (1) week prior to the teleconference, the Contractor shall submit an agenda to the Contracting Officer’s Representative. Within one (1) week after the teleconference, the Contractor shall provide a meeting summary of the teleconference to the Contracting Officer’s Representative. The timing of the Quarterly Teleconference meetings may be altered or adjusted by the Contracting Officer’s Representative as needed to address progress on the contract.

4. Additional Contract Meetings/Teleconferences

The Principal Investigator, Project Manager, key investigators, and key subcontractor personnel shall attend additional meetings or teleconferences at the request of the Contracting Officer’s Representative. Such meetings will be requested, as necessary, to discuss contract specific issues and to review recommended changes or deviations from milestones and timelines in the Product Development Plan.

5. Uniform Cost Assumptions

Offerors should use the following assumptions for the purposes of estimating costs and preparing the technical proposal:

a. Technical Cost Assumptions

1. Business Proposals must provide a breakdown by line item cost, including: Direct Labor, Direct Materials, Animal costs (including housing), Subcontracts, Consultants, Travel (refer to the instructions in Section IV, 2., C. - Business Proposal Instructions, of this solicitation).

2. It is anticipated that this contract will be aligned with the deliverables identified in the Research and Technical Objectives. Consequently, Business Proposals must provide a breakdown of costs for each milestone as well as a cost estimate for the entire project period of performance. The Business Proposal must also include a detailed Gantt chart that provides timelines delineating each milestone and associated tasks, subtasks and budgets to the subtask level of detail.

b. Travel

1. Annual Meeting: Assume (required) annual 1 day programmatic meeting in years 1-4 of the contract, to be held in the Rockville, MD area, back-to-back with the 11/2
day annual meeting of the NIAID Adjuvant Development Program (attendance at Adjuvant Development Program’s annual meeting is optional for Adjuvant Development contractors). Include travel costs (transportation, meals, hotel, etc.) for Contractor staff members, including the Principal Investigator, key co-investigators, collaborators and subcontractors (up to 7 individuals).

2. Subcontractor Site Visits: Budget travel costs (transportation, meals, hotels, etc.) for two 2-day trips per year for up to 3 personnel to visit sites of subcontracts, if applicable.

D. DAIT: ADJUVANT DEVELOPMENT PROGRAM - Reporting Requirements and Deliverables:

1. Reporting Requirements

In addition to reporting requirements and deliverables identified elsewhere in this solicitation, it is expected that awards resulting from Research Area 001 will include the following reports and deliverables:

a. Semi-Annual Technical Progress Reports

This report is to include a summation of the work performed and the results obtained for the contract period of performance. This report shall be in sufficient detail to describe the results achieved, including any difficulties encountered and proposed or implemented remedies.

b. Final Report

This report is to include a summation of the work performed and the results obtained for the entire contract period of performance. This report shall be in sufficient detail to describe comprehensively the results achieved. The Final Report shall be submitted in accordance with the DELIVERIES Article in SECTION F of the contract. A Semi-Annual Progress Report will not be required for the period when the Final Report is due.

The Contractor shall provide the Contracting Officer’s Representative and Contracting Officer with one electronic copy each of the Final Report in draft form in accordance with the DELIVERIES Article in SECTION F of this contract 60 calendar days prior to the completion date of this contract. The Contracting Officer’s Representative will review the draft report and provide the Contracting Officer with comments within 30 calendar days after receipt. The Final Report shall be corrected by the Contractor, if necessary and the final version delivered as specified in the above paragraph.

c. Summary of Salient Results.

The Contractor shall submit, with the Final Report, a summary (not to exceed 200 words) of salient results achieved during the performance of the contract.

d. Report on Select Agents or Toxins and/or Highly Pathogenic Agents

The Contractor shall describe what agents or toxins were used, if any, and list the studies conducted with them.

2. Deliverables
Delivery of other reports and deliverables will be proposed by the Offerors in their technical proposal. They will be developed further after receipt of proposals as a result of finalization of the Statement of Work and other terms and conditions of any resultant contract during negotiations.

All electronic reports and deliverables shall be submitted through the NIAID Electronic Reports and Deliverables System, available here: https://erds.niaid.nih.gov/

-- END OF DAIT: ADJUVANT DEVELOPMENT PROGRAM --

2. **DIVISION OF ALLERGY, IMMUNOLOGY, AND TRANSPLANTATION (DAIT), RADIATION/NUCLEAR COUNTERMEASURES PROGRAM**

A. **BACKGROUND:**

Over the last three decades, world events have highlighted the growing threat of terrorism and its many forms, including the 1995 Tokyo sarin gas attack; radiological dispersal devices (dirty bombs) planted, but never detonated in Chechnya in 1995 and 1998; and the deliberate spread of anthrax spores and ricin through the United States postal service in 2001 and 2003, respectively. These incidents provide insight into the range of approaches used by terrorists, which include the potential to use chemical, biological, and/or radiological/nuclear weapons. Acts of radiological or nuclear terrorism could involve the use of stolen or improvised nuclear devices, attacks on nuclear power plants or reactors, the detonation of a dirty bomb, or the placement of radiation sources in public locations or in food or water supplies. Moreover, natural disasters like the 2011 earthquake and tsunami in Japan, which resulted in damage to the Fukushima Daiichi Nuclear Power Plant, and release of radiation into the environment, further emphasize the need for the United States Government to be prepared with stockpiled medical countermeasures (MCMs, e.g. drugs and/or biodosimetry devices) to be used in the event of a radiation incident.

Radiation/nuclear incidents and disasters can potentially result in the large-scale exposure of civilian populations to a high dose of radiation in a short period of time, which may lead to Acute Radiation Syndrome (ARS). Depending on the dose of whole-body exposure to radiation, biological effects can range from acute effects, including nausea and vomiting within hours; hematopoietic and gastrointestinal injury leading to immunosuppression, infection, hemorrhage and death within days to weeks (ARS); to late lung, cardiovascular, and kidney complications months after irradiation (delayed effects of acute radiation exposure or DEARE).

The United States Government recognizes the need to develop MCMs to address the systemic damage from radiation exposure following a radiological/nuclear incident. To this end, the Project BioShield Act of 2004, “Project BioShield”, Public Law 108-276, was enacted on July 21, 2004. The Act provides the Department of Health and Human Services (HHS) with authorities to procure MCMs for the Strategic National Stockpile (SNS) and to perform advanced research and development on priority MCMs against chemical, biological, radiological, and nuclear threats. Under this act, the National Institute of Allergy and Infectious Diseases (NIAID) Radiation and Nuclear Countermeasures Program (RNCP) was charged by HHS, on behalf of the National Institutes of Health (NIH), to address radiation-induced injuries resulting from a radiological/nuclear incident, with funds provided from a special congressional appropriation.

The coordinated efforts to support research and development of MCMs by the NIH, as well as other HHS sister agencies, is outlined in the [HHS Public Health Emergency Medical Countermeasures](#).
Enterprise (PHEMCE) implementation plan. The NIH is committed to accelerating the development of both medical approaches to treat injuries, and biodosimetry biomarkers and/or devices, for triage use in mass casualty situations, and supporting advanced development and deployment efforts to make them available for possible procurement by the Biomedical Advanced Research and Development Authority (BARDA) and subsequent storage in the SNS, overseen by the Centers for Disease Control and Prevention (CDC).

In 2005, based on the recommendations of a Blue Ribbon Panel, NIAID published its Strategic Plan and Research Agenda for Medical Countermeasures against Radiological and Nuclear Threats, which was most recently updated in 2012. These plans describe a multifaceted program to expand research infrastructure and radiobiology expertise; promote the development of biodosimetry methods to assess radiation injury; and research, identify, develop, and obtain licensure for MCMs to mitigate/treat radiation-induced injuries, in order to save lives during a radiation emergency.

The goal of Research Area 002, below, is to support the development of safe and effective MCMs to mitigate and/or treat tissue injuries arising from exposure to ionizing radiation from a radiological or nuclear incident, thereby leading to a reduction in radiation-associated morbidities and mortalities.

Since the program’s inception, NIAID has sponsored early-stage/applied research, product development programs and targeted initiatives focused on development of drugs to mitigate and/or treat complications of ARS and DEARE syndromes (e.g. hematopoietic, gastrointestinal, pulmonary, renal, central nervous system, cutaneous, and radiation combined injury). Investment in this portfolio has led to the establishment of several rodent and non-human primate animal models which are critical for licensure of radiation mitigators under the U.S. Food and Drug Administration (FDA) Animal Rule. In fact, studies funded by the RNCP led to FDA approval of both Neupogen® (filgrastim) and Neulasta® (pegfilgrastim) for the adult and pediatric hematopoietic-ARS indication in March 2015 and November 2015, respectively. Although progress has been made in licensing products to treat some forms of radiation injury, drugs are still needed to address other forms of hematopoietic injury, as well as for the treatment of other organ systems affected by radiation exposure.

The goal of Research Area 003, below, is to advance the development and translation of biodosimetry biomarkers and/or devices to inform triage and treatment strategies for a mass casualty radiation incident.

The number of casualties from a radiological or nuclear incident could result in many persons exposed to radioactive fallout downwind from the explosion. Such victims might not initially show clear signs and symptoms of radiation toxicity, even if exposed to substantial doses of radiation. Similarly, persons exposed to a radiological dispersal device might also present minimal evidence of exposure. In addition, person-to-person variability must be considered in early and delayed radiation damage to organs and tissues in response to a given radiation dose. Confounding factors include genetic pre-disposition, age, body size, underlying illnesses, and immune status. Therefore, estimates of radiation exposure dose alone will not necessarily predict the extent of radiation injury to organs and tissues. Hence, the need for rapid, accurate and sensitive biomarker assays/techniques and diagnostic platforms that can confirm exposure and predict acute and delayed radiation injury to different organs and tissues in victims of radiation incidents.

Existing biodosimetry techniques and devices, and others in development, cannot assess biological variability. In addition, these techniques and devices do not predict the severity of injury sustained by specific organs and tissues, and thus do not allow for the prompt organ- and tissue-directed medical treatment that might be provided by any available radiation MCMs. With the potential of a
mass casualty occurring, the measurement of absorbed radiation dose (biodosimetry) is needed to better inform health care and first responders on the appropriate triage and treatment strategies following a radiological or nuclear incident, in order to facilitate precise and timely medical intervention, reduce morbidity, and save lives.

B. RESEARCH AREAS (DAIT: RADIATION/NUCLEAR COUNTERMEASURES PROGRAM)

Research Area 002 - Development of Radiation/Nuclear Medical Countermeasures

Budget and Award Information

NIAID anticipates that one or two awards may be issued for a total cost of up to $2 million for the non-severable base work across all contracts (direct and indirect costs combined), depending on the number of technically meritorious proposals, importance to agency programs, and availability of funds. The total cost for each award(s) may vary depending upon the scope of the project and the technical objectives of the award(s).

The total duration of a proposed contract should be consistent with the nature and complexity of the offeror’s proposed research. The total performance period comprised of the base and any options proposed by an Offeror should not exceed three (3) years.

Awards are anticipated to be made in or around April 2018.

Technical Objectives

Offerors are invited to submit proposals to advance the development of one lead candidate MCM that has shown concept feasibility. MCM candidates should increase survival by mitigating and/or treating acute or delayed radiation injury.

Proposals should include a plan to conduct translational research and development and, if applicable, provide additional information and data to support U.S. Food and Drug Administration (FDA) approval or licensure and submission of an Investigational New Drug (IND) application. Offerors should include a well-defined product development path that includes IND-enabling studies that will be performed under the contract.

Specifically, this Research Area is intended to support the research and development of promising new approaches to mitigate and/or treat tissue injuries arising from exposure to ionizing radiation, which may include, but are not limited to: biologics, including cytokines and free radical scavengers; cellular therapies; and drugs, such as, anti-inflammatory agents, antibiotics, and anti-fibrotics.

Technical Approach

The lead MCM to be supported by this initiative must meet all of the following scientific and technical requirements prior to submission of the proposal:

1. The lead MCM should already have demonstrated efficacy (i.e., demonstrating clinically-relevant and statistically-significant reduction in mortality and/or major morbidity in animal
models of acute or delayed radiation injury predictive of the human response) when administered at least 24 hours after radiation exposure. The MCM preferably should be easy to distribute and use in a mass casualty incident (e.g., the preferred routes of administration are oral, subcutaneous, inhaled, transdermal or intramuscular);

2. The lead MCM should be safe to use in normal, healthy individuals if appropriate biodosimetry is not available to confirm radiation dose received prior to initiating treatment. The lead MCM should be previously identified as minimally reactogenic using animal model safety studies and/or in human clinical studies for another indication. For example, safety could be documented by assessing acute morbidity/mortality, weight loss, injection site reactogenicity, pyrogenicity, respiratory distress or other related indicators of health;

3. Radiation exposure type, dose level, and dose rates proposed for study need to be relevant to a terrorist incident or accidental exposure. Studies using fractionated radiation exposures, commonly used for clinical radiotherapy treatments would NOT be appropriate, unless information gained would be directly applicable to an unintentional exposure scenario; and

4. A target product profile for the lead MCM that includes:
   a. Preliminary data to support the selection of the MCM, specifically: animal studies that demonstrate efficacy when delivered 24 hours or later after radiation exposure using appropriate animal models and assays.
   b. Safety studies and PK/PD studies, if any.
   c. Intended use/indication of the lead MCM and the biodefense/public health gap that the product is intended to fill.
   d. The performance specifications and features the MCM would meet in order to provide therapeutic benefit.
   e. Physicochemical characteristics, current formulation, and a mechanism of action, if known.
   f. Discussions or meeting minutes with the FDA, if any, that are relevant to development activities for the proposed therapeutic product.

This contract will provide funds to support the following activities:

1. Non-clinical Research and Development, including:
   a. Animal model(s) development.
   b. Reagent and assay development.
   c. Efficacy studies in animals to optimize route of administration, formulation, dose, dose schedule, and dose modifying factor (DMF). Studies should be designed to be suitable (species, endpoints, measurements) for predicting future pivotal Good Laboratory Practice (GLP) efficacy studies under the FDA Animal Rule (21 CFR 314.600-314.650, 601.90-601.95). Efficacy is defined hereafter as a statistically significant improvement in survival in an in vivo model of radiation injury when the MCM is first administered at least 24 hours or later after radiation exposure.
d. Efficacy studies to test the lead MCM in the context of other expected medical management, including growth factors.

e. Mechanism of action studies.

f. Bioavailability; pharmacokinetic; and adsorption, distribution, metabolism, and excretion studies.

g. GLP toxicology and pharmacology safety studies.

h. Clinical research testing ex vivo using human subject samples.

2. Manufacturing, including:

a. Formulation development, stability, and production scale-up.

b. Physicochemical and bioanalytical methods development.

c. Current Good Manufacturing Practice (cGMP) Manufacturing development and scale-up support.

d. Stability studies.

e. Manufacture of pilot lots of candidate product in amounts sufficient to carry out proposed non-clinical research.

3. Other IND or New Drug Application (NDA) and Biological License Application (BLA) Activities, including:


b. Regulatory efforts to support pre-IND interactions with the FDA, drafting of an IND, and preparation of IND package.

c. Quality control over the implementation, coordination and conduct of the proposed activities.

d. Drug Master File (DMF) submissions under cGMP guidelines. (see 21 CFR 314.420)

e. Discussions with the FDA’s Center for Drug Evaluation and Research (CDER), Center for Devices and Radiological Health (CDRH) or Center for Biologics Evaluation and Research (CBER), if any, related to development for the proposed therapeutic product.

Note: Research and development studies are anticipated to advance MCMs toward submission of an Investigational New Drug (IND) application and eventual approval/clearance from the FDA under the FDA Animal Rule (21 CFR 314.600-314.6R50, 601.90-601.95). For more information please see the Animal Rule Guidance provided by the FDA.

This contract will NOT provide funds to support the following activities:

- Screening activities to identify new MCMs
- Performance of clinical trials (all phases)
• Development of more than one than one lead candidate MCM per proposal
• Development of biodosimetry biomarkers and/or devices
• Studies using fractionated radiation exposures, commonly used for clinical radiotherapy treatments, unless information gained would be directly applicable to an unintentional exposure scenario

-- END OF RESEARCH AREA 002 --

Research Area 003 - Development of Radiation/Nuclear Predictive Biomarkers and Biodosimetric Devices

Budget and Award Information

NIAID anticipates that one or two awards may be issued for a total cost of up to $2 million for the non-severable base work across all contracts (direct and indirect costs combined), depending on the number of technically meritorious proposals, importance to agency programs, and availability of funds. The total cost for each award(s) may vary depending upon the scope of the project and the technical objectives of the award(s).

The total duration of a proposed contract should be consistent with the nature and complexity of the offeror’s proposed research. The total performance period comprised of the base and any options proposed by an Offeror should not exceed three (3) years.

Awards are anticipated to be made in or around April 2018.

Technical Objectives

Offerors are invited to submit proposals to advance the development of biodosimetry biomarkers and/or devices that have demonstrated concept feasibility. For the purpose of this contract concept feasibility is defined as the capacity to assess levels of radiation exposure within ±0.5 Gy and extent of tissue injuries from ionizing radiation at least 24 hours post-exposure.

Proposals should include a plan to conduct translational research and development and, if applicable, provide additional information and data that support U.S. Food and Drug Administration (FDA) approval or licensure and submission of an Investigational Use Only (IUO) application. Offerors should propose a well-defined product development path with milestones that includes IUO-enabling studies that will be performed under the contract.

Specifically, this Research Area is intended to support further development of biodosimetry biomarkers (biological indicators of radiation exposure, such as intensity of radiation-induced tissue injuries), and/or automated high-throughput diagnostic systems (devices) to rapidly assess levels and types of radiation exposure using minimally invasive biosamples (e.g., a minimum quantity of blood, hair follicles, skin swabs, saliva, serum, or urine, rather than spinal fluid or tissue biopsy samples).

Technical Approach
The biodosimetry biomarkers and/or device to be supported by this initiative must meet all of the following scientific and technical requirements prior to submission of the proposal:

1. Biologically-based dosimetric methods and/or testing/sampling devices where the radiation exposure type, dose level, and dose rates to be measured shall be relevant to a terrorist incident or accidental exposure (e.g., nuclear power plant accident);

2. The biodosimetry biomarker and/or device shall already have demonstrated capabilities to accurately and precisely measure absorbed radiation exposure levels to the body and/or tissues within ±0.5 Gy;

3. Demonstrated medical benefit and broad, practical use of the biodosimetry biomarker and/or device in a mass casualty setting (e.g., time required for assay, process for testing accuracy of the biomarker and/or device and confounders such as: time from exposure, gender, age, health status, co-morbidities or health conditions), as demonstrated with the use of animal models, human clinical samples or \textit{ex vivo} cells; and

4. A target product profile for the lead Biodosimetry Biomarker and/or Device that includes:
   a. Intended use of the biodosimetry biomarkers and/or device in a mass casualty setting; specify use for preliminary triage purposes (within 72 hours), for medical management in a hospital setting, or later post-exposure times (for dose assessment and monitoring).
   b. Performance specifications, features and diagnostic benefit of the biodosimetry biomarker and/or device.
   c. Description and specification of biodosimetry biomarker(s) used, specimen type, selected population, assay limitations, established performance characteristics, demonstrated accuracy, analytical range, and possible confounders of the assay.
   d. Discussions or meeting minutes with the FDA, if any, that are relevant to development activities for the proposed biodosimetry marker or device.

This contract will provide funds to support the following activities:

1. Non-clinical Research and Development, including:
   a. Validation of biomarkers to rapidly assess acute and/or delayed radiation-induced injuries to physiological systems/organs/tissues to inform triage and treatment decisions, and/or assessment of injury and recovery of specific organ/organ systems.
   b. Development of quantitative and accurate means to distinguish between non-irradiated and exposed cohorts. Appropriate radiation quality, radiation doses and dose rate should be applied to animal models to obtain samples. Human clinical biosamples may be utilized if necessary to the study design.
   c. Reagent and assay development.
   d. Conduct of mechanism of action studies relevant to humans.
   e. Analysis of biomarker biokinetics (i.e., biomarker persists over a range of time permitting use in a radiation public health emergency – 30 minutes to days and weeks).
f. Influence of confounders on the kinetics of the technique/biomarker (e.g., gender, age [pediatric and geriatric populations], smoking status, health status, current medications), type of radiation, partial body irradiation, other injuries (burn, trauma, wound).

g. Biomarker studies in appropriate animal models, using relevant exposure conditions (radiation quality, dose, dose rate), and using minimally invasive biosamples (i.e., studies using fractionated radiation exposures, commonly used for clinical radiotherapy treatments would NOT be appropriate, unless information gained would be directly applicable to an unintentional exposure scenario).

h. Clinical research testing ex vivo using human subject samples.

i. Efficacy studies in appropriate animal models, using relevant exposure conditions (radiation quality, dose, dose rate), and using easily available biosamples to test the device.

j. Development of a biodosimetry device, high-throughput, or other automated diagnostic systems for rapid radiation dose assessment following exposure, research that supports quantification of the radiation dose to the exposed individual to inform treatment strategies, and/or assessment of injury and recovery of specific organ/organ systems.

k. Conduct of IUO enabling studies for regulatory approval of an advanced device specific for the intended stage of response (triage or medical management), within a specified time-frame post-exposure (1-3 days post exposure for point-of-care, or 72 hours and beyond for medical management guidance), and defined biodosimetry biomarkers (e.g., RNA, DNA, multiparametric, metabolomics).

2. Manufacturing, including:

a. Pilot kits to test for stability, verification, and validation of the biodosimetry biomarkers to be used with pre-existing devices.

b. Development and optimization of biomarker assays of radiation injury for preliminary triage purposes following a mass exposure incident, or for medical management in a hospital setting at later post-exposure times.

c. Performance testing to demonstrate robustness of the biomarker assay.

d. Pilot biodosimetry device to test for stability, verification and validation of the biomarker assay.

e. Development and optimization of throughput capabilities, turnover time for the biomarker assay, as well as sample information (type of sample, volume, quantity, ease of accessibility).

f. Performance testing to demonstrate robustness of a biodosimetry device (for field triage) or for dose refinement to demonstrate measurement precision performance characteristics (for medical management).

3. Other IUO Activities, including:

b. Regulatory efforts to support pre-IUO interactions with the FDA, drafting of an IDE, and preparation of IUO package.

c. Quality control over the implementation, coordination and conduct of the proposed activities.

d. Drug Master File (DMF) submissions under cGMP guidelines. (see 21 CFR 314.420)

NOTE: Research and development studies are anticipated to advance biodosimetry biomarkers and/or devices toward submission of an Investigational Use Only (IUO) and eventual approval/clearance from the FDA under the FDA Animal Rule (21 CFR 314.600-314.650, 601.90-601.95). For more information please review the Guidance for Radiation Biodosimetry Devices provided by the FDA.

This contract will not provide funds to support the following activities:

- Screening activities to identify biodosimetry biomarkers and/or devices
- Development of medical countermeasures
- Non-biologically-based dosimetric methods and/or environmental testing/sampling devices (e.g. thermo-luminescent detectors (TLDs), fortuitous dosimeters, radiation portals, etc.)
- Performance of clinical trials (all phases)
- Studies using fractionated radiation exposures, commonly used for clinical radiotherapy treatments, to validate the biomarkers or device; unless samples are collected after the first fraction and information gained would be directly applicable to an unintentional exposure scenario

-- END OF RESEARCH AREA 003 --

C. DAIT: RADIATION/NUCLEAR COUNTERMEASURES PROGRAM - Additional Technical Proposal Instructions:

The following information supplements Section IV – Instructions, Conditions, and Notices to Offerors, of this solicitation, and should be used for preparing proposals in response to Research Area 002 or 003. Separate and distinct proposals must be submitted for each Research Area to which you are proposing. It is recommended that your proposal be organized in accordance with the order of your Statement of Work and the technical evaluation criteria provided in Section V.

1. Experimental Plan (Include the following in SECTION 4: TECHNICAL DISCUSSIONS, of your Technical Proposal):

NIAID recognizes that the regulatory path to licensure for products within the scope of this BAA may not have been previously defined. The regulatory requirements are likely to be defined in an iterative decision-making process with the FDA based on product-specific data as it emerges.

Provide an Experimental Plan that details the specific tasks and stages that the Offeror proposes to perform with contract funding that can reasonably be completed in three years. The Experimental Plan should also include:
a. Details of the critical path to licensure for the proposed product, based on current data and/or discussions with the FDA. Specify the elements of this critical path that would be completed under the proposed Statement of Work.

b. Activities and stages of product development that the Offeror proposes to perform under contract funding, including Go/No Go decisions for advancement to the next stage.

c. Timelines for the initiation, conduct and completion of product development activities for each stage, the analysis of outcomes and findings, and the preparation of detailed reports summarizing the results of work completed and an analysis of the data as it relates to the qualitative and quantitative criteria established for Go/No Go decision making. Provide a Gantt chart of proposed activities.

d. A detailed discussion of the proposed technical approach for each activity to be performed to achieve the project objectives, containing sufficient detail to fully explain and justify the scientific and technical rationale for the proposed approach and methodologies. Also include information on the proposed radiation dosimetry and irradiator set-up (e.g., radiation dose and quality, dose rate, source).

e. An analysis of risks that could compromise performance of activities described in the Statement of Work, along with a risk mitigation plan in the event that the specified risks materialize.

2. Data Management, Quality Assurance and Regulatory Compliance (Include the following in SECTION 4: TECHNICAL DISCUSSIONS, of your Technical Proposal):

a. Include a description of: (1) proposed data management that will be used for all studies; (2) the procedures for the data entry and validation; (3) documentation of data corrections, routine maintenance and backup, transmission of data, data reporting and exporting system, access control and confidentiality, and data retrieval and disaster recovery; and (4) the statistical design and analysis resources that will be used to support contract activities.

b. (Applicable ONLY to Research Area 002, as appropriate to the statement of work) Describe procedures to be used to maintain documentation adhering to FDA regulatory standards and published guidance documents, for the conduct of assays under GLP and manufacturing under cGMP standards. Include information on data management for GLP and cGMP activities.

c. (Applicable ONLY to Research Area 002, as appropriate to the statement of work) Describe processes and procedures for regulatory compliance including: timing of audits, timely scheduling of audits, performance of audits, responding to audit reports and supporting documentation, as well as an audit history of the facilities proposed for use in carrying out contract activities.

d. List any applicable FDA inspection reports (Form 483), audit reports and/or any other FDA communications about the lead MCM (applicable ONLY to Research Area 002), or lead BioDosimetry Biomarkers and Device (applicable ONLY to Research Area 003). (This information should not exceed more than 1 page).

3. Scientific and Technical Personnel (Include the following in SECTION 5: Scientific and Technical Personnel, of your Technical Proposal):
a. **Principal Investigator (PI):** Describe the scientific and technical expertise of the proposed Principal Investigator with regard to radiation biology and product development. Document the experience of the PI with performing studies of comparable size and scope (completed or ongoing) in accordance with FDA regulations and published guidance documents, including GLP and cGMP guidelines as appropriate to their proposed Statement of Work.

b. **Other Key Scientific and Technical Personnel:** Provide selected references for publications relevant to the scope of the BAA; include experience with projects of similar scope, size and complexity carried out by the offeror and any proposed subcontractors over the past five years. Document the experience of scientific personnel and/or subcontractors with performing studies in accordance with FDA regulations and published guidance documents, including GLP and cGMP guidelines as appropriate to their proposed Statement of Work.

4. **Organizational Facilities, Equipment, and other Resources**

   As appropriate to the Statement of Work:

   a. Document: (1) the availability of proposed facilities for the duration of the contract; (2) plans for obtaining, adding or deleting facilities as necessary due to progress or performance issues that arise during the course of product development.

   b. Provide procedures to be utilized to insure compliance with all safety guidelines and regulations, including training and monitoring of personnel.

   c. Document entry access to facilities of the contractor or the subcontractor, if any for performing assays and animal studies under GLP standards and production of therapeutic material under cGMP guidelines as required by the Experimental Plan.

   d. Describe provisions for complying with Public Health Service and Department of Agriculture guidelines and regulations for the housing and humane care and use of laboratory animals as prescribed by the Office of Laboratory Animal Welfare (OLAW) (http://grants.nih.gov/grants/olaw/olaw.htm), the USDA Animal Welfare Act (http://awic.nal.usda.gov/government-and-professional-resources/federal-laws/animal-welfare-act) and the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) (http://www.aaalac.org/index.cfm) if appropriate.

   e. Describe provisions for ensuring safe facilities for the conduct of work and the controls and provisions to be in place for handling radioactive materials and irradiation equipment (see Publication 3000 as a recommended program; http://www.lbl.gov/ehs/pub3000/CH21.html#_Toc407168416).

5. **Uniform Cost Assumptions**

   Offerors should use the following assumptions for the purposes of estimating costs and preparing the technical proposal:

   a. Technical Cost Assumptions

      1. Business Proposals must provide a breakdown by line item cost, including: Direct Labor, Direct Materials, Animal costs (including housing), Subcontracts, Consultants, Travel (refer to the instructions in Section IV, 2., C. - Business Proposal Instructions, of this solicitation).
2. It is anticipated that this contract will be aligned with the deliverables identified in the Research and Technical Objectives. Consequently, Business Proposals must provide a breakdown of costs for each milestone as well as a cost estimate for the entire project period of performance. The Business Proposal must also include a detailed Gantt chart that provides timelines delineating each milestone and associated tasks, subtasks and budgets to the subtask level of detail.

b. Travel

1. **Contract Initiation Meeting:** Assume one meeting in the Rockville, Maryland area within 60 calendar days of the effective date of the contract to discuss contract initiation. Assume that this meeting will require a two-night stay and attendance of all of the Contractor’s key personnel (up to 5 individuals), including subcontractor’s personnel.

2. **Annual Meetings:**
   i. **Annual Site Visits:** Assume annual 1-day site visits at the Contractor’s facilities to be attended by the Principal Investigator and key personnel of the Contractor, 4 Government personnel and 4 collaborators and/or key personnel of subcontractors. Travel and per diem costs for the Government personnel shall not be provided by the contract.
   ii. **Annual Programmatic Meetings:** Assume annual ½ day programmatic meetings, to be held in the Rockville, MD area. Include travel costs (transportation, meals, hotel, etc.) for Contractor staff members, including the Principal Investigator, key co-investigators, collaborators and subcontractors (up to 5 individuals).

3. **Scientific Meetings:** Budget travel costs (transportation, meals, hotel, etc.) for one 3-day scientific meeting per year for up to 2 personnel to travel to present scientific findings generated under this contract.

4. **Subcontractor Site Visits:** Budget travel costs (transportation, meals, hotels, etc.) for two 2-day trips per year for up to 3 personnel to visit sites of subcontracts, if applicable.

D. **DAIT: RADIATION/NUCLEAR COUNTERMEASURES PROGRAM - Reporting Requirements and Deliverables:**

1. **Reporting Requirements**

   In addition to reporting requirements and deliverables identified elsewhere in this solicitation, it is expected that awards resulting from Research Areas 002 and 003 will include the following reports and deliverables:

   a. **Quarterly Progress Report**

   This report shall include a description of the activities during the reporting period and the activities planned for the ensuing reporting period. The first reporting period consists of the first full three months of performance including any fractional part of the initial month. Thereafter, the reporting period shall consist of three full calendar months.

   b. **Annual Technical Progress Report for Clinical Research Study Populations**
The Contractor shall submit information about the inclusion of women and members of minority groups and their subpopulations (when appropriate) for each study being performed under this contract. The Contractor shall submit this information in the format indicated in the attachment entitled, "Cumulative Inclusion Enrollment Report," which is set forth in SECTION VI of this contract. The Contractor also shall use this format, modified to indicate that it is a final report, for reporting purposes in the final report. If the clinical study(s) involves US and non-US sites, the US sites and non-US sites should be reported on separate Cumulative Inclusion Enrollment Reports.

In addition, the NIH Policy and Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research, amended October 2001, applies. If this contract is for Phase III clinical trials, see II.B of these guidelines. The Guidelines may be found at the following website: http://grants.nih.gov/grants/funding/women_min/women_min.htm

For NIH-defined Phase III Clinical Trials: Include a description of the plans for valid analysis in the study design and outcomes. This includes designing the study in a manner that potential differences, as appropriate, by sex/gender and/or racial/ethnic groups in the clinical trial protocol could be conducted. Also, provide a description of any analyses by sex/gender, race, and/or ethnicity, as appropriate, in the annual progress report and the final report. If the analysis reveals no subset differences, a brief statement to that effect, indicating the subsets analyzed, will suffice. The Government strongly encourages inclusion of the results of subset analysis in all publication submissions. In the final report, the Contractor shall include all final analyses of the data on sex/gender, race and/or ethnicity.

c. Final Report

This report shall consist of the work performed and results obtained for the entire contract performance period. This report shall be in sufficient detail to describe comprehensively the results achieved. The Final Report shall be submitted on or before the last day of the contract performance period. A Quarterly Progress Report will not be required for the period when the Final Report is due.

The Contractor shall provide the Contracting Officer’s Representative and Contracting Officer with an electronic copy of the Final Report in draft form 30 calendar days prior to the completion date of this contract. The Contracting Officer’s Representative will review the draft report and provide the Contracting Officer with comments within 15 calendar days after receipt. The Final Report shall be corrected by the Contractor, if necessary and the final version delivered as specified in the above paragraph.

d. Summary of Salient Results

The Contractor shall submit, with the Final Report, a summary (not to exceed 200 words) of salient results achieved during the performance of the contract.

2. Deliverables

Delivery of other reports and deliverables will be proposed by the Offerors in their technical proposal. They will be developed further after receipt of proposals as a result of finalization of the Statement of Work and other terms and conditions of any resultant contract during negotiations.
All electronic reports and deliverables shall be submitted through the NIAID Electronic Reports and Deliverables System, available here: https://erds.niaid.nih.gov/

-- END OF DAIT: RADIATION/NUCLEAR DEVELOPMENT PROGRAM --

3. DIVISION OF MICROBIOLOGY AND INFECTIOUS DISEASES (DMID)

A. BACKGROUND:

Research supported by the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH), Department of Health and Human Services (DHHS), strives to understand, treat, and ultimately prevent the myriad infectious, immunologic, and allergic diseases that threaten millions of human lives. NIAID also has a key role in the development of new medical countermeasures (MCMs) against potential agents of bioterrorism, drug-resistant pathogens, and emerging and re-emerging infectious diseases. Through a variety of research grants and contracts, NIAID’s Division of Microbiology and Infectious Diseases (DMID) supports basic and applied research to develop and evaluate therapeutics, vaccines, and diagnostics targeting multiple pathogens, including NIAID Category A, B, and C priority pathogens (https://www.niaid.nih.gov/research/emerging-infectious-diseases-pathogens). This solicitation aims to further advance the translation of promising products against these priority pathogens and emerging infectious diseases.

These efforts are guided by the current NIAID Strategic Plan for Biodefense Research (https://www.niaid.nih.gov/research/biodefense-strategic-plan), which established a strategy for developing new and improved MCMs against a broad array of relevant pathogens. NIAID’s plan reflects the Institute’s partnerships with the HHS Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) and Department of Homeland Security. The HHS PHEMCE coordinates interagency efforts aiming to optimize the United States’ preparedness for public health emergencies with respect to the creation, stockpiling, and use of MCMs. Led by the Assistant Secretary for Preparedness and Response (ASPR)/HHS, the PHEMCE consists of the NIH, Food and Drug Administration (FDA), and Centers for Disease Control and Prevention (CDC), and senior leadership from other federal agencies. The 2016 HHS PHEMCE Strategy and Implementation Plan (http://www.phe.gov/Preparedness/mcm/phemce/Pages/strategy.aspx) describes the current priorities for MCM development against advanced, enhanced, or emerging threats.

Further, an Executive Order released by the President of the United States in 2014 (http://www.whitehouse.gov/the-press-office/2014/09/18/executive-order-combating-antibiotic-resistant-bacteria) highlights one of the most urgent public health threats facing us today – antibiotic resistance – and encourages the development of new and next generation antibiotics, among other goals. Also through this solicitation, NIAID aims to advance research relevant to this new guidance.

B. RESEARCH AREAS (DMID):

Research Area 004 - The Development of Broad-spectrum Therapeutic Products for Biodefense, Antimicrobial-Resistant Infections and Emerging Infectious Diseases

Budget and Award Information
NIAID estimates that two or more awards may be issued across Research Areas 004 and 005 for a total cost of up to $18 million for the non-severable base work across all contracts (direct and indirect costs combined), depending on the number of technically meritorious proposals, importance to agency programs, and availability of funds. The total cost for each award(s) may vary depending upon the scope of the project and the technical objectives of the award(s).

The total duration of a proposed contract should be consistent with the nature and complexity of the offeror’s proposed research. The total performance period comprised of the base and any options proposed by an Offeror should not exceed five (5) years.

Awards are anticipated to be made in or around May 2018.

**Technical Objectives**

The objective of Research Area 004 is the development of broad-spectrum therapeutic products for use in post-event settings following the intentional release of a NIAID Category A, B, or C Priority Pathogen, or in response to naturally-occurring outbreaks of infectious diseases caused by these pathogens or Zika virus. Only broad-spectrum therapeutics active against these pathogens are eligible as proposed candidates/products.

Broad-spectrum activity is a characteristic that enables a particular product to mitigate biological threats across a range or class of agents. There are a number of traditional threats for which effective treatments are either non-existent, of limited usefulness, or vulnerable to both naturally emerging and intentionally engineered antibacterial and antiviral resistance. A limited number of anti-infectives with broad-spectrum activity directed at common, invariable, and essential components of different classes of microbes, or directed at host functions that are required by different classes of microbes, could potentially be effective against both traditional and non-traditional threats. This approach would allow a small number of drugs to replace dozens of pathogen-specific drugs for emergency use.

Additionally, strategies to overcome bacterial and viral drug resistance could extend the clinical utility of existing broad-spectrum anti-infectives and have immediate benefits. Moreover, broad-spectrum treatments directed towards host targets have the potential to be effective against one or more diseases. For these reasons, proposals on the non-traditional therapeutics are encouraged, provided they have demonstrated therapeutic activity when used alone or in combination with an existing licensed product. For the purposes of this contract, therapeutic activity is defined as the cure or mitigation of disease once signs and symptoms of infection are evident.

Research Area 004 will support the progression of candidate therapeutic countermeasures through the product development pipeline toward licensure by the FDA. To that end, lead candidates must show all of the following characteristics:

- Demonstrated feasibility of manufacturing;
- *In vitro* and *in vivo* evidence of efficacy; and
- Sufficient characterization to allow the development of a draft target product profile.

**Technical Approach**

Solicited Products:

1. Antibacterial Broad-spectrum Therapeutics
Candidate antibacterial therapeutic products must meet all of the following criteria:

a. Display activity against the effects of one or more of the urgent, serious, and concerning drug-resistant bacterial threats listed in the 2013 CDC Antibiotic Resistance Threats in the United States report;

b. Display activity against the effects of one of the following bacterial pathogens:
   - Bacillus anthracis
   - Francisella tularensis
   - Yersinia pestis
   - Burkholderia pseudomallei
   - B. mallei

2. Antiviral Broad-spectrum Therapeutics

Candidate antiviral therapeutic products must meet all of the following criteria:

a. Display activity against viruses that are classified as NIAID Category A, B, or C viral threat agents; and

b. Display activity against infection caused by two or more viruses from the following families:
   - Flaviviruses (esp. Zika and Dengue virus)
   - Filoviruses (esp. Ebola virus)
   - Orthopox viruses representative of Variola major
   - pathogenic Coronaviruses (e.g. MERS and SARS CoV)
   - Alphaviruses (esp. Chikingunya virus)
   - Influenza (e.g., H1N1, H3N2)

For the purposes of this Research Area, a broad-spectrum candidate for antibacterial or antiviral therapeutics is defined as a single agent that meets all of the following criteria:

a. A drug (synthetic or natural product) or a biological product (e.g. monoclonal antibodies, recombinant proteins) intended for use in the cure, mitigation, or treatment of two or more bacterial or viral pathogens;

b. An agent with demonstrated in vivo activity in an appropriate therapeutic model of disease; and

c. An agent that will complete evaluation in a Phase 1 clinical trial within the 5-year proposed period of performance. Phase 1 clinical trial completion is defined as completion of a Final Clinical Study Report following International Conference on Harmonization (ICH) Guidelines on Structure and Content of Clinical Study Reports E3.

3. Anti-toxin Broad-spectrum Therapeutics

Candidate anti-toxin therapeutic products must meet at least one of the following criteria:

a. Display activity against Ricin intoxication;
b. Display activity against the effects of Staphylococcus enterotoxin B;

c. Have broad-spectrum activity against the effects of all of the known serotypes of Clostridium botulinum neurotoxin (serotype A, B, C, D, E, F, G);

d. Function as small molecule agents against the effects Bacillus anthracis Protective Antigen, Lethal Factor and/or Edema Factor.

For this Research Area, an anti-toxin therapeutic candidate is a single product meeting the following criteria/definitions:

a. An agent intended for use in the cure, mitigation or treatment of intoxication;

b. An agent that has demonstrated activity against a specific toxin in an appropriate in vivo model of disease; and

c. An agent that will complete evaluation in a Phase 1 clinical trial within the 5-year proposed period of performance. Phase 1 clinical trial completion is defined as completion of a Final Clinical Study Report following International Conference on Harmonization (ICH) Guidelines on Structure and Content of Clinical Study Reports E3.

Additional Requirements

Organizations responding to this Research Area must have documented expertise in drug discovery and development, including demonstrated knowledge of regulatory guidelines and submission processes for candidate products directed against emerging infectious diseases and/or biological threats identified as NIAID Category A, B and C Priority Pathogens, Zika virus, or identified in the 2016 HHS PHEMCE Strategy and Implementation Plan.

Contracts awarded under this Research Area will NOT support:

- Basic research and discovery of new series/candidates/products
- Refinement of a lead series to identify a candidate
- Development of devices, topical products, or diagnostics
- Development of candidates/products that have not demonstrated therapeutic activity in a relevant animal model of disease
- Development of serum-derived products
- Development of licensed products as new formulations, or for additional clinical indications

-- END OF RESEARCH AREA 004 --
NIAID estimates that two to three awards may be issued across Research Areas 004 and 005 for a total cost of up to $18 million for the non-severable base work across all contracts (direct and indirect costs combined), depending on the number of technically meritorious proposals, importance to agency programs, and availability of funds. The total cost for each award(s) may vary depending upon the scope of the project and the technical objectives of the award(s).

The total duration of a proposed contract should be consistent with the nature and complexity of the offeror’s proposed research. The total performance period comprised of the base and any options proposed by an Offeror should not exceed five (5) years.

Awards are anticipated to be made in or around May 2018.

**Technical Objectives**

The objective of Research Area 005 is the development of vaccines for use in post-event settings following the intentional release of a NIAID Category A, B, or C Priority Pathogen, or in response to naturally-occurring outbreaks of infectious diseases caused by these pathogens or Zika virus. Only proposed candidate products aimed at these pathogens are eligible.

The candidate product(s) may also include an adjuvant that enhances the immune response (i.e., enhanced immunogenicity, decreased time or reduced number of immunizations to achieve protective antibodies and/or increased efficacy). Adjuvants will be supported as components of the candidate product. Novel delivery platforms that reduce logistical requirements may be components of the candidate product to be developed as well. Cross-cutting technologies applicable to more than one vaccine component are also of interest.

**Technical Approach**

**Solicited Products:**

Research Area 005 will support the progression of candidate countermeasures through the product development pipeline toward licensure by the FDA. For the purposes of this Research Area:

- Proposals should demonstrate vaccine candidate efficacy using non-clinical challenge agent exposure routes that are most relevant to known or suspected routes of natural human exposure.
- The scope of the product development activities to be undertaken will depend on the status of the individual candidate product, as well as regulatory requirements.

1. **Vaccines Against Antimicrobial Resistance Threats**

    Antimicrobial resistance (AMR) is rendering many current countermeasures ineffective and increasingly challenges the development of effective new antimicrobials (antibiotics, antivirals, etc.) for many NIAID priority pathogens. For example, antibiotic resistance represents a serious threat to public health and the economy. As more bacterial strains become resistant to an ever-increasing number of antibiotics, drug choices will become increasingly limited and expensive and, in some cases, nonexistent. For the many AMR pathogens, there are currently no licensed vaccines. The development of vaccines against AMR microorganisms is critical since vaccines reduce the need to use antimicrobials and antibiotics, and therefore reduce the threat of AMR.

2. **Technology Gaps that Slow Progression to Clinical Testing**
There is a critical need for technologies that accelerate the vaccine design, development, nonclinical testing, and production process toward clinical testing. These innovative technologies/tools would be in product development and/or regulatory models and reduce or eliminate the bottlenecks to clinical testing and increase the likelihood of success along the regulatory path. These tools/technologies could advance animal models, predict/determine human safety and efficacy, and/or improve downstream processing methods and analytical tools to provide novel rapid methods of assessment. Other technologies could accelerate the development of vaccines for infectious diseases by technologies similar to genome-to-vaccine or epitope-driven vaccine approaches.

3. Enhanced Vaccine Performance

Several techniques can promote enhanced vaccine performance. These techniques may be applicable across a broad range of products and/or platforms. These include development of vaccine technologies, platforms, and/or formulations that minimize cold chain requirements and enhance stability. Strategies for ease and simplicity of delivery, and increased speed of onset to immune protection including sterilizing immunity are of interest.

4. Novel Vaccine “Plug-and-Play” Technologies

NIAID supports development of plug-and-play technological solutions/platforms that improve preparedness capabilities, approaches to MCM development and manufacturing against multiple threats. These technologies would increase the rapid response to and development of vaccines to infectious disease threats, contribute to greater biodefense preparedness and significantly improve the ability of the US to protect its citizens against infectious diseases. Technologies that enable multivalent and/or universal vaccines approaches are of interest. Platform development technologies could also include continuous manufacturing initiatives including process efficiencies and surge production capabilities and enhancement of these process efficiencies and surge capabilities.

Additional Requirements

1. This Research Area focuses on the development of promising lead vaccine candidates/products. To that end, a lead candidate must possess all of the following characteristics:

   • Demonstrated feasibility of manufacturing
   • *In vitro* and *in vivo* evidence of efficacy
   • Sufficient characterization to allow the development of a draft target product profile

2. Organizations responding to this Research Area must have documented expertise in vaccine discovery and development, including demonstrated knowledge of regulatory guidelines and submission processes for candidate products directed against emerging infectious diseases and/or biological threats identified as NIAID Category A, B and C Priority Pathogens, Zika virus, or identified in the 2016 HHS PHEMCE Strategy and Implementation Plan.

Contracts awarded under this Research Area will NOT support:

• Basic research and discovery of new series/candidates/products
• Refinement of a lead series to identify a candidate
• Development of devices or diagnostics in the absence of a companion product
• Development of candidates/products that have not demonstrated vaccine efficacy in a relevant animal model of disease
• Development of Anthrax vaccines

-- END OF RESEARCH AREA 005 --

C. DMID: RESEARCH AREAS 004 and 005 - Additional Technical Proposal Instructions

The following information supplements Section IV – Instructions, Conditions, and Notices to Offerors of this solicitation, and should be used for preparing proposals in response to Research Area 004 or 005. Separate and distinct proposals must be submitted for each Research Area to which you are proposing.

1. CANDIDATE PRODUCT PROFILE

Provide a synopsis (suggested 10-page maximum – included in total page limitation) of the intended use of the candidate product and background information to support the further development of the candidate product as formulated/designed. Include the following information:

a. The intended use/indication of the lead product/formulation/design and the biodefense/public health gap the product is intended to fill.

b. The performance specifications and features the product/device would meet in order to provide benefit that would meet the Technical Objectives, including potential stability, dosing and safety.

c. A description of the product and its current formulation and/or device description.

d. Data to support the characterization and selection of the product for further development, including: a summary of manufacturing status, processes, scalability product stability and overall potential for commercialization, a summary of data that demonstrates efficacy using appropriate assays and animal models predictive of the human response; a description of the assays and animal models; and, the rationale for the choice of assays and animal models for the outcome/endpoints selected.

e. Meeting minutes or, if no meeting minutes are available, synopses from discussions with the FDA (CBER/CDER/CDRH), if any, that are relevant to development activities for the proposed product.

f. A description of activities that are part of the critical product development strategy through submission of a BLA or NDA.

2. PRODUCT DEVELOPMENT PLAN

Technical Proposals must include a Product Development Plan that describes the critical path for the proposed candidate/product to eventual licensure and identifies the decision points/gates for progress of the candidate/product. Offerors should point out areas of significant uncertainty and propose likely alternatives.
The Product Development Plan should detail the specific tasks and stages to be performed with contract funding that can be reasonably completed within the period of performance. The Product Development Plan should include a summary of the following:

a. A description of the candidate/product as it is currently configured.

b. The intended use/indication of the proposed candidate/product and the public health gap the product is intended to fill.

c. A Target Product Profile for the lead candidate, the performance specifications and features the candidate/product should have including potential stability, dosing and safety.

d. Data to support the characterization and selection of the candidate/product for further development. A summary of the data that demonstrates activity in an appropriate animal model.

e. Discussions with FDA, if available, that are relevant to development activities for the proposed candidate/product.

f. A description of activities that are part of the critical product development strategy through submission of a BLA or NDA.

g. As relevant, plans for the development, submission, and sponsorship of an Investigational New Drug (IND)/combination product application, including compliance with all regulatory requirements.

h. As relevant, plans for the design, conduct, and completion of a Phase 1, Phase 1/2 and/or Phase 2 clinical trial for the candidate product.

3. **WORK PLAN** (For the implementation of the PRODUCT DEVELOPMENT PLAN)

Technical proposals shall include a work plan detailing the specific tasks that the Offeror proposes to perform with contract funding that can reasonably be completed within the period of performance. These include milestones and gates for Go/No Go decisions with a timeline Gantt chart that can be correlated with a task-linked budget at a level that facilitates government oversight of funded activities.

The Work Plan for the candidate/product submitted with the Technical Proposal will be subject to negotiations and if an award is made, the Statement of Work (SOW), to be developed by the Offeror and provided with the Technical Proposal, shall provide for the updated Work Plan to be approved by the Contracting Officer’s Representative (COR) and the Contracting Officer prior to the initiation of any activities related to its execution. In addition, the SOW shall provide for annual updates of the Work Plan, and additional updates upon a change in any task, that must be approved by the COR and the contracting officer prior to the initiation of any activities related to its execution. The Work Plan shall include:

a. Milestones for key project objectives.

b. Threshold decision gates using objective, measurable criteria to enable Go/No-Go decisions for advancement into the next stage of development. For each decision gate proposed, a description of the specific qualitative and quantitative criteria, associated data elements and
the process for making decisions to proceed or not proceed (Go/No-Go), for advancement of candidates/products through each stage of the product development process.

c. Timelines for: the initiation, conduct and completion of product development activities for each stage; the analysis of outcomes and findings; and, the preparation of detailed reports summarizing the results of work completed and an analysis of the data as it relates to the qualitative and quantitative criteria established for Go/No Go decision making.

d. A Gantt chart of proposed activities that are associated with a task-linked budget at a level that facilitates Government oversight, and contractor management of those activities. A Gantt chart of proposed activities that can be correlated with a task-linked budget at a level that facilitates Government oversight of those activities.

The Gantt chart should be organized by each specific decision gate/stage of product development proposed, as well as the overall product development program. Schedules should be shown in terms of calendar months from the date of authorization to proceed or, where applicable, the date of a stated event. The timeline will identify summary tasks and subtasks, including predecessor and successor logic for all activities covering the initiation, conduct and completion of all product development activities in a base period and in subsequent option periods.

The task-linked budget should provide a breakdown of direct costs linked to each activity, task and subtask contained on a detailed chart. The timeline should identify summary tasks and subtasks, including predecessor and successor logic for all activities covering the initiation, conduct and completion of all product development activities in a base period and in subsequent option periods.

e. A detailed discussion of the proposed technical approach for each activity to be performed to achieve the key project objectives, with sufficient detail to fully explain and justify the scientific/technical rationale for the proposed approach and/or methodologies.

f. The following, as applicable for the project being proposed:

- Approach for manufacturing and CMC development of candidate/product to optimize production, formulation and delivery.
- Description of non-clinical studies, including all Investigational New Drug (IND)-enabling studies.
- Approach for development of assays and reagents needed to support product development activities.
- Development and submission of an IND and performance of clinical trials to demonstrate product safety and/or early efficacy.

g. Plans for quality control over the implementation, coordination and conduct of the activities set forth in the Work Plan, including plans to conduct regulatory audits.

h. Approaches to integrate adverse experimental or production results, new scientific findings and/or guidance from FDA into the proposed goals and timelines. A risk management and mitigation plan is required.

i. A plan for sharing data and resources, reagents, assays and animal models developed with contract funding with the scientific community.
j. A list and description of all items to be delivered to the Government at each stage in the product development process during the performance of the contract and a timeline for delivery to be determined at time of award. This includes delivery of all necessary supporting documentation and letters of cross-reference required for subsequent regulatory submissions, and clinical trials.

NOTE: Depending on the status of the individual candidate product, the Contractor may be required to deliver to the Government an amount of product for any purpose deemed necessary by the Government.

k. A Technical Proposal Cost Summary to include: a list of all subcontracts by activity (for example, GMP manufacture, IND-enabling toxicological studies, formulation and fill, etc.) including a budget for each stage of product development proposed for funding (direct costs plus indirect costs).

l. Offerors proposing subcontracts and/or consultants to perform portions of the proposed work should clearly identify the specific tasks for which they plan to utilize subcontractors and/or consultants, as well as the method and level of integration/coordination between the prime Contractor and all proposed subcontractors and/or consultants, and the expected advantages of such an approach. Processes for subcontractor and consultant identification, selection, management and evaluation should be described. Expected deliverables associated with consulting services should be clearly delineated.

m. The technical proposal should include direct cost and resources information, such as labor-hours and categories and applicable rates, materials, subcontracts, travel, etc., and associated costs so that the Offeror's understanding of the project may be evaluated (http://oamp.od.nih.gov/DGS/FORMS/Tech-Prop-Cost-Summ.pdf). However, the technical proposal should not include pricing data relating to individual salary information, indirect cost rates or amounts, fee amounts (if any), and total costs.

The Product Development Plan will be subject to negotiations, and if an award is made, the resulting contract shall provide for continuing revision of the Product Development Plan following periodic input and approval from the Government.

4. CLINICAL TRIAL PROTOCOL DEVELOPMENT AND IMPLEMENTATION

Human subjects research may be carried out under this contract with the approval of DMID. Describe experience in the conduct of human subjects research in accordance with DMID, NIAID, NIH policies and guidelines and provide a statement acknowledging willingness to conduct clinical research according to these policies and in accordance with applicable ICH and U.S. FDA regulations and guidance.

Provide a Protocol Synopsis for each proposed clinical trial including a brief description of all of the following:

- Study objectives and endpoints
- Human subjects protection
- Provisions for data and safety monitoring
- Draft inclusion/exclusion criteria and recruitment, and retention of study participants
- Informed consent
- Quality management plan
- Clinical monitoring plan
• Summary of statistical approach
• Plan for management of subcontractor activities

Provide a plan that specifies at which points in the Statement of Work (SOW) it will be critical to engage in communications with the FDA and the means by which NIAID will be kept apprised of such communications.

5. **REGULATORY COMPLIANCE, QUALITY CONTROL & ASSURANCE, and DATA MANAGEMENT**

- Describe the data management and quality control systems/procedures that will be used for all studies and procedures for data entry and validation, documentation of data corrections, routine maintenance and backup, transmission of data, data reporting and exporting system, access control and confidentiality, and data retrieval and disaster recovery in accordance with 21 CFR 11.
- Describe the statistical design and analysis resources that will be used to support contract activities.
- Provide a plan to develop and maintain quality assurance documentation to support adherence to FDA regulatory standards and guidance that bear on the conduct of assays under GLP, manufacturing under GMP, and performance of clinical trials under GCP standards, as relevant to the Product Development Plan.
- Document experience of the Offeror and any proposed subcontractors and consultants experience with performing regulated studies in accordance with FDA regulations and guidance, including GLP, cGMP, and/or GCP guidelines as appropriate to their proposed SOW.
- Describe a plan to determine when audits need to be performed, timely scheduling of audits, performance of audits, and responding to audit reports.
- Provide an audit history of the facilities proposed for use in carrying out contract activities that will be performed under GLP, cGMP and/or GCP.
- Provide letters signed by the appropriate authority allowing for pre-award site visits to the Offeror’s facility and proposed subcontractors’ facilities. Site visits may include GLP, cGMP, or GCP audits (as appropriate) performed by independent auditors contracted by the NIAID.

6. **UNIFORM COST ASSUMPTIONS**

Offerors should use the following assumptions for the purposes of estimating costs and preparing the technical proposal:

a. Audits: Assume three (3) independent QA audits per year for the duration of the contract period of performance.

b. Purchase of Equipment: Cost will NOT be allowed for the purchase of any equipment, hardware, or software under this contract.

c. Alterations and Renovations: Cost will NOT be allowed for any facility construction, alterations, or renovations under this contract.

d. Programmatic Presentations and Meetings: Assume attendance at the following meetings:

   1) Post Award Contract Initiation Meeting
The Contractor shall be responsible for arranging a one-day meeting at the contractor site. Attendees should include all Key Personnel and Key Subcontractor personnel.

2) Annual Contract Review Meetings

For each year of performance, the Contractor shall attend an Annual Contract Review meeting. The meetings will be held at the Contractor’s facility, and a location at or near Washington D.C., on an alternating-year basis. Each meeting will be one-day in length. Attendees should include all Key Personnel, members of the External Advisory Group, and Key Subcontractor personnel.

3) External Advisory Group Meetings

After contract award and in consultation with the Contracting Officer’s Representative (COR) and the Contracting Officer, the Contractor shall establish an External Advisory Group with the relevant expertise to critically evaluate technical progress in achieving product development objectives and established timelines. It is anticipated that the External Advisory Group will consist of at least 2 members. The membership of the External Advisory Group will be proposed by the Contractor and approved by the COR and Contracting Officer post-award. Compensation for this role will be provided by the Contractor with contract funds as approved by the Contracting Officer and will be commensurate with the specific roles and duties assigned to the members.

NOTE: DO NOT identify or propose External Advisory Group members in the technical or business proposal. Do not contact specific individuals regarding service on the External Advisory Group in advance of contract award.

7. POST-AWARD REQUIREMENTS

The following POST-AWARD requirements will apply to all awards made under Research Areas 004 and 005 of this BAA.

Offerors are instructed to address responsibility for complying with these requirements in the proposed Statement of Work for the Technical Proposal. Offerors are NOT required to submit documentation to address these post-award requirements in their technical proposals. Instructions for submitting documentation associated with post-award requirements will be provided during negotiations.

a. Contractual Commitments

Upon award of a contract, the contractor shall be required to make legal commitments through acceptance of Government contract clauses contract. The outline that follows is illustrative of the types of provisions required by the Federal Acquisition Regulations that shall be included in the contract. This is not a complete list of provisions to be included in contracts, nor does it contain specific wording of these clauses. Copies of complete terms and conditions applicable to your contract will be provided during negotiations.

1) Standards of Work: Work performed under the contract must conform to high professional standards.

2) Inspection: Work performed under the contract is subject to Government inspection and evaluation at all times.
3) Termination for Convenience: The Government may terminate the contract at any time for convenience if it deems termination to be in its best interest, in which case the contractor will be compensated for work performed and for reasonable termination costs.

4) Disputes: Any dispute concerning the contract that cannot be resolved by agreement shall be decided by the contracting officer with right of appeal.

5) Equal Opportunity: The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

6) Affirmative Action for Veterans: The contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran. Affirmative Action for Workers with Disabilities. The contractor will not discriminate against any employee or applicant for employment because he or she has a physical or mental disability.

7) Gratuities: The Government may terminate the contract if any gratuities have been offered to any representative of the Government to secure the contract.

8) American-made Equipment and Products: When purchasing equipment or products under a contract award, the contractor shall purchase only American-made items whenever possible.

9) Examination of Records: The Comptroller General (or a duly authorized representative) shall have the right to examine any directly pertinent records of the contractor involving transactions related to this contract.

10) Default: The Government may terminate the contract for default if the contractor fails to perform the work described in the contract and such failure is not the result of excusable delays.

11) Contract Work Hours: The contractor may not require an employee to work more than eight hours a day or forty hours a week unless the employee is compensated accordingly (i.e., overtime pay).

12) Covenant Against Contingent Fees: No person or agency has been employed to solicit or secure the contract upon an understanding for compensation except bona fide employees or commercial agencies maintained by the contractor for the purpose of securing business.

13) Patent Infringement: The contractor shall report each notice or claim of patent infringement based on the performance of the contract.

D. DMID: RESEARCH AREAS 004 and 005 – Reporting Requirements and Deliverables

1. Reporting Requirements

In addition to reporting requirements and deliverables identified elsewhere in this solicitation, it is expected that awards resulting from Research Areas 004 and 005 will include the following reports and deliverables:
a. **Monthly Progress Reports**

This report shall include a description of the technical activities and results during the reporting period and the activities planned for the ensuing reporting period, and shall include a budget summary for costs incurred during the monthly reporting period for the base period and each option and milestone. The funding level shall be presented in correlation with percent completion of the activities under the base, option and/or milestone. Monthly Progress Reports shall not be required when the Annual Progress Report is due.

b. **Annual Progress Reports**

This report shall include a summation of the technical activities and results for the entire contract period covered, and shall include a description of the technical activities and results during the reporting period, a budget summary for costs incurred during the annual reporting period for the base period and each option and milestone. The funding level shall be presented in correlation with percent completion of the activities under the base, option and/or milestone. An Annual Progress Report shall not be required for the period when the Final Report is due.

c. **Annual Technical Progress Report for Clinical Research Study Populations**

The Contractor shall submit information about the inclusion of women and members of minority groups and their subpopulations for each study being performed under this contract. In addition, the [NIH Policy and Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research, Amended, October 2001](#) applies. Include a description of the plans to conduct analyses, as appropriate, by sex/gender and/or racial/ethnic groups in the clinical trial protocol as approved by the IRB, and provide a description of the progress in the conduct of these analyses, as appropriate, in the annual progress report and the final report. If the analysis reveals no subset differences, a brief statement to that effect, indicating the subsets analyzed, will suffice. The Government strongly encourages inclusion of the results of subset analysis in all publication submissions. In the final report, the Contractor shall include all final analyses of the data on sex/gender and race/ethnicity.

d. **Final and Draft Reports**

This report shall include a summation of the work performed and the results obtained for the entire contract period of performance. This report shall be in sufficient detail to describe comprehensively the results achieved. An annual report will not be required for the period when the Final Report is due. The Contractor shall submit, with the Final Report, a summary of salient results (not to exceed 250 words) achieved during the performance of the contract.

e. **Product Development Plan and Work Plan**

The Contractor shall update the Product Development Plan and create a Work Plan to incorporate the progress from the effective date of the contract. The Contractor shall submit an updated Product Development Plan (PDP) for review within thirty (30) calendar days of the effective date of the contract and prior to initiation of product development activities, unless otherwise negotiated with the COR and the Contracting Officer. This updated Product Development Plan and Work Plan shall include:
1) Clearly defined goals, product development stages and product development activities.

2) A breakdown of activities by fiscal year and nonseverable stages, and applicable decision gates.

3) Quantitative and qualitative criteria and associated data elements for assessing the scientific merit and feasibility of moving to the next stage of product development.

4) A detailed timeline for each stage covering the initiation, conduct and completion of product development activities and a task-linked budget (a budget linked to each major activity). A Gantt chart should be provided to outline the proposed activities.

5) The Work Plan shall include a description of the studies to be performed within each stage of the project. The Contractor shall also be required to submit a revised Product Development Plan and associated Work Plan when a change to the approved plans is requested by the COR.

6) Risk identification, analysis, and mitigation strategies for accomplishing the objectives of this contract within the period of performance, particularly with respect to adverse experimental or production results, new scientific findings or regulatory guidance from FDA.

NOTE – For purposes of this BAA:

- The Product Development Plan describes the critical path for the proposed candidate/product toward eventual licensure and identifies the decision points/gates for progress of the candidate/product.
- The Work Plan describes the studies to be performed at each stage of the project within the 5 year term of award in order to implement the Product Development Plan and advance the product through Phase 1 clinical testing.

f. **Milestone Completion/Decision Gate Report**

A Decision Gate Report shall be submitted when the Contractor has completed a stage of product development and has reached a decision point, as defined in the Work Plan for the Implementation of the Staged Product Development Plan. These reports shall be in sufficient detail to explain comprehensively the results achieved. The description shall also include pertinent data and/or conclusions resulting from the analysis and scientific evaluation of data accumulated to date under the project. Offerors shall propose the timing of these reports to coincide with the decision points specified in their SOW.

Note: Contract activities shall be divided into manageable time frames with associated deliverables. Initial funding shall be for the Base Period only. Funding of subsequent deliverables shall be funded by Options. Each Option shall be fully funded when exercised and shall be dependent on successful completion of critical Milestones, including the United States Government acceptance of associated deliverables, when applicable. The critical predecessor activities should constitute decision-enabling criteria for successor activities. The contract budget shall be aligned with the Base Period, Options and associated tasks identified in the Product Development Plan and associated Gantt chart.

g. **Audit Reports**
Within thirty (30) calendar days of completion of an audit related to conformance to FDA regulations and guidance, including adherence to GLP, GMP or GCP guidelines, the Contractor shall provide copies of the audit report and a plan for addressing areas of nonconformance to FDA regulations and guidance for GLP, GMP or GCP guidelines as identified in the final audit report.

h. **Draft and Final Clinical Trial Protocols**

NIAID has a responsibility to ensure that mechanisms and procedures are in place to protect the safety of participants in the NIAID-funded clinical trials. Therefore, as described in the NIAID Clinical Terms of Award (https://www.niaid.nih.gov/grants-contracts/niaid-clinical-terms-award), the Contractor shall develop a protocol and all associated documents for each clinical trial and submit drafts for review as well as all final protocols and protocol amendments for approval by DMID. Prior to FDA submission and enrollment, additional reviews and approval periods may be required for changes in the final protocol. Three (3) weeks should be planned for each review period. It is recommended that protocols be submitted using approved DMID templates. The DMID templates and other important information regarding performing human subject research are available at https://www.niaid.nih.gov/grants-contracts/human-subjects.

i. **Draft and Final Clinical Study Report**

For each clinical study performed with contract support, a Draft Clinical Study Report shall be provided upon completion of the analysis of all data generated in the clinical trial. Following review and approval by DMID, final Clinical Study Reports shall follow the ICH guidelines on Structure and Content of Clinical Study Reports E3 (http://www.ich.org/fileadmin/Public_Web_Site/ICH_Products/Guidelines/Efficacy/E3/E3_Guideline.pdf).

j. **Draft and Final Non-Clinical Study Protocols**

Provide electronic copies of draft protocols for all non-clinical studies for review and approval to the COR. Allow at least 10 calendar days for review unless otherwise agreed upon by the COR. The non-clinical study protocols shall undergo at least one round of revision and resubmission for final approval.

k. **Draft and Final Non-Clinical Study Reports**

For each non-clinical study performed with contract support, a Draft Non-Clinical Study Report should be prepared within thirty (30) calendar days, unless otherwise approved by the COR, of the completion of the analysis of all data and submitted to COR for review. A Final Non-Clinical Study Report shall be submitted to the COR within thirty (30) calendar days of finalization of the report after the draft reports have been reviewed. Allow at least one round of revision and resubmission for final approval unless otherwise agreed upon by the COR. The Non-Clinical Study Reports shall include a complete description of the experimental design, protocol, methods, reagents, data analysis, and conclusions of studies performed.

l. **FDA Correspondence and Meetings**
Submit for review and approval planned FDA communications as well as any subsequent correspondence and resulting meeting summaries.

m. **Human Subject IRB Annual Report (Form OMB No. 0990-0263)**

Within thirty (30) calendar days of each anniversary date of the effective contract award, the Contractor shall submit the Human Subject Annual Report.

n. **Invention Reporting**

Electronic reporting of inventions shall be required as well as paper copies.

o. **Samples of Products**

The Contractor shall submit samples of non-GMP candidate therapeutics and GMP material manufactured with contract funding. The type of material and the amount will be specified in the contract.

p. **Technology Transfer**

Technology Transfer packages shall include complete protocols and critical, assays or procedures developed and/or improved with contract funding.

q. **Institutional Biosafety Approval**

The Contractor shall provide documentation of materials submitted for Institutional Biosafety Committee Review and documentation of approval of experiments.

Note: Copies of other reports and documents for work generated under the BAA may include draft and final reports for Process Development, Assay Qualification, Assay Validation, Assay Technology Transfer, Batch Records, SOPs, Master Production Records, and Certificates of Analysis. The delivery schedule, requirements of other reports and deliverables shall be proposed by the Offerors in their technical proposal. They will be developed further after receipt of proposals as a result of finalization of the Statement of Work and other terms and conditions of any resultant contract during negotiations.

t. **Annual Contract Review Meeting**

A report of the Post Award Contract Initiation Meeting and Annual Contract Review Meetings shall be prepared by the Contractor and submitted within twenty-one (21) calendar days following the date of the meetings. These reports shall include the slide presentations and all other meeting materials as well as summaries of all discussions.

s. **Teleconference and Meeting Minutes**

Minutes of regular, as well as ad hoc teleconferences and meetings shall be provided by the Contractor within two (2) business days following the date of the teleconference or meeting.

t. **External Advisory Group Meetings**

Reports of all meetings and communications with the External Advisory Group or its individual members shall be documented and submitted to the COR and Contracting
Officer. Documentation of such meetings/communications will be provided within twenty-one (21) calendar days and shall include a summary of the discussions and copies of slide presentations.

1. **Deliverables**

Delivery of other reports and deliverables will be proposed by the Offerors in their technical proposal. They will be developed further after receipt of proposals as a result of finalization of the Statement of Work and other terms and conditions of any resultant contract during negotiations.

All electronic reports and deliverables shall be submitted through the NIAID Electronic Reports and Deliverables System, available here: https://erds.niaid.nih.gov/

--- END OF DIVISION OF MICROBIOLOGY AND INFECTIOUS DISEASES (DMID) ---

IV. **INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS**

1. **GENERAL INFORMATION**

   A. **NAICS Code and Size Standard**

   Note: The following information is to be used by the Offeror in preparing its Representations and Certifications, specifically in completing the provision entitled, SMALL BUSINESS PROGRAM REPRESENTATION, FAR Clause 52.219-1.

   (1) The North American Industry Classification System (NAICS) code for this acquisition is 541712.

   (2) The small business size standard is 1,000 employees.

   THIS REQUIREMENT IS NOT SET ASIDE FOR SMALL BUSINESS. However, the Federal Acquisition Regulation (FAR) requires in every solicitation, (except for foreign acquisitions) the inclusion of the North American Industry Classification System (NAICS) Code and corresponding size standard which best describes the nature of the requirement in the solicitation.

   B. **Commitment of Public Funds**

   The Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds in connection with the proposed procurement. Any other commitment, either explicit or implied, is invalid.

   C. **Restriction on disclosure and use of data**

   (1) The proposal submitted in response to this request may contain data (trade secrets; business data (e.g., commercial information, financial information, cost and pricing data); and technical data) which the Offeror, including its prospective subcontractor(s), does not want used or disclosed for any purpose other than for evaluation of the proposal. The use and disclosure of any data may be so restricted; provided, that the Government determines that the data is not required to be disclosed under the Freedom of Information Act, 5 U.S.C. 552, as amended, and the Offeror
marks the cover sheet of the proposal with the following statements, specifying the particular portions of the proposal which are to be restricted:

"Unless disclosure is required by the Freedom of Information Act, 5 U.S.C. 552, as amended, (the Act) as determined by Freedom of Information (FOI) officials of the Department of Health and Human Services (HHS), data contained in the portions of this proposal which the Offeror has specifically identified by page number, paragraph, etc. as containing restricted information shall not be used or disclosed except for evaluation purposes.

The Offeror acknowledges that HHS may not be able to withhold a record (e.g. data, document, etc.) nor deny access to a record requested pursuant to the Act and that the HHS's FOI officials must make that determination. The Offeror hereby agrees that the Government is not liable for disclosure if HHS has determined that disclosure is required by the Act.

If a contract is awarded to the Offeror as a result of, or in connection with, the submission of this proposal, the Government shall have right to use or disclose the data to the extent provided in the contract. Proposals not resulting in a contract remain subject to the Act.

The Offeror also agrees that the Government is not liable for disclosure or use of unmarked data and may use or disclose the data for any purpose, including the release of the information pursuant to requests under the Act.

(2) In addition, the Offeror must mark each page of data it wishes to restrict with the following statement: "Use or disclosure of data contained on this page is subject to the restriction on the cover sheet of this proposal or quotation."

(3) Offerors are cautioned that proposals submitted with restrictive statements or statements differing in substance from those cited above may not be considered for award. The Government reserves the right to reject any proposal submitted with a nonconforming statement(s).

D. Communications Prior to Contract Award

Offerors shall direct all communications to the attention of the Contract Specialist or Contracting Officer cited at the beginning of this announcement. Communications with other officials may compromise the competitiveness of this acquisition and result in cancellation of the requirement.

E. Release of Information

Contract selection and award information will be disclosed to Offerors in accordance with regulations applicable to negotiated acquisition. Prompt written notice will be given to unsuccessful Offerors as they are eliminated from the competition, and to all Offerors following award.

F. Preparation Costs

This BAA does not commit the Government to pay for the preparation and submission of a proposal.

G. Promoting Efficient Spending

On September 21, 2011, the Office of Management and Budget issued Memorandum M-11-35, entitled, "Eliminating Conference Spending and Promoting Efficiency in Government," emphasizing the President's priority to ensure that the Government operates with the utmost efficiency and
eliminates unnecessary or wasteful spending. This was followed by the Executive Order on Delivering an Efficient, Effective, and Accountable Government (EO 13576) and the Executive Order on Promoting Efficient Spending (EO 13589). On January 3, 2012, the Department of Health and Human Services (DHHS) issued the memorandum "HHS Policy on Promoting Efficient Spending: Use of Appropriated Funds for Conferences and Meetings, Food, Promotional Items, and Printing, and Publications" (See https://www.hhs.gov/grants/contracts/contract-policies-regulations/efficient-spending/.)

In support of these directives, the NIH issued a January 30, 2012, Memorandum, entitled, "NIH Guidance Related to the HHS Policies on Promoting Efficient Spending: Use of Appropriated Funds for Conferences, Conference Grants and Meetings, Food, Promotional Items, and Printing and Publications." (See http://oamp.od.nih.gov/)

Any contract awarded as a result of this solicitation will

- Specifically prohibit the use of contract funds for the provision of food for meals, light refreshments and beverages for any NIH funded meeting or conference; and
- Limit the procurement of meeting space, promotional items, printing and publications

H. Service of Protest (September 2006) - FAR 52.233-2

(1) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

George W. Kennedy, J.D.
Contracting Officer
Office of Acquisitions
National Institute of Allergy and Infectious Diseases
DEA, Office of Acquisitions
5601 Fishers Lane, Room 3D39, MSC 9821
Rockville, Maryland 20892-9821

(2) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

2. INSTRUCTIONS TO OFFERORS

A. General Information

1. CONTRACT TYPE and GENERAL CLAUSES

It is contemplated that multiple cost-reimbursement completion type contracts will be awarded. Any resultant contract shall include the clauses applicable to the selected offeror's organization and type of contract awarded as required by Public Law, Executive Order, or acquisition regulations in effect at the time of execution of the proposed contract.

2. AUTHORIZED OFFICIAL
The proposal must be signed by an official authorized to bind your organization and must stipulate that it is predicated upon all the terms and conditions of this BAA.

3. PROPOSAL SUMMARY AND DATA RECORD (NIH-2043)

The Offeror must complete the Form NIH-2043, attached, with particular attention to the length of time the proposal is firm and the designation of those personnel authorized to conduct negotiations.

4. USE OF THE METRIC SYSTEM OF MEASUREMENT

It is the policy of the Department of Health and Human Services to support the Federal transition to the metric system and to use the metric system of measurement in all procurements, grants, and other business related activities unless such use is impracticable or is likely to cause significant inefficiencies.

The offeror is encouraged to prepare their proposal using either "Hard Metric," "Soft Metric," or "Dual Systems" of measurement. The following definitions are provided for your information:

**Hard Metric** - The replacement of a standard inch-pound size with an accepted metric size for a particular purpose. An example of size substitution might be: selling or packaging liquids by the liter instead of by the pint or quart (as for soft drinks), or instead of by the gallon (as for gasoline).

**Soft Metric** - The result of a mathematical conversion of inch-pound measurements to metric equivalents for a particular purpose. The physical characteristics are not changed.

**Dual Systems** - The use of both inch-pound and metric systems. For example, an item is designed, produced, and described in inch-pound values with soft metric values also shown for information or comparison purposes.

5. PRIVACY ACT - TREATMENT OF PROPOSAL INFORMATION

The Privacy Act of 1974 (P.L. 93-579) requires that a Federal agency advise each individual whom it asks to supply information, the authority which authorizes the solicitation, whether disclosure is voluntary or mandatory, the principal purpose or purposes for which the information is intended to be used, the uses outside the agency which may be made of the information, and the effects on the individual, if any, of not providing all or any part of the requested information.

The NIH is requesting the information called for in this SOLICITATION pursuant to the authority provided by Sec. 301(a)(7) of the Public Health Service Act, as amended, and P.L. 92-218, as amended.

Providing the information requested is entirely voluntary. The collection of this information is for the purpose of conducting an accurate, fair, and adequate review prior to a discussion as to whether to award a contract.

Failure to provide any or all of the requested information may result in a less than adequate review.

In addition, the Privacy Act of 1974 (P.L. 93-579, Section 7) requires that the following information be provided when individuals are requested to disclose their social security number.

Provision of the social security number is voluntary. Social security numbers are requested for the purpose of accurate and efficient identification, referral, review and management of NIH
contracting programs. Authority for requesting this information is provided by Section 301 and Title IV of the PHS Act, as amended.

The information provided by you may be routinely disclosed for the following purposes:
- to the cognizant audit agency and the Government Accountability Office for auditing.
- to the Department of Justice as required for litigation.
- to respond to congressional inquiries.
- to qualified experts, not within the definition of Department employees, for opinions as a part of the review process.

6. **PRIVACY ACT, HHSAR 352.224-70 (December 2015)**

The contract will require the Contractor to perform one or more of the following: (a) Design; (b) develop; or (c) operate a Federal agency system of records to accomplish an agency function in accordance with the Privacy Act of 1974 (Act) (5 U.S.C. 552a(m)(1)) and applicable agency regulations. The term "system of records" means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual. Violations of the Act by the Contractor and/or its employees may result in the imposition of criminal penalties (5 U.S.C. 552a(i)). The Contractor shall ensure that each of its employees knows the prescribed rules of conduct and that each employee is aware that he/she is subject to criminal penalties for violation of the Act to the same extent as Department of Health and Human Services employees. These provisions also apply to all subcontracts the Contractor awards under this contract which require the design, development or operation of the designated system(s) of records [5 U.S.C. 552a(m)(1)]. The contract work statement: (a) identifies the system(s) of records and the design, development, or operation work the Contractor is to perform; and (b) specifies the disposition to be made of such records upon completion of contract performance.

45 CFR Part 5b contains additional information which includes the rules of conduct and other Privacy Act requirements and can be found at:
http://www.access.gpo.gov/nara/cfr/waisidx_06/45cfr5b_06.html

7. **INSTITUTIONAL RESPONSIBILITY REGARDING CONFLICTING INTERESTS OF INVESTIGATORS**

45 CFR Part 94 promotes objectivity in research by establishing standards to ensure there is no reasonable expectation that the design, conduct, or reporting of research to be performed under NIH contracts will be biased by any conflicting financial interest of an Investigator. The Institution shall comply with all requirements of 45 CFR Part 94 at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=0af84ca649a74846f102aaf664da1623&rgn=div5&view=text&node=45:1.0.1.1.51&idno=45

8. **ROTC ACCESS AND FEDERAL MILITARY RECRUITING ON CAMPUS**

Section 514 of the FY 1997 Appropriations Act prohibits NIH from providing contract funds to educational institutions that the Secretary of Defense determines have a policy or practice (regardless of when implemented) that either prohibits, or in effect prevents (1) the maintaining, establishing, or operation of a unit of the Senior Reserve Officer Training Corps at the covered education entity; or (2) a student at the covered educational entity from enrolling in a unit of the Senior Reserve Officer Training Corps at another institution of higher education.
Further, contract funds may not be provided to educational institutions that have a policy or practice that prohibits or prevents (1) entry to campuses, or access to students (who are 17 years of age or older) on campuses, for purposes of Federal military recruiting; or (2) access by military recruiters for purposes of Federal military recruiting to information pertaining to students (who are 17 years of age or older) enrolled at the covered educational entity.

9. RESTRICTION ON PORNOGRAPHY ON COMPUTER NETWORKS

The Contractor shall not use contract funds to maintain or establish a computer network unless such network blocks the viewing, downloading, and exchanging of pornography.

10. GUN CONTROL

The Contractor shall not use contract funds in whole or part, to advocate or promote gun control.

11. CERTIFICATION OF FILING AND PAYMENT OF TAXES

None of the funds appropriated or otherwise made available by the Consolidated Appropriations Act of FY 2014, may be used to enter into a contract in an amount greater than $5,000,000 unless the prospective contractor certifies in writing to the agency awarding the contract that, to the best of its knowledge and belief, the contractor has filed all Federal tax returns required during the 3 years preceding the certification, has not been convicted of a criminal offense under the Internal Revenue Code of 1986, and has not, more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

12. HIGHLY PATHOGENIC AGENTS

The work being conducted under this contract may involve a Highly Pathogenic Agent (HPA). The NIAID defines an HPA as a pathogen that, under any circumstances, warrants a biocontainment safety level of BSL3 or higher according to either:

a. The current edition of the CDC/NIH Biosafety in Microbiological and Biomedical Laboratories (BMBL) [http://www.cdc.gov/biosafety/publications/index.htm under "Publications"];

b. The Contractor's Institutional Biosafety Committee (IBC) or equivalent body; or
c. The Contractor's appropriate designated institutional biosafety official.

If there is ambiguity in the BMBL guidelines and/or there is disagreement among the BMBL, an IBC or equivalent body, or institutional biosafety official, the highest recommended containment level must be used.

13. PROHIBITION ON CONTRACTOR INVOLVEMENT WITH TERRORIST ACTIVITIES

For awards funded with appropriated bio-defense funds, the Contractor acknowledges that U.S. Executive Orders and Laws, including but not limited to E.O. 13224 and P.L. 107-56, prohibit transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Contractor to ensure compliance with
these Executive Orders and Laws. This clause must be included in all subcontracts issued under this contract.

14. SOLICITATION PROVISIONS INCORPORATED BY REFERENCE, FAR 52.252-1 (FEBRUARY 1998)

This Solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address:

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1):

a. System for Award Management, FAR Provision 52.204-7 (October 2016).
d. Facilities Capital Cost of Money, FAR Clause 52.215-16, (June 2003).

B. TECHNICAL PROPOSAL INSTRUCTIONS

It is strongly recommended that offerors use the following template as the format for the Technical Proposal. All information presented in the Technical Proposal should be presented in the order specified below.

These Technical Proposal Instructions reflect the requirements of the BAA and provide specific instructions and formatting for the Technical Proposal. These Technical Proposal Instructions are applicable to all proposals submitted in response to this BAA, and should be used as a Table of Contents for your Technical Proposal. Offerors should also refer to the Technical Proposal Instructions in Section IV, for specific requirements applicable to the Research Area for which you are proposing.

Offerors are advised to give careful consideration to the Broad Agency Announcement Description, Background and Introduction, Research and Technical Objectives, all reference materials and attachments, the Technical Evaluation Criteria in Section V, and the BAA as a whole in the development of their Technical Proposals.

Offerors proposing subcontracts and/or consultants to perform portions of the proposed Statement of Work should clearly identify the specific tasks for which they plan to utilize subcontractors and/or consultants, as well as the method and level of integration/coordination between the prime Contractor and all proposed subcontractors and/or consultants, and the expected advantages of such an approach.

1. PROPOSAL SUBMISSION INSTRUCTIONS

A. Receipt Date

This BAA includes five distinct Research Areas, each with a specified closing date and time, identified below. An Offeror must submit a separate and distinct proposal for each Research Area to which it wishes to propose.
B. **Online Submission of Electronic Proposals**

1. For this solicitation, NIAID requires proposals to be submitted Online via the electronic Contract Proposal Submission (eCPS) website: [https://ecps.nih.gov](https://ecps.nih.gov). Submission of proposals by any other method is not permitted.

2. For directions on using eCPS, go to the website [https://ecps.nih.gov](https://ecps.nih.gov) and then click on "How to Submit."

C. **Formatting and Page Limitations**

1. The Technical Proposal shall not exceed 150 pages, inclusive of CV’s. Although no page limit has been placed on the Business Proposal, Offerors are encouraged to limit its content to only those documents required by this solicitation, and necessary to provide adequate support for the proposed costs.

2. Total page count does not include: Title and Back Page; Table of Contents; and Section Dividers that do not contain information other than the title of the Section.

3. Pages in excess of this limitation will be removed from the proposal and will not be considered.

4. Proposals shall not include links to internet web site addresses (URLs) or otherwise direct readers to alternate sources of information.

    Font size must be 10 to 12 points.
Spacing should be no more than 15 characters per inch. Within a vertical inch, there must be no more than six lines of text.

Margins must be at least one-inch on all sides.

Failure to adhere to the formatting requirements above may impact whether your proposal is reviewed in its entirety.

D. Submission, modification, and withdrawal of proposals

1. Offerors are responsible for submitting proposals, and any modifications or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 3:00 p.m., Eastern Time, for the designated Government office on the date that proposal or revision is due.

2. A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

   (1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or

   (2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

   (3) It is the only proposal received.

B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

3. Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

4. If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

5. Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at
any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

E. Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

F. Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

G. Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

H. Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

I. Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

2. TECHNICAL PROPOSAL – TABLE OF CONTENTS

*The Technical Proposal is limited to 150 pages, inclusive of CV’s.*

SECTION 1:

1) PROPOSAL TITLE PAGE

Include BAA title and number, name of organization, DUNS number, and identify if the proposal is an original or a copy. Offerors that include data in their proposals that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall also include the legend regarding Restriction on Disclosure and Use of Data prescribed by FAR 52.215-1 (e)]

2) TABLE OF CONTENTS

SECTION 2: TECHNICAL PROPOSAL OVERVIEW (suggested 3-page maximum)

Provide a brief description of the proposed project, including:

1. 1-2 sentence summary describing the concept the offeror is proposing.

2. A summary describing the scope of the activities proposed.

3. A brief description of the activities proposed by the offeror and all proposed subcontractors, including identification of all proposed subcontractors and a list of key personnel for the offeror and the proposed subcontractors with degrees, titles and role in the project.

4. By area of expertise, provide the proposed total number and hours or effort of personnel: the number currently employed to be assigned to this contract; all
proposed subcontractors; and total number of additional staff to be hired and trained.

5. A brief description of the facilities and other resources to be made available by the proposed prime contractor (offeror) and any proposed subcontractors.

SECTION 3: STATEMENT OF WORK FORMAT

Offeror(s) are required to provide a Statement of Work in their proposal. The Statement of Work shall be developed by each offeror based on the information in Section III of this solicitation, entitled “Research Areas and Technical Objectives”, and shall consist of two parts: (1) Scope, and (2) Technical Requirements. Provided below is an outline of the Statement of Work format that should be used by all offeror(s) in the preparation of their Technical Proposals. The headers and subheaders may be adjusted to match the requirements as proposed in each offeror’s individual technical proposal.

Contracts awarded as a result of this BAA will include the Statement of Work proposed by the offeror. Offeror(s) will be required to perform the activities and provide the resources appropriate to the scope of their specific negotiated Statement of Work.

The opening paragraph under the Technical Requirements section of the Statement of Work shall be followed by a description of all activities that the Contractor shall perform after the award of the contract. The Technical Requirements shall include all activities required to effectively implement the project and shall include a description of all items to be delivered to the Government during performance of the contract, such as progress reports, financial reports, end products, and other deliverables, along with a timetable for their delivery.

SAMPLE STATEMENT OF WORK

1. SCOPE

    Instruction to offerors: Provide a brief description (one to two paragraphs) of the overall project and objectives in broad terms that indicates the size and magnitude of the proposed effort.

2. TECHNICAL REQUIREMENTS

    [NOTE TO OFFEROR: The Technical Requirements shall begin with the following introductory paragraph.]

Independently, and not as an agent of the Government, the Contractor shall furnish all necessary services, qualified professional, technical, and administrative personnel, material, equipment and facilities, not otherwise provided by the Government under the terms of this contract, as needed to perform the tasks set forth below. Specifically, the Contractor shall:

A. Product Development Plan, including as applicable:
   1. Efficacy Studies (Including Model Development)
   2. Animal Safety Studies
   3. Non-Clinical Research and Development
   4. Manufacturing and CMC Development
   5. Clinical Trial Protocol Development and Implementation
   6. Other IND/IUO-Enabling Studies

B. Regulatory Compliance, Quality Control, Assurance and Data Management

C. Project Management
SECTION 4: TECHNICAL DISCUSSIONS

In addition to the guidance provided in the Technical Proposal Instructions of the BAA, this section of your technical proposal should include documentation to demonstrate how you will accomplish the work detailed in your proposed Statement of Work. It is recommended that your proposal be organized in accordance with the order of your Statement of Work and the technical evaluation criteria provided in Section V.

SECTION 5: SCIENTIFIC AND TECHNICAL PERSONNEL

Provide information relevant to document individual training, experience, qualifications and expertise necessary for the successful completion of the proposed Statement of Work. Limit CVs to 2-3 pages and provide selected references for publications relevant to the scope of the contract.

1) Principal Investigator (PI): Describe the experience, training, expertise, and qualifications, and level of effort of the proposed Principal Investigator to lead and direct the activities to be carried out under the proposed Statement of Work.

2) Other Key Scientific and Technical Personnel: Describe the experience, training, expertise and qualifications for all proposed key scientific and technical personnel.

Note - Offerors should assure that the principal investigator, and all other personnel proposed, shall not be committed on federal grants and contracts for more than a total of 100% of their time. If the situation arises where it is determined that a proposed employee is committed for more than 100% of his or her time, the government will require action on the part of the offeror to correct the time commitment.

SECTION 6: PROJECT MANAGEMENT

1) Provide a Project Management Plan for the overall organization that addresses the planning, initiation, implementation, conduct, monitoring and completion of tasks identified in the proposed Statement of Work. If consultants and/or subcontractors are proposed, include a plan to manage, coordinate, and oversee the work performed by consultants and/or subcontractor(s).

2) Provide a Staffing Plan that describes roles, responsibilities, and level of effort for all personnel, including all proposed subcontractors and consultants. Provide an administrative and technical framework indicating clear lines of authority and responsibility for all proposed personnel. Include a chart of the proposed organizational/management structure for the project.

3) Describe the project management systems that will be used to track activities and to keep multiple activities on time and budget. The plan must include a description of the quality control methods that will be used to ensure the effective and efficient initiation, implementation, management, and oversight of contract requirements.

SECTION 7: FACILITIES, EQUIPMENT, AND OTHER RESOURCES
The Technical Proposal should document availability and adequacy of facilities, equipment, space and other resources necessary to carry out the proposed Statement of Work, including:

1) Location and features of facilities including a floor plan and a list of equipment and resources dedicated to the project for the prime contractor and any proposed subcontractors (lease or ownership information should be provided).

2) Identification and description of ALL support resources (including Information Technology systems) that will be required to effectively complete the proposed Statement of Work.

SECTION 8: OTHER CONSIDERATIONS

This section of the Technical Proposal should document other resources not covered in Sections 1 through 7 above, necessary to carry out the proposed Statement of Work.

3. HUMAN SUBJECTS

Important Note to Offerors: As applicable to the offeror’s proposed approach, the following subparagraphs should be addressed in a SEPARATE SECTION of the Technical Proposal entitled, “HUMAN SUBJECTS.”

A. Notice to Offerors of Requirements, Protection of Human Subjects, HHSAR 352.270-4(a) (December 2015)

1) The Department of Health and Human Services (HHS) regulations for the protection of human subjects, 45 CFR part 46, are available on the Office for Human Research Protections (OHRP) Web site at: http://www.hhs.gov/ohrp/index.html. These regulations provide a systematic means, based on established ethical principles, to safeguard the rights and welfare of human subjects participating in research activities supported or conducted by HHS.

2) The regulations define a human subject as a living individual about whom an investigator (whether professional or student) conducting research obtains data or identifiable public information through intervention or interaction with the individual, or identifiable private information. In most cases, the regulations extend to the use of human organs, tissue, and body fluids from individually identifiable human subjects as well as to graphic, written, or recorded information derived from individually identifiable human subjects. 45 CFR part 46 does not directly regulate the use of autopsy materials; instead, applicable state and local laws govern their use.

3) Activities which involve human subjects in one or more of the categories set forth in 45 CFR 46.101(b)(1)-(6) are exempt from complying with 45 CFR part 46. See http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html

4) Inappropriate designations of the noninvolvement of human subjects or of exempt categories of research in a project may result in delays in the review of a proposal.

5) In accordance with 45 CFR part 46, offerors considered for award shall file an acceptable Federal-wide Assurance (FWA) of compliance with OHRP specifying review procedures and assigning responsibilities for the protection of human subjects. The FWA is the only
type of assurance that OHRP accepts or approves. The initial and continuing review of a research project by an institutional review board shall ensure that: The risks to subjects are minimized; risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result; selection of subjects is equitable; and informed consent will be obtained and documented by methods that are adequate and appropriate. Depending on the nature of the research, additional requirements may apply; see http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.111 for additional requirements regarding initial and continuing review. HHS regulations for the protection of human subjects (45 CFR part 46), information regarding OHRP registration and assurance requirements/processes, and OHRP contact information is available at the OHRP Web site (at http://www.hhs.gov/ohrp/assurances/index.html).

6) Offerors may consult with OHRP only for general advice or guidance concerning either regulatory requirements or ethical issues pertaining to research involving human subjects. ONLY the contracting officer may offer information concerning a solicitation.

7) The offeror shall document in its proposal the approved FWA from OHRP, related to the designated Institutional Review Board (IRB) reviewing and overseeing the research. If the offeror does not have an approved FWA from OHRP, the offeror must obtain an FWA before the deadline for proposal submission. When possible, the offeror shall also certify the IRB's review and approval of the research. If the offeror cannot obtain this certification by the time of proposal submission they must include an explanation in their proposal. Never conduct research covered by 45 CFR part 46 prior to receiving certification of the research's review and approval by the IRB.

(End of provision)

B. Instructions to Offerors Regarding Protection of Human Subjects

Offerors must address the following human subjects protections issues if this contract will be for research involving human subjects (note: under each of the following points below, the offeror should indicate whether the information provided relates to the primary research site, or to a collaborating performance site(s), or to all sites:

1) Risks to the subjects
   o Human Subjects Involvement and Characteristics:
     ▪ Describe the proposed involvement of human subjects in response to the solicitation.
     ▪ Describe the characteristics of the subject population, including their anticipated number, age range, and health status.
     ▪ Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as fetuses, pregnant women, children, prisoners, institutionalized individuals, or others who are likely to be vulnerable populations.
   o Sources of Materials:
     ▪ Identify the sources of research material obtained from individually identifiable living human subjects in the form of specimens, records, or data. Indicate whether the material or data will be obtained specifically for research purposes or whether use will be made of existing specimens, records, or data.
   o Potential Risks:
- Describe the potential risks to subjects (physical, psychological, social, legal, or other) and assess their likelihood and seriousness to the subjects.
- Describe alternative treatments and procedures, including the risks and benefits of the alternative treatments and procedures, to participants in the proposed research, where appropriate.

2) Adequacy of Protection Against Risks
   o Recruitment and Informed Consent:
     - Describe plans for the recruitment of subjects and the procedures for obtaining informed consent. Include a description of the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. The informed consent document for the Contractor and any collaborating sites should be submitted only if requested elsewhere in the solicitation. Be aware that an IRB-approved informed consent document for the Contractor and any participating collaborative sites must be provided to the Government prior to patient accrual or participant enrollment.
   o Protection Against Risk:
     - Describe the procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness.
     - Discuss provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects where appropriate.
     - In studies that involve interventions, describe the provisions for data and safety monitoring of the research to ensure the safety of subjects.

3) Potential Benefits of the Proposed Research to the Subjects and Others
   o Discuss the potential benefits of the research to the subjects and others.
   o Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and others.
   o Describe treatments and procedures that are alternatives to those provided to the participants by the proposed research, where appropriate.

4) Importance of the Knowledge to be Gained
   o Discuss the importance of the knowledge gained or to be gained as a result of the proposed research.
   o Discuss why the risks to subjects are reasonable in relation to the importance of the knowledge that may reasonably be expected to result.

   **Note:** If a test article (investigational new drug, device, or biologic) is involved, name the test article and state whether the 30-day interval between submission of offeror's certification to the Food and Drug Administration (FDA) and its response has elapsed or has been waived and/or whether the FDA has withheld or restricted use of the test article.

**Collaborating Site(s)**

When research involving human subjects will take place at collaborating site(s) or other performance site(s), the offeror must provide in this section of its proposal a list of the collaborating sites and their assurance numbers. Further, if you are awarded a contract, you must obtain in writing, and keep on file, an assurance from each site that the previous points have been adequately addressed at a level of attention that is at
least as high as that documented at your organization. Site(s) added after an award is made must also adhere to the above requirements.

C. **Required Education in the Protection of Human Research Participants**

NIH policy requires education on the protection of human subject participants for all investigators submitting NIH proposals for contracts for research involving human subjects. This policy announcement is found in the NIH Guide for Grants and Contracts Announcement dated June 5, 2000 at the following website: [http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html](http://grants.nih.gov/grants/guide/notice-files/NOT-OD-00-039.html). Offerors should review the policy announcement prior to submission of their offers. The following is a summary of the Policy Announcement:

The information below is a summary of the Policy Announcement:

For any solicitation for research involving human subjects, the offeror shall provide in its technical proposal the following information: (1) a list of the names of the principal investigator and any other individuals proposed under the contract who are responsible for the design and/or conduct of the research; (2) the title of the education program completed (or to be completed prior to the award of the contract) for each named personnel; (3) a one sentence description of the program(s) listed in (2) above. This requirement extends to investigators and all individuals responsible for the design and/or conduct of the research who are working as subcontractors or consultants under the contract.

Curricula that are readily available and meet the educational requirement include the NIH Office of Extramural Research (OER) on-line tutorial, entitled "Protecting Human Research Participants" at: [http://phrp.nihtraining.com](http://phrp.nihtraining.com). This course is also available in Spanish under the title "Protección de los participantes humanos de la investigación" at: [http://pphi.nihtraining.com](http://pphi.nihtraining.com). You may take the tutorials on-line or download the information in PDF form at no cost. The University of Rochester has made its training program available for individual investigators. Completion of this program will also satisfy the educational requirement. The University of Rochester manual, entitled, "Protecting Study Volunteers in Research," can be obtained through Centerwatch, Inc. at: [http://store.centerwatch.com/c-29-training-guides.aspx](http://store.centerwatch.com/c-29-training-guides.aspx).

If an institution already has developed educational programs on the protection of research participants, completion of these programs also will satisfy the educational requirement.

In addition, prior to the substitution of the principal investigator or any other individuals responsible for the design and/or conduct of the research under the contract, the Contractor shall provide the contracting officer with the title of the education program and a one sentence description of the program that the replacement has completed.

D. **Inclusion of Women and Minorities in Research Involving Human Subjects**

It is NIH policy that women and members of minority groups and their sub-populations must be included in all NIH-supported clinical research projects involving human subjects, unless a clear and compelling rationale and justification establishes to the satisfaction of the relevant Institute/Center Director that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research. The Director, NIH, may determine that exclusion under other circumstances is acceptable, upon the recommendation of an Institute/Center Director, based on a compelling rationale and justification. Cost is not an acceptable reason for exclusion except when the study would duplicate data from other sources. Women of
childbearing potential should not be routinely excluded from participation in clinical research. This policy results from the NIH Revitalization Act of 1993 (Section 492B of Public Law 103-43), and applies to research subjects of all ages.

All investigators proposing research involving human subjects should read the UPDATED "NIH Policy and Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research, Amended October 2001," published in the NIH Guide for Grants and Contracts on October 9, 2001 at the following web site:


These guidelines contain a definition of clinical research adopted in June 2001, as: "(1) Patient-oriented research. Research conducted with human subjects (or on material of human origin such as tissues, specimens and cognitive phenomena) for which an investigator (or colleague) directly interacts with human subjects. Excluded from this definition are in vitro studies that utilize human tissues that cannot be linked to a living individual. Patient-oriented research includes (a) mechanisms of human disease, (b) therapeutic interventions, (c) clinical trials, and (d) development of new technologies; (2) Epidemiologic and behavioral studies; and (3) Outcomes research and health services research."

Information Required for ALL Clinical Research Proposals

This solicitation contains a review criterion addressing the adequacy of: (1) the offeror's plans for inclusion of women and minorities in the research proposed; or (2) the offeror's justification(s) for exclusion of one or both groups from the research proposed.

Provide information on the composition of the proposed study population in terms of sex/gender and racial/ethnic groups and provide a rationale for selection of such subjects in response to the requirements of the solicitation. The description may include (but is not limited to) information on the population characteristics of the disease or condition being studied in the planned research, and/or described in the statement of work, national and local demography, knowledge of the racial/ethnic/cultural characteristics of the population, prior experience and collaborations in recruitment and retention of the populations and subpopulations to be studied, and the plans, arrangements and letters of commitment from relevant community groups and organizations for the planned research.

The proposal must include the following information:

- A description of the subject selection criteria
- The proposed dates of enrollment (beginning and end)
- A description of the proposed outreach programs for recruiting women and minorities as subjects
- A compelling rationale for proposed exclusion of any sex/gender or racial/ethnic group
- The proposed sample composition using the "Planned Enrollment Report"(see Section VI, Attachments)

NOTE 1: For all proposals, use the ethnic and racial categories and complete the "Planned Enrollment Report" in accordance with the Office of Management and Budget (OMB) Directive No. 15, which may be found at https://obamawhitehouse.archives.gov/omb/fedreg_notice_15.

NOTE 2: If this is an Indefinite Delivery, Indefinite Quantity (IDIQ) or Requirements
contract as defined in FAR 16.5, the proposal should describe in general terms how it will comply with each bulleted item above for each task order. When the Government issues a task order request for proposal, each of the bulleted information items must be fully and specifically addressed in the proposal.

Standards for Collecting Data. When you, as a contractor, are planning data collection items on race and ethnicity, you shall use, at a minimum, the categories identified in OMB Directive No. 15. The collection of greater detail is encouraged. However, you should design any additional, more detailed items so that they can be aggregated into these required categories. Self-reporting or self-identification using two separate questions is the preferred method for collecting data on race and ethnicity. When you collect race and ethnicity separately, you must collect ethnicity first. You shall offer respondents the option of selecting one or more racial designations. When you collect data on race and ethnicity separately, you shall also make provisions to report the number of respondents in each racial category who are Hispanic or Latino. When you present aggregate data, you shall provide the number of respondents who selected only one category, for each of the five racial categories. If you collapse data on multiple responses, you shall make available, at a minimum, the total number of respondents reporting "more than one race." Federal agencies shall not present data on detailed categories if doing so would compromise data quality or confidentiality standards.

In addition to the above requirements, solicitations for NIH defined Phase III clinical trials* require that: a) all proposals and/or protocols provide a description of plans to conduct analyses, as appropriate, to detect significant differences in intervention effect (see NIH Guide: http://grants.nih.gov/grants/funding/women_min/guidelines_amended_10_2001.htm, Definitions - Significant Difference) by sex/gender, racial/ethnic groups, and relevant subpopulations, if applicable; and b) all contractors to report annually cumulative subject accrual, and progress in conducting analyses for sex/gender and race/ethnicity differences.

*The definition of an "NIH-Defined Phase III clinical trial" can also be found at this website.)

Offerors may obtain copies of the Updated Guidelines from the sources above or from the contact person listed in the solicitation.

Also, the proposal must include one of the following plans:

- Plans to conduct valid analysis to detect significant differences in intervention effect among sex/gender and/or racial/ethnic subgroups when prior studies strongly support these significant differences among subgroups,

  OR

- Plans to include and analyze sex/gender and/or racial/ethnic subgroups when prior studies strongly support no significant differences in intervention effect between subgroups,

  OR

- Plans to conduct valid analyses of the intervention effect in sex/gender and/or racial/ethnic subgroups (without requiring high statistical power for each subgroup) when the prior studies neither support nor negate significant differences in intervention effect between subgroups.
Use the form entitled, "Planned Enrollment Report," when preparing your response to the solicitation requirements for inclusion of women and minorities. (See Section VI-Attachments of the BAA)

Unless otherwise specified in this solicitation, the Government has determined that the work required by this solicitation does not involve a sex/gender specific study or a single or limited number of minority population groups. Therefore, the NIH believes that the inclusion of women and minority populations is appropriate for this project. (See Section V of this RFP for more information about evaluation factors for award.)

Use the form entitled, "Cumulative Inclusion Enrollment Report," for reporting in the resultant contract.

E. Inclusion of Children in Research Involving Human Subjects

It is NIH policy that children (defined below) must be included in all human subjects research, including, but not limited to, clinical trials, conducted under a contract funded by the NIH, unless there are clear and compelling reasons not to include them. (See examples of Justifications for Exclusion of Children below). For the purposes of this policy, contracts involving human subjects include categories that would otherwise be exempt from the DHHS Policy for Protection of Human Research Subjects (sections 101(b) and 401(b) of 45 CFR 46), such as surveys, evaluation of educational interventions, and studies of existing data or specimens that should include children as participants. This policy applies to both domestic and foreign research contracts.

For purposes of this policy, a child is defined as an individual under the age of 21 years.

All offerors proposing research involving human subjects should read the "NIH Policy and Guidelines on the Inclusion of Children as Participants in Research Involving Human Subjects" which was published in the NIH Guide for Grants and Contracts on March 6, 1998 and is available at the following URL address:


Offerors also may obtain copies from the contact person listed in the RFP.

Inclusion of children as participants in research must be in compliance with all applicable subparts of 45 CFR 46 as well as other pertinent laws and regulations whether or not such research is otherwise exempted from 45 CFR 46. Therefore, any proposals must include a description of plans for including children, unless the offeror presents clear and convincing justification for an exclusion. The "Human Subjects" section of your technical proposal should provide either a description of the plans to include children and a rationale for selecting or excluding a specific age range of child, or an explanation of the reason(s) for excluding children as participants in the research. This solicitation contains a review criterion addressing the adequacy of: (1) the plans for including children as appropriate for the scientific goals of the research; and/or (2) the justification of exclusion of children or exclusion of a specific age range of children.

When children are included, the plan also must include a description of: (1) the expertise of the investigative team for dealing with children at the ages included; (2) the appropriateness of the available facilities to accommodate the children; and, (3) the inclusion of a sufficient number of children to contribute to a meaningful analysis relative to the purpose/objective of
the solicitation.

**Justifications for Exclusion of Children**

It is expected that children will be included in all research involving human subjects unless one or more of the following exclusionary circumstances can be fully justified:

- The objective of the solicitation is not relevant to children.
  - There are laws or regulations barring the inclusion of children in the research to be conducted under the solicitation.
  - The knowledge being sought in the research is already available for children or will be obtained from another ongoing study, and an additional study will be redundant. You should provide documentation of other studies justifying the exclusion.
  - A separate, age-specific study in children is warranted and preferable. Examples include:
    - The relative rarity of the condition in children, as compared with adults (in that extraordinary effort would be needed to include children); or
    - The number of children is limited because the majority are already accessed by a nationwide pediatric disease research network; or
    - Issues of study design preclude direct applicability of hypotheses and/or interventions to both adults and children (including different cognitive, developmental, or disease stages of different age-related metabolic processes); or
    - Insufficient data are available in adults to judge potential risk in children (in which case one of the research objectives could be to obtain sufficient adult data to make this judgment). While children usually should not be the initial group to be involved in research studies, in some instances, the nature and seriousness of the illness may warrant their participation earlier based on careful risk and benefit analysis; or
    - Study designs aimed at collecting additional data on pre-enrolled adult study subjects (e.g., longitudinal follow-up studies that did not include data on children);

Other special cases justified by the offeror and found acceptable to the review group and the Institute Director

**Definition of a Child**

For the purpose of this solicitation, a child is defined as an individual under the age of 21 years.

The definition of child described above will pertain to this solicitation (notwithstanding the FDA definition of a child as an individual from infancy to 16 years of age, and varying definitions employed by some states). Generally, State laws define what constitutes a "child," and such definitions dictate whether or not a person can legally consent to participate in a research study. However, State laws vary, and many do not address when a child can consent to participate in research. Federal Regulations (45 CFR 46, subpart D, Sec.401-409) address DHHS protections for children who participate in research, and rely on State definitions of "child" for consent purposes. Consequently, the children included in this policy (persons under the age of 21) may differ in the age at which their own consent is required and sufficient to participate in research under State law. For example, some states consider a person age 18 to be an adult and therefore one who can provide consent without parental permission.

**F. Research Involving Prisoners as Subjects**
1) HHS Regulations at 45 CFR Part 46, Subpart C provide additional protections pertaining to biomedical and behavioral research involving prisoners or those individuals who, during the period of the contract become prisoners, as subjects. These regulations also set forth the duties of the Institutional Review Board (IRB) where prisoners are involved in the research. HHS funded research involving prisoners as subjects may not proceed until the Office for Human Research Protections (OHRP) issues approval, in writing, as required by 45 CFR 46.306(a)(2). In addition, OHRP Guidance on the Involvement of Prisoners in Research may be found at: [http://www.hhs.gov/ohrp/policy/prisoner.html](http://www.hhs.gov/ohrp/policy/prisoner.html).

2) HHS Waiver for Epidemiological Research Involving Prisoners as Subjects

On June 20, 2003 the Secretary of HHS waived the applicability of certain provisions of Subpart C of 45 CFR Part 46, (Additional DHHS Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects) to specific types of epidemiological research involving prisoners as subjects.

The applicability of 45 CFR 46.305(a)(1) and 46.306(a)(2) for certain epidemiological research conducted or funded by DHHS is waived when:

a. The sole purposes are:
   i. to describe the prevalence or incidence of a disease by identifying all cases, or
   ii. to study potential risk factor associations for a disease, and

b. The Institution responsible for the conduct of the research certifies to the OHRP that the Institutional Review Board (IRB) approved the research and fulfilled its duties under 45 CFR 46.305(a)(2) and determined and documented that:
   i. the research presents no more than minimal risk, and
   ii. no more than inconvenience to the prisoner subjects, and
   iii. prisoners are not a particular focus of the research.


G. Research Involving Human Fetal Tissue

Human Fetal Tissue means tissue or cells obtained from a dead human fetus, including human embryonic stem cells, human pluripotent stem cells and human embryonic germ cells.

The governing federal statute is the Public Health Service Act, 42 U.S.C. 289g-1 and 289g-2. Implementing regulations and guidance for conducting research on human fetal tissue may be found at 45 CFR 46, Subpart B and [http://grants1.nih.gov/grants/guide/notice-files/not93-235.html](http://grants1.nih.gov/grants/guide/notice-files/not93-235.html) and any subsequent revisions to this NIH Guide to Grants and Contracts ("Guide") Notice.

By signing the face page of the proposal, the offeror (authorized institutional official) certifies that researchers using human fetal tissue are in compliance with 42 USC 289g-2. This statute specifically prohibits any person from knowingly acquiring, receiving, or transferring any human fetal tissue for valuable consideration. "Valuable consideration" is a concept similar to profit, and does not include reasonable payment for costs associated with the collection processing, preservation, storage, quality control or transportation of these tissues.
Research involving the transplantation of human fetal tissue must be conducted in accordance with applicable Federal, State and local law.

H. Research Involving Recombinant or Synthetic Nucleic Acid Molecules (Including Human Gene Transfer Research)

All research projects (both NIH-funded and non-NIH-funded) involving recombinant or synthetic nucleic acid molecules that are conducted at or sponsored by an entity in the U.S. that receives any support for recombinant or synthetic nucleic acid research from NIH shall be conducted in accordance with the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines) (see http://osp.od.nih.gov/office-biotechnology-activities/biosafety/nih-guidelines). All NIH-funded projects conducted abroad that involve research with recombinant or synthetic nucleic acid molecules must also comply with the NIH Guidelines. In addition to biosafety and containment requirements, the NIH Guidelines delineate points to consider in the development and conduct of human gene transfer clinical trials, including ethical principles and safety reporting requirements (see Appendix M of the NIH Guidelines).

Prior to beginning any clinical trial involving the transfer of recombinant or synthetic nucleic acid molecules into humans, the trial must be registered with the NIH Office of Science Policy (OSP) and, if applicable, reviewed by the NIH Recombinant DNA Advisory Committee (RAC). If this contract involves a human gene transfer trial raising unique and/or novel issues, the trial may be discussed by the RAC in a public forum (see Appendix M-I-B of the NIH Guidelines for the specific criteria for the selection of protocols for RAC review and discussion). Approval of an Institutional Biosafety Committee (IBC) and the Institutional Review Board (IRB) are necessary before the Contracting Officer's Representative (COR) and Contracting Officer (CO) may approve the protocol prior to the start of the research. IBC approval may not occur until the protocol registration process with NIH is complete. If the trial is reviewed by the RAC, IBC approval may not occur before the RAC has concluded its review of the protocol and the protocol registration process with NIH is complete.

For human gene transfer research, Appendix M-I-C-4 of the NIH Guidelines requires any serious adverse events (SAEs) that are both unexpected and possibly associated with the human gene transfer product to be reported to NIH OSP and an IBC within 15 days, or within 7 days if the event was life-threatening or resulted in a death. A copy of the report must also be filed with the COR and CO. SAE reports must also be submitted within their mandated time frames to the IRB, Food and Drug Administration (FDA), and, if applicable, the Health and Human Services (HHS) Office for Human Research Protections (OHRP). In addition, annual reports must be submitted to NIH OSP covering certain information about human gene transfer protocols. Further information about the content of these reports can be found in Appendix M-I-C-3 of the NIH Guidelines. Additional information on the requirements that pertain to human gene transfer can be found in a series of Frequently Asked Questions at: http://osp.od.nih.gov/office-biotechnology-activities/biosafety/institutional-biosafety-committees/faq.

Failure to comply with the NIH Guidelines may result in suspension, limitation, or termination of the contract for any work related to recombinant or synthetic nucleic acid research or a requirement for the CO to approve any or all recombinant or synthetic nucleic acid molecule projects under this contract. This includes the requirement for the institution to have an IBC registered with NIH OSP that complies with the requirements of the NIH Guidelines. Further information about compliance with the NIH Guidelines can be found on

I. Human Stem Cell Research

On March 9, 2009, the President issued Executive Order (EO) 13505: Removing Barriers to Responsible Scientific Research Involving Human Stem Cells. The NIH has published Guidelines on Human Stem Cell Research at: http://stemcells.nih.gov/policy/pages/2009guidelines.aspx. The Guidelines implement EO 13505 with regard to extramural NIH-funded human stem cell research, establish policy and procedure under which the NIH will fund such research, and help ensure that NIH-funded research in this area is ethically responsible, scientifically worthy, and conducted in accordance with applicable law.

To facilitate research using human embryonic stem cells, the NIH has established a Human Embryonic Stem Cell Registry ("the NIH Registry") that lists the human embryonic stem cells that are currently eligible for use in NIH-funded research. This registry is available at: http://grants.nih.gov/stem_cells/registry/current.htm. Proposed human embryonic stem cell line(s) must be on the NIH Registry at the time of proposal submission. Any possible changes to the proposed cell line must be discussed in the proposal. Offerors wishing to have Human Embryonic Stem Cell Lines added to the NIH Human Embryonic Stem Cell Registry must submit the request on Form NIH 2890 through the following website: http://hescregapp.od.nih.gov/NIH_Form_2890_Login.htm.

J. Data and Safety Monitoring in Clinical Trials

All offerors are directed to the full text of the NIH Policies regarding Data and Safety Monitoring and Reporting of Adverse Events that are found in the NIH Guide for Grants and Contracts Announcements at the following web sites:


All offerors receiving an award under this solicitation must comply with the NIH Policy cited in these NIH Announcements and any other data and safety monitoring requirements found elsewhere in this solicitation.

The following is a brief summary of the Data and Safety Monitoring and Adverse Event Reporting Requirements:

Data and Safety Monitoring is required for every clinical trial. Monitoring must be performed on a regular basis and the conclusions of the monitoring reported to the Contracting Officer's Representative (COR).

The type of data and safety monitoring required will vary based on the type of clinical trial and the potential risks, complexity and nature of the trial. A plan for data and safety monitoring is required for all clinical trials. A general description of a monitoring plan establishes the overall framework for data and safety monitoring. It should describe the entity that will be responsible for the monitoring, and the policies and procedures for adverse event reporting. Phase III clinical trials generally require the establishment of a
Data Safety Monitoring Board (DSMB). The establishment of a DSMB is optional for Phase I and Phase II clinical trials.

The DSMB/Plan is established at the time the protocol is developed and must be approved by both the Institutional Review Board (IRB) and the Government and in place before the trial begins. If the protocol will be developed under the contract awarded from this solicitation, a general description of the data and safety monitoring plan must be submitted as part of the proposal and will be reviewed by the peer review group convened to evaluate the proposal. If the protocol is developed and is included as part of the submitted proposal, a complete and specific data and safety monitoring plan must be submitted as part of the proposal.

Monitoring Plans, at a minimum, must include the prompt reporting of adverse events to the IRB, the NIH Office of Biotechnology Activities (OBA), and the Food and Drug Administration (FDA). Also, in the plan you should describe the frequency of reporting of the conclusions of the monitoring activities. The overall elements of each plan may vary depending on the size and complexity of the trial. The NIH Policy for Data and Safety Monitoring at http://grants.nih.gov/grants/guide/notice-files/not98-084.html describes examples of monitoring activities to be considered.

The frequency of monitoring will depend upon potential risks, complexity, and the nature of the trial; therefore a number of options for monitoring trials are available. These can include, but are not limited to, monitoring by a:

- Principal Investigator (required)
- Independent individual /Safety Officer
- Designated medical monitor
- Internal Committee or Board with explicit guidelines
- Data and Safety Monitoring Board (DSMB - required for multisite trials)
- Institutional Review Board (IRB - required)

For multi-site Phase I and Phase II trials, a central reporting entity that will be responsible for preparing timely summary reports of adverse events for distribution among sites and IRBs should be considered.

Organizations with a large number of clinical trials may develop standard monitoring plans for Phase I and Phase II trials. In this case, such organizations may include the IRB-approved monitoring plan as part of the proposal submission.

K. Registration of and Results Reporting for Applicable Clinical Trials in ClinicalTrials.gov

The Food and Drug Administration Amendments Act of 2007 (FDAAA) at: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws&docid=f:publ085.110.pdf, Title VIII, expands the National Institutes of Health's (NIH's) clinical trials registry and results database known as ClinicalTrials.gov (http://www.clinicaltrials.gov/) and imposes new requirements that apply to certain applicable clinical trials, including those supported in whole or in part by NIH funds. FDAAA requires:
1) The registration of certain "applicable clinical trials" in ClinicalTrials.gov no later than 21 days after the first subject is enrolled; and

2) The reporting of summary results information (including adverse events) no later than 1 year after the completion date for registered applicable clinical trials involving drugs that are approved under section 505 of the Food, Drug and Cosmetic Act (FDCA) or licensed under section 351 of the PHS Act, biologics, or of devices that are cleared under section 510k of FDCA.

The resultant contract will support one or more applicable clinical trial subject to FDAAA.

The "responsible party" is the entity responsible for registering and reporting trial results in ClinicalTrials.gov.

- Where the Contractor is the IND/IDE holder, the Contractor will be considered the Sponsor, therefore the "Responsible Party."
- Where there is no IND/IDE holder or where the Government is the IND/IDE holder, the Government will generally be considered the "Sponsor" and may designate the contractor's Principal Investigator (PI) as the "Responsible Party."
- For Multi-Center trials where there is no IND/IDE holder or where the Government is the IND/IDE holder, the "Responsible Party" will be designated at one site (generally the lead clinical site) and all other sites will be responsible for providing necessary data to the "Responsible Party" for reporting in the database.

Additional information is available at http://prsinfo.clinicaltrials.gov

4. NOTICE TO OFFERORS OF REQUIREMENT FOR COMPLIANCE WITH THE PUBLIC HEALTH SERVICE POLICY ON HUMANE CARE AND USE OF LABORATORY ANIMALS, HHSAR 352.270-5(a) (December 2015)

The Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals (PHS Policy) establishes a number of requirements for research activities involving animals. Before awarding a contract to an offeror, the organization shall file, with the Office of Laboratory Animal Welfare (OLAW), National Institutes of Health (NIH), a written Animal Welfare Assurance (Assurance) which commits the organization to comply with the provisions of the PHS Policy, the Animal Welfare Act, and the Guide for the Care and Use of Laboratory Animals (National Academy Press, Washington, DC). In accordance with the PHS Policy, offerors must establish an Institutional Animal Care and Use Committee (IACUC), qualified through the experience and expertise of its members, to oversee the institution's animal program, facilities, and procedures. Offerors must provide verification of IACUC approval prior to receiving an award involving live vertebrate animals. No award involving the use of animals shall be made unless OLAW approves the Assurance and verification of IACUC approval for the proposed animal activities has been provided to the Contracting Officer. Prior to award, the Contracting Officer will notify Contractor(s) selected for projects involving live vertebrate animals of the Assurance and verification of IACUC approval requirement. The Contracting Officer will request that OLAW negotiate an acceptable Assurance with those Contractor(s) and request verification of IACUC approval. For further information, contact OLAW at NIH, 6705 Rockledge Drive, RKL1, Suite 360, MSC 7982 Bethesda, Maryland 20892-7982 (Email: olaw@od.nih.gov ; Phone: 301-496-7163).
5. **RESEARCH INVOLVING LIVE VERTEBRATE ANIMALS**

It is intended that live vertebrate animals will be used during performance of this contract. The Public Health Service (PHS) Policy on Humane Care and Use of Laboratory Animals (authority derived from the Health Research Extension Act of 1985) specifies that certain information is required from offerors in contract proposals submitted to the NIH that will use live vertebrate animals.

The following criteria must be addressed in a separate section of the Technical Proposal titled "Vertebrate Animal Section" (VAS):

i. **Description of Procedures.** Provide a concise description of the proposed procedures to be used that involve vertebrate animals in the work outlined in the Request for Proposal (RFP) Statement of Work. Identify the species, strains, ages, sex and total number of animals by species to be used in the proposed work. If dogs or cats are proposed, provide the source of the animals.

ii. **Justifications.** Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model (e.g., computational, human, invertebrate, in vitro).

iii. **Minimization of Pain and Distress.** Describe the interventions including analgesia, anesthesia, sedation, palliative care and humane endpoints to minimize discomfort, distress, pain and injury.

iv. **Euthanasia.** State whether the method of euthanasia is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals. If not, describe the method and provide a scientific justification.

A concise (no more than 1-2 pages), complete description addressing these criteria must be provided. The description must be cohesive and include sufficient information to allow evaluation by reviewers and NIH staff. For more discussion regarding the VAS, see NIH Guide Notice NOT-OD-16-006 at: [http://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-006.html](http://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-006.html).

The Contract Proposal VAS Worksheet is provided as an Attachment in SECTION VI of this solicitation to assist in the preparation of the VAS as part of the Technical Proposal. It can be accessed at: [http://grants.nih.gov/grants/olaw/VAScontracts.pdf](http://grants.nih.gov/grants/olaw/VAScontracts.pdf)

6. **POSSESSION, USE AND TRANSFER OF SELECT BIOLOGICAL AGENTS OR TOXINS**


These regulations implement the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, and the Agricultural Bioterrorism Protection Act of 2002. They are designed to improve the ability of the United States Government to prevent, prepare for, and
respond to bioterrorism and other public health emergencies. These regulations establish requirements regarding registration, security risk assessments, safety plans, security plans, emergency response plans, training, transfers, record keeping, inspections, and notifications.

Listings of HHS and USDA Select Agents and Toxins, and overlap Select Agents or Toxins as well as information about the registration process for domestic institutions, are available on the Select Agent Program Web site at http://www.selectagents.gov/ and http://www.selectagents.gov/SelectAgentsandToxinsList.html

For foreign institutions, see the NIAID Select Agent Award information (https://www.niaid.nih.gov/grants-contracts/select-agents).

If the proposed contract will not involve the possession, use or transfer Select Agents or Toxins, the offeror must include a statement in its technical proposal that the work does not now nor will it in the future (i.e. throughout the life of the award) involve the possession, use or transfer Select Agents or Toxins.

**Domestic Institutions**

For prime or subcontract awards to domestic institutions that possess, use, and/or transfer Select Agents under this contract, the domestic institution must:

- Include details about the Select Agent in their technical proposal, including the quantity proposed to be used during contract performance.
- Describe the proposed use of the Select Agent or Toxin, including any restricted experiments.
- Comply with 42 CFR part 73, 7 CFR part 331 and/or 9 CFR part 121 at: http://www.selectagents.gov/Regulations.html, as required, before using NIH funds for research involving Select Agents. No NIH funds can be used for research involving Select Agents if the final registration certificate is denied.

**Foreign Institutions**

For prime or subcontract awards to foreign institutions that possess, use, and/or transfer Select Agents under this contract, the foreign institution must:

- Include details about the select agent in their technical proposal, including the quantity proposed to be used during contract performance.
- Describe the proposed use of the Select Agent or Toxin, including any restricted experiments.
- When requested during negotiations, provide information satisfactory to the NIAID/NIH that safety, security, and training standards equivalent to those described in 42 CFR part 73, 7 CFR part 331, and/or 9 CFR part 121 at: http://www.selectagents.gov/Regulations.html for U.S. institutions are in place and will be administered on behalf of all Select Agent work under the resulting contract. The process for making this determination includes a site visit to the foreign laboratory facility by an NIAID representative. During this visit, the foreign institution must provide the following information: concise summaries of safety, security, and training plans; names of all individuals at the foreign
institution who will have access to the Select Agents and procedures for ensuring that only approved and appropriate individuals, in accordance with institution procedures, will have access to the Select Agents under the contract; and copies of or links to any applicable laws, regulations, policies, and procedures applicable to that institution for the safe and secure possession, use, and/or transfer of select agents. Laboratory site visits are conducted every three years for the life of the contract.

An NIAID chaired committee of U.S. federal employees (including representatives of NIH grants/contracts and scientific program management, CDC, Department of Justice and other federal intelligence agencies, and Department of State) will ultimately assess the results of the site visit, the regulations, policies, and procedures of the foreign institution for equivalence to the U.S. requirements described in 42 CFR part 73, 7 CFR part 331, and/or 9 CFR part 121 at: http://www.selectagents.gov/Regulations.html. The committee will provide recommendations to the DEA Director, NIAID. The DEA Director will make the approval decision and notify the Contracting Officer. The Contracting Officer will inform the prime contractor of the approval status of the foreign institution. No NIH funds can be used for research involving a Select Agent or Toxin at a foreign institution until NIAID grants this approval.

7. ENHANCING REPRODUCIBILITY THROUGH RIGOR AND TRANSPARENCY

The offeror shall demonstrate compliance with the NIH Policy on enhancing Reproducibility through Rigor and Transparency as described in NIH Guide Notice NOT-OD-15-103. Specifically, the offeror shall describe in its technical proposal the information described below:

b. Compliance Factors

1) Describe the scientific premise for the Technical Proposal. The scientific premise is the research that is used to form the basis for the proposed research. Offerors should describe the general strengths and weaknesses of the prior research being cited by the offeror as crucial to support the proposal. It is expected that this consideration of general strengths and weaknesses could include attention to the rigor of the previous experimental designs, as well as the incorporation of relevant biological variables and authentication of key resources.

2) Describe the experimental design and methods proposed and how they will achieve robust and unbiased results.

3) Explain how relevant biological variables, including sex, [if deemed necessary by the IC, additional variables may be included here] are factored into research designs and analyses for studies in vertebrate animals and humans. For example, strong justification from the scientific literature, preliminary data, or other relevant considerations, must be provided for proposals proposing to study only one sex. If your proposal involves human subjects, the sections on the Inclusion of Women and Minorities and Inclusion of Children can be used to expand your discussion and justify the proposed proportions of individuals (such as males and females) in the sample. Refer to NOT-OD-15-102 for further consideration of NIH expectations about sex as a biological variable.

4) If applicable to the proposed science, briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposal. Key biological and/or chemical resources may or may not be generated with NIH funds and: 1) may differ from laboratory to laboratory or over time; 2) may have qualities and/or qualifications that could influence the research data; and 3) are integral to the proposed research. These include, but are not limited to, cell lines, specialty chemicals, antibodies, and other biologics.
Standard laboratory reagents that are not expected to vary do not need to be included in the plan. Examples are buffers and other common biologicals or chemicals. If the Technical Proposal does not propose the use of key biological and/or chemical resources, a plan for authentication is not required, and the offeror should so state in its proposal.

8. NIH POLICY ON ENHANCING PUBLIC ACCESS TO ARCHIVED PUBLICATIONS RESULTING FROM NIH-FUNDED RESEARCH

NIH-funded investigators shall submit to the NIH National Library of Medicine's (NLM) PubMed Central (PMC) an electronic version of the author's final manuscript, upon acceptance for publication, resulting from research supported in whole or in part with direct costs from NIH. NIH defines the author's final manuscript as the final version accepted for journal publication, and includes all modifications from the publishing peer review process. The PMC archive will preserve permanently these manuscripts for use by the public, health care providers, educators, scientists, and NIH. The Policy directs electronic submissions to the NIH/NLM/PMC: http://www.pubmedcentral.nih.gov. Additional information is available at http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-071.html and http://publicaccess.nih.gov.

9. DUAL USE RESEARCH OF CONCERN

The offeror shall demonstrate compliance with the United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern (http://www.phe.gov/s3/dualuse/Documents/dure-policy.pdf) or "DURC" policy. The offeror shall provide in its technical proposal each of the following items:

a. Identification of the agents or toxins subject to the DURC policy.
b. A description of the categories of experiments in which the identified agents or toxins produces or aims to produce or can be reasonably anticipated to produce one or more of the effects identified in Section 6 of the DURC policy.
c. For projects involving any of the agents listed in the DURC policy and that involve or are anticipated to involve any of the categories of experiments listed in the DURC policy, an indication of whether or not the project meets the definition of "dual use research of concern" in Section 4C of the policy.
d. For projects meeting the definition of "dual use research of concern," a draft risk mitigation plan.
e. Certification that the offeror is or will be in compliance with all aspects of the DURC policy prior to use of pertinent agents or toxins.

The Government shall not award a contract to an offeror who fails to certify compliance or whose draft risk mitigation plan is unsatisfactory to the Government. If selected for award, an approved risk mitigation plan shall be incorporated into the contract.

10. NEEDLE EXCHANGE, HHSAR 352.270-12 (December 2015)

The Contractor shall not use any funds obligated under this contract to carry out any program of distributing sterile needles or syringes for the hypodermic injection of any illegal drug.

(End of clause)

11. CONTINUED BAN ON FUNDING ABORTION AND CONTINUED BAN ON FUNDING OF HUMAN EMBRYO RESEARCH, HHSAR 352.270-13 (December 2015)
a. The Contractor shall not use any funds obligated under this contract for any abortion.
b. The Contractor shall not use any funds obligated under this contract for the following:
   1. The creation of a human embryo or embryos for research purposes; or
   2. Research in which a human embryo or embryos are destroyed, discarded, or knowingly subjected to risk of injury of death greater than that allowed for research on fetuses in utero under 45 CFR part 46 and Section 498(b) of the Public Health Service Act (42 U.S.C. 289g(b)).
c. The term "human embryo or embryos" includes any organism, not protected as a human subject under 45 CFR part 46 as of the date of the enactment of this Act, that is derived by fertilization, parthenogenesis, cloning, or any other means from one or more human gametes of human diploid cells.
d. The Contractor shall not use any Federal funds for the cloning of human beings.

(End of clause)

12. LIMITATION ON USE OF FUNDS FOR PROMOTION OF LEGALIZATION OF CONTROLLED SUBSTANCES
   The Contractor shall not use contract funds to support activities that promote the legalization of any drug or other substance included in schedule I of the schedules of controlled substances established under section 202 of the Controlled Substances Act, except for normal and recognized executive-congressional communications. This limitation shall not apply when the Government determines that there is significant medical evidence of a therapeutic advantage to the use of such drug or other substance or that federally sponsored clinical trials are being conducted to determine therapeutic advantage.

13. DISSEMINATION OF FALSE OR DELIBERATELY MISLEADING INFORMATION
   The Contractor shall not use contract funds to disseminate information that is deliberately false or misleading.

14. OBTAINING AND DISSEMINATING BIOMEDICAL RESEARCH RESOURCES
   As a public sponsor of biomedical research, the National Institutes of Health (NIH) has a dual interest in accelerating scientific discovery and facilitating product development. Intellectual property restrictions can stifle the broad dissemination of new discoveries and limit future avenues of research and product development. At the same time, reasonable restrictions on the dissemination of research tools are sometimes necessary to protect legitimate proprietary interests and to preserve incentives for commercial development. To assist NIH contractors achieve an appropriate balance, the NIH has provided guidance in the form of a two-part document, consisting of Principles setting forth the fundamental concepts and Guidelines that provide specific information to patent and license professionals and sponsored research administrators for implementation.

   The purpose of these Principles and Guidelines is to assist NIH funding recipients in determining: 1) Reasonable terms and conditions for making NIH-funded research resources available to scientists in other institutions in the public and private sectors (disseminating research tools); and 2) Restrictions to accept as a condition of receiving access to research tools for use in NIH-funded research (acquiring research tools). The intent is to help recipients ensure
that the conditions they impose and accept on the transfer of research tools will facilitate further biomedical research, consistent with the requirements of the Bayh-Dole Act and NIH funding policy.

This policy, entitled, "SHARING BIOMEDICAL RESEARCH RESOURCES: Principles and Guidelines for Recipients of NIH Research Grants and Policy," (Federal Register Notice, December 23, 1999 [64 FR 72090] will be included in any contract awarded from this solicitation. It can be found at the following website:


a. Sharing Research Data

[Note: This policy applies to all NIH contracts, regardless of dollar value, that are expected to generate research data.]

The NIH endorses the sharing of final research data to expedite the translation of research results into knowledge, products, and procedures to improve human health. This contract is expected to generate research data. Therefore, the offeror must submit a plan in its technical proposal for data sharing or state why data sharing is not possible. If data sharing is limited, the offeror should explain such limitations in its data sharing plan. NIH's data sharing policy may be found at the following Web site:


[If the resultant contract is part of a collaborative program involving multiple sites, the data sharing will be governed by a dissemination plan to be developed jointly following award. Offerors must include in their proposals a statement of willingness to work collaboratively after award with the other funded sites to prepare a joint dissemination plan. Coordinating Center proposals should describe methods to coordinate the dissemination planning and implementation. The Coordinating Center must include a budget and justification for any additional costs of this collaborative effort.]

b. Sharing of Model Organisms for Biomedical Research


(http://grants.nih.gov/grants/guide/notice-files/NOT-OD-04-066.html), the NIH provides further sharing guidance with particular attention on model organisms for biomedical research. Such organisms include, but are not limited to: mammalian models such as the mouse and rat, and non-mammalian models, such as budding yeast, social amoebae, round worm, fruit fly, zebra fish, and frog. Research resources to be shared include genetically modified or mutant organisms, sperm, embryos, protocols for genetic and phenotypic screens, mutagenesis protocols, and genetic and phenotypic data for all mutant strains.

Offerors must include in their technical proposal a description of a specific plan for sharing
and distributing unique model organism research resources generated using NIH funding so that other researchers can benefit from these resources, OR provide appropriate reasons why such sharing is restricted or not possible. A reasonable time frame for periodic disposition of material and associated data must be specified in the proposal. In addition, the plan must address if, or how, offerors will exercise their intellectual property rights while making model organisms and research resources available to the broader scientific community. At a minimum, the plan should address the following:

- Will material transfers be made with no more restrictive terms than in a Simple Letter Agreement (SLA) at: [http://www.ott.nih.gov/hhs-manual-toc](http://www.ott.nih.gov/hhs-manual-toc); for the transfer of materials or the Uniform Biological Material Transfer Agreement (UBMTA) ([http://www.autm.net/UBMTA/8847.htm](http://www.autm.net/UBMTA/8847.htm))
- How will inappropriate "reach-through" requirements (as discussed in the NIH Research Tools Policy) on materials transferred be discussed?
- How will technologies remain widely available and accessible to the research community, for example, if any intellectual property rights arise for which a patent application may be filed?

Offerors may request funds in their cost proposal to defray reasonable costs associated with sharing materials or data or transfer of model organisms and associated data to appropriate repositories.

c. **Data Sharing Policy for Genome-Wide Association Studies**

NIH is interested in advancing genome-wide association studies (GWAS) to identify common genetic factors that influence health and disease through a centralized GWAS data repository. For the purposes of this policy, a genome-wide association study is defined as any study of genetic variation across the entire human genome that is designed to identify genetic associations with observable traits (such as blood pressure or weight), or the presence or absence of a disease or condition.

All offerors proposing a genome-wide association study are expected to provide a plan for submission of GWAS data to the NIH-designated GWAS data repository, or provide an appropriate explanation why submission to the repository is not possible. Contractors submitting GWAS data are expected to:

- Provide descriptive information about their studies;
- Submit coded genotypic and phenotypic data to the NIH GWAS data repository; and
- Submit a certification that the institution or organization has reviewed and approved submission to the NIH, noting any limitations on data use based on the relevant informed consents and providing assurance that all data are submitted to the NIH in accord with applicable laws and regulations and that the identities of research participants will not be disclosed to the NIH GWAS data repository and an IRB and/or Privacy Board, as applicable, has reviewed and verified that:
  - The submission of data to the NIH GWAS data repository and subsequent sharing for research purposes are consistent with the informed consent of study participants from whom the data were obtained;
  - The investigator's plan for de-identifying datasets is consistent with the standards outlined above;
It has considered the risks to individuals, their families, and groups or populations associated with data submitted to the GWAS data repository; and

- The genotype and phenotype data to be submitted were collected in a manner consistent with 45 C.F.R. Part 46.

Contractors requesting access to GWAS data in the NIH repository are expected to:

- Submit a data access request, including a brief description of the proposed research and a Data Use Certification that is co-signed by the designated Institutional Official(s) at their sponsoring institution;
- Use the data only for the approved research project described in the data access request;
- Protect data confidentiality;
- Not attempt to use the requested datasets to re-identify or contact individual study participants;
- Retain control of the data and not distribute it to any entity or individual not covered in the data access request;
- Ensure that data security measures are in place;
- Notify the appropriate Data Access Committee of policy violations; and
- Submit annual progress reports detailing significant research findings.

Additionally, Contractors requesting access to the data are also expected to abide by the dbGaP Approved User Code of Conduct (https://dbgap.ncbi.nlm.nih.gov/aa/GWAS_Code_of_Conduct.html).

Data repository management (submission and access) is governed by the Policy for Sharing of Data Obtained in NIH Supported or Conducted Genome-Wide Association Studies, NIH Guide NOT-OD-07-088 located at: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-07-088.html. For additional information see: http://gwas.nih.gov/.

d. Sharing HeLa Cell Whole Genome Sequence Data and Family Acknowledgement


Offerors proposing to generate HeLa Cell Whole Genome Sequence Data shall include a plan for submission of this data to the database of Genotypes and Phenotypes (dbGaP) as part of the technical proposal. The plan should include provisions for the data to be added to the dbGaP study page for HeLa Cell Genome Sequencing Studies, and an acknowledgement that the offeror has read and will agree to the provisions of the HeLa Genome Data Use Agreement available at: https://dbgap.ncbi.nlm.nih.gov/aa/wga.cgi?view_pdf&stacc=phs000640.v1.p1.

C. BUSINESS PROPOSAL INSTRUCTIONS

Offerors should propose a budget that is aligned with the Statement of Work proposed. As such, Business Proposals must provide a detailed task-linked budget that consists of a breakdown of total costs (direct costs, indirect costs, and fees) to the Base and each Option proposed, accompanied with a detailed Gantt chart. Proposed budgets should also include an annual breakdown where annual budgets will be based on the total amount for all activities starting in that fiscal year.
A summary budget reflecting the total costs over the period of performance of the proposed contract shall be provided in the same “Breakdown of Proposed Estimated Costs (plus fee) and Labor Hours” format (see http://oamp.od.nih.gov/sites/default/files/DGS/contracting-forms/spshexcl_dec2012.xlsx).

The Gantt timeline will consist of summary tasks, tasks and subtasks, including predecessor and successor logic for all activities covering the initiation, and conduct and completion of all product development activities. Product development activities will be planned and structured such that the Base and each individual Option will be performed within the entire performance period of the contract. The lowest level of tasks or subtasks for each activity for which budget is assigned will be determined by the Offeror. However, the budget plan, based on the task-linked budget must provide for feasible execution, management and oversight. Budget linked to activities at the lowest level will include budget for all subordinate activities.

1. **General Instructions**

   a. **Basic Cost/Price Information**

   The business proposal must contain sufficient information to allow the Government to perform a basic analysis of the proposed cost or price of the work. This information shall include the amounts of the basic elements of the proposed cost or price. These elements will include, as applicable, direct labor, fringe benefits, travel, materials, subcontracts, purchased parts, shipping, indirect costs and rate, fee, and profit.

   b. **Business Proposal – Table of Contents**

   **SECTION 1 – PROPOSAL COVER SHEET** (use form NIH 2043, Section VI Attachments)

   The following information shall be provided on the first page of your pricing proposal:

   1. Solicitation, contract, and/or modification number;
   2. Name and address of Offeror;
   3. Name and telephone number of point of contact;
   4. Name, address, and telephone number of Contract Administration Office, (if available);
   5. Name, address, and telephone number of Audit Office (if available);
   6. Proposed cost and/or price; profit or fee (as applicable); and total;
   7. The following statement: By submitting this proposal, the offeror, if selected for discussions, grants the contracting officer or an authorized representative the right to examine, at any time before award, any of those books, records, documents, or other records directly pertinent to the information requested or submitted.
   8. Whether your organization is subject to cost accounting standards; whether your organization has submitted a CASB Disclosure Statement, and if it has been determined adequate; whether you have been notified that you are or may be in noncompliance with your Disclosure Statement or CAS, and, if yes, an explanation; whether any aspect of this proposal is inconsistent with your disclosed practices or applicable CAS, and, if so, an explanation; and whether the proposal is consistent with your established estimating and accounting principles and procedures and FAR Part 31, Cost Principles, and, if not, an explanation;
   9. Date of submission; and
   10. Name, title and signature of authorized representative.
This cover sheet information is for use by offerors to submit information to the Government when certified cost or pricing data are not required but information to help establish price reasonableness or cost realism is necessary. Such information is not required to be certified in accordance with FAR 15.406-2.

**SECTION 2 – COST OR PRICE SUPPORT**

Section IV of the BAA specifies the minimum documentation requirements for cost data and all cost related support. All related documentation should be included in a clearly marked section of the proposal.

**SECTION 3 – UNIFORM COST ASSUMPTIONS**

Offerors should refer to Section III, Research Areas, for Uniform Cost Assumptions applicable to the specific Research Area under which you are proposing.

**SECTION 4 – OPTIONS**

Each Option must be budgeted separately within the Business Proposal. All uniform cost assumptions associated with Options are to be delineated here.

2. **Certified Cost or Pricing Data**

   **A. General Instructions**

   1) In submitting your proposal, you must include an index, appropriately referenced, of all the certified cost or pricing data and information accompanying or identified in the proposal. In addition, you must annotate any future additions and/or revisions, up to the date of agreement on price, or an earlier date agreed upon by the parties, on a supplemental index.

   2) As part of the specific information required, you must submit, with your proposal, certified cost or pricing data (as defined at FAR 2.101). You must clearly identify on your cover sheet that certified cost or pricing data are included as part of the proposal. In addition, you must submit with your proposal any information reasonably required to explain your estimating process, including:

      a. The judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data; and

      b. The nature and amount of any contingencies included in the proposed price.

   3) You must show the relationship between contract line item prices and the total contract price. You must attach cost element breakdowns for each proposed line item, using the appropriate format prescribed in the "Formats for Submission of Line Item Summaries" section of this table. You must furnish supporting breakdowns for each cost element, consistent with your cost accounting system.

   4) When more than one contract line item is proposed, you must also provide summary total amounts covering all line items for each element of cost.
5) Whenever you have incurred costs for work performed before submission of a proposal, you must identify those costs in your cost/price proposal.

6) If you have reached an agreement with Government representatives on use of forward pricing rates/factors, identify the agreement, include a copy, and describe its nature.

7) As soon as practicable after final agreement on price or an earlier date agreed to by the parties, but before the award resulting from the proposal, you must, under the conditions stated in FAR 15.406-2, submit a Certificate of Current Cost or Pricing Data.

B. Cost Elements

Depending on your system, you must provide breakdowns for the following basic cost elements, as applicable:

1) Materials and services. Provide a consolidated priced summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing (vendor quotes, invoice prices, etc.). Include raw materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed, identify the item and show the source, quantity, and price. Conduct price analyses of all subcontractor proposals. Conduct cost analyses for all subcontracts when certified cost or pricing data are submitted by the subcontractor. Include these analyses as part of your own certified cost or pricing data submissions for subcontracts expected to exceed the appropriate threshold in FAR 15.403-4. Submit the subcontractor certified cost or pricing data as part of your own certified cost or pricing data as required in paragraph A.2. below. These requirements also apply to all subcontractors if required to submit certified cost or pricing data.

a. Adequate Price Competition. Provide data showing the degree of competition and the basis for establishing the source and reasonableness of price for those acquisitions (such as subcontracts, purchase orders, material order, etc.) exceeding, or expected to exceed, the appropriate threshold set forth at FAR 15.403-4 priced on the basis of adequate price competition. For interorganizational transfers priced at other than the cost of comparable competitive commercial work of the division, subsidiary, or affiliate of the contractor, explain the pricing method (see FAR 31.205-26(e)).

b. All Other. Obtain certified cost or pricing data from prospective sources for those acquisitions (such as subcontracts, purchase orders, material order, etc.) exceeding the threshold set forth in FAR 15.403-4 and not otherwise exempt, in accordance with FAR 15.403-1(b) (i.e., adequate price competition, commercial items, prices set by law or regulation or waiver). Also provide data showing the basis for establishing source and reasonableness of price. In addition, provide a summary of your cost analysis and a copy of certified cost or pricing data submitted by the prospective source in support of each subcontract, or purchase order that is the lower of either $12.5 million or more, or both more than the pertinent cost or pricing data threshold and more than 10 percent of the prime contractor's proposed price. Also submit any information reasonably required to explain your estimating process (including the judgmental factors applied and the mathematical or other methods used in the estimate, including those used in
projecting from known data, and the nature and amount of any contingencies included in the price). The Contracting Officer may require you to submit certified cost or pricing data in support of proposals in lower amounts. Subcontractor certified cost or pricing data must be accurate, complete and current as of the date of final price agreement, or an earlier date agreed upon by the parties, given on the prime contractor's Certificate of Current Cost or Pricing Data. The prime contractor is responsible for updating a prospective subcontractor's data. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown, if priced based on cost. For interorganizational transfers priced at cost, provide a separate breakdown of cost elements. Analyze the certified cost or pricing data and submit the results of your analysis of the prospective source's proposal. When submission of a prospective source's certified cost or pricing data is required as described in this paragraph, it must be included, along with your own certified cost or pricing data submission, as part of your own certified cost or pricing data. You must also submit any other certified cost or pricing data obtained from a subcontractor, either actually or by specific identification, along with the results of any analysis performed on that data.

2) Direct Labor. Provide a time phased (e.g., monthly, quarterly, etc.) breakdown of labor hours, rates, and cost by appropriate category, and furnish bases for estimates.

3) Indirect Costs. Indicate how you have computed and applied your indirect costs, including cost breakdowns. Show trends and budgetary data to provide a basis for evaluating the reasonableness of proposed rates. Indicate the rates used and provide an appropriate explanation.

4) Other Costs. List all other costs not otherwise included in the categories described above (e.g., special tooling, travel, computer and consultant services, preservation, packaging and packing, spoilage and rework, and Federal excise tax on finished articles) and provide bases for pricing.

5) Royalties. If royalties exceed $1,500, you must provide the following information on a separate page for each separate royalty or license fee:
   a. Name and address of licensor.
   b. Date of license agreement.
   c. Patent numbers.
   d. Patent application serial numbers, or other basis on which the royalty is payable.
   e. Brief description (including any part or model numbers of each contract item or component on which the royalty is payable).
   f. Percentage or dollar rate of royalty per unit.
   g. Unit price of contract item.
   h. Number of units.
   i. Total dollar amount of royalties.
   j. If specifically requested by the Contracting Officer, a copy of the current license agreement and identification of applicable claims of specific patents (see FAR 27.202 and 31.205-37).

6) Facilities Capital Cost of Money. When you elect to claim facilities capital cost of money as an allowable cost, you must submit Form CASB CMF and show the calculation of the proposed amount (see FAR 31.205 10).
C. Formats for Submission of Line Item Summaries

The detailed breakdown shall be in the format as shown on the form Breakdown of Proposed Estimated Cost (plus fee) and Labor Hours (Section VI, List of Attachments). For each separate cost estimate, the offeror must furnish a breakdown by cost element as indicated above. In addition, summary total amounts shall be furnished. In the event the RFP cites specific line items, by number, a cost breakdown for each line item must be furnished.

D. General Information

1) There is a clear distinction between submitting certified cost or pricing data and merely making available books, records, and other documents without identification. The requirement for submission of certified cost or pricing data is met when all accurate cost or pricing data reasonably available to the offeror have been submitted, either actually or by specific identification, to the Contracting Officer or an authorized representative. As later information comes into your possession, it should be submitted promptly to the Contracting Officer in a manner that clearly shows how the information relates to the offeror's price proposal. The requirement for submission of certified cost or pricing data continues up to the time of agreement on price, or an earlier date agreed upon between the parties if applicable.

2) By submitting your proposal, you grant the Contracting Officer or an authorized representative the right to examine records that formed the basis for the pricing proposal. That examination can take place at any time before award. It may include those books, records, documents, and other types of factual information (regardless of form or whether the information is specifically referenced or included in the proposal as the basis for pricing) that will permit an adequate evaluation of the proposed price.

3. Requirements for Certified Cost or Pricing Data and Data Other than Certified Cost or Pricing Data, FAR Clause 52.215-20 (October 2010)

A. Exceptions from certified cost or pricing data.

1) In lieu of submitting certified cost or pricing data, offerors may submit a written request for exception by submitting the information described in the following subparagraphs. The Contracting Officer may require additional supporting information, but only to the extent necessary to determine whether an exception should be granted, and whether the price is fair and reasonable.

   a. Identification of the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews, or similar actions of a governmental body, attach a copy of the controlling document, unless it was previously submitted to the contracting office.

   b. Commercial item exception. For a commercial item exception, the offeror shall submit, at a minimum, information on prices at which the same item or similar items have previously been sold in the commercial market that is adequate for evaluating the reasonableness of the price for this acquisition. Such information may include
i. For catalog items, a copy of or identification of the catalog and its date, or the appropriate pages for the offered items, or a statement that the catalog is on file in the buying office to which the proposal is being submitted. Provide a copy or describe current discount policies and price lists (published or unpublished), e.g., wholesale, original equipment manufacturer, or reseller. Also explain the basis of each offered price and its relationship to the established catalog price, including how the proposed price relates to the price of recent sales in quantities similar to the proposed quantities;

ii. For market priced items, the source and date or period of the market quotation or other basis for market price, the base amount, and applicable discounts. In addition, describe the nature of the market;

iii. For items included on an active Federal Supply Service Multiple Award Schedule contract, proof that an exception has been granted for the schedule item.

2) The offeror grants the Contracting Officer or an authorized representative the right to examine, at any time before award, books, records, documents, or other directly pertinent records to verify any request for an exception under this provision, and the reasonableness of price. For items priced using catalog or market prices, or law or regulation, access does not extend to cost or profit information or other data relevant solely to the offeror's determination of the prices to be offered in the catalog or marketplace.

B. Requirements for certified cost or pricing data. If the offeror is not granted an exception from the requirement to submit certified cost or pricing data, the following applies:

1) The offeror shall prepare and submit certified cost or pricing data, data other than certified cost or pricing data, and supporting attachments in accordance with the instructions contained in Table 15-2 of FAR 15.408, which is incorporated by reference with the same force and effect as though it were inserted here in full text. The instructions in Table 15-2 are incorporated as a mandatory format to be used in this contract, unless the Contracting Officer and the Contractor agree to a different format and change this clause to use Alternate I.

2) As soon as practicable after agreement on price, but before contract award (except for unpriced actions such as letter contracts), the offeror shall submit a Certificate of Current Cost or Pricing Data, as prescribed by FAR 15.406-2.

(End of provision)

4. Submission of Electronic Funds Transfer Information with Offer, FAR Clause 52.232-38 (JULY 2013)

The offeror shall provide, with its offer, the following information that is required to make payment by electronic funds transfer (EFT) under any contract that results from this solicitation. This submission satisfies the requirement to provide EFT information under paragraphs (b)(1) and (j) of the clause at 52.232 34, Payment by Electronic Funds Transfer Other than System for Award Management.
(1) The solicitation number (or other procurement identification number).
(2) The offeror's name and remittance address, as stated in the offer.
(3) The signature (manual or electronic, as appropriate), title, and telephone number of the offeror's official authorized to provide this information.
(4) The name, address, and 9 digit Routing Transit Number of the offeror's financial agent.
(5) The offeror's account number and the type of account (checking, savings, or lockbox).
(6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the offeror's financial agent.
(7) If applicable, the offeror shall also provide the name, address, telegraphic abbreviation, and 9 digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the offeror's financial agent is not directly on line to the Fedwire and, therefore, not the receiver of the wire transfer payment.

(End of Provision)

5. Financial Capacity

The offeror shall indicate if it has the necessary financial capacity, working capital, and other resources to perform the contract without assistance from any outside source. If not, indicate the amount required and the anticipated source.

6. Adequate Accounting System

FAR Part 16 sets forth the requirements and limitations for consideration of contract type. As stated in Section IV, Instructions, Conditions, and Notices to Offerors, of this solicitation, the resultant contract will not be Firm-Fixed Price. Therefore, the offeror's/contractor's accounting system and practices must be adequate and suitable for accumulating costs under government contracts.

To be considered for an award under this solicitation, the offeror shall include, in the Business Proposal, the following Certification:

"By submission of its signed offer, the Offeror certifies that its accounting system:

- Complies with generally accepted accounting principles (GAAP).
- Provides for:
  - Proper segregation of direct costs from indirect costs.
  - Identification and accumulation of direct costs by contract.
  - A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives.
  - Accumulation of costs under general ledger control.
  - A timekeeping system that identifies employees' labor by intermediate or final cost objectives.
  - A labor distribution system that charges direct and indirect labor to the appropriate cost objectives.
  - Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account.
  - Exclusion from costs charged to government contracts of amounts that are not allowable in terms of FAR 31, "Contract Cost Principles and Procedures," or other contract provisions."
o Identification of costs by contract line item and by units (as if each unit or line item were a separate contract) if required by the proposed contract.
o Segregation of preproduction costs from production costs, if applicable.

- Accounting system provides financial information:
o Required by contract clause concerning limitation of cost (FAR 52.232-20) or limitation on payments (FAR 52.216-16).
o Required to support requests for progress payments.
- Accounting system was designed, and records are maintained in such a manner that adequate, reliable data are developed for use in pricing follow-on acquisitions.
- Accounting system is currently in full operation.

The Contracting Officer reserves the right to request, with the Final Proposal Revision (FPR), a current (within 18 months) CPA opinion confirming that the Offeror's accounting system is compliant as certified above.

7. **Facilities Capital Cost of Money, FAR 52.215-16, (June 2003)**

(This is applicable if you are a commercial organization.)

(a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in FAR 31.205-10(b) are met. One of the allowability criteria requires the prospective Contractor to propose facilities capital cost of money in its offer.

(b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

(End of Provision)

If the offeror elects to claim this cost, the offeror shall specifically identify or propose it in the cost proposal for the contract by checking the appropriate box below.

[ ] Fac Cap Cost of Money (Has) The prospective Contractor has specifically identified or proposed facilities capital cost of money in its cost proposal and elects to claim this cost as an allowable cost under the contract. Submit Form CASB-CMF (see FAR 31.205-10).

[ ] Fac Cap Cost of Money (Has Not) The prospective Contractor has not specifically identified or proposed facilities capital cost of money in its proposal and elects not to claim it as an allowable cost under the contract.

8. **Qualifications of the Offeror**

You are requested to submit a summary of your "General Experience, Organizational Experience Related to this RFP, Performance History and Pertinent Contracts."

**B. General Experience**

General experience is defined as general background, experience and qualifications of the offeror. A discussion of proposed facilities which can be devoted to the project may be appropriate.
C. **Organizational Experience Related to the RFP**

Organizational experience is defined as the accomplishment of work, either past or on-going, which is comparable or related to the effort required by this RFP. This includes overall offeror or corporate experience, **but not** the experience and/or past performance of individuals who are proposed as personnel involved with the Statement of Work in this RFP.

D. **Performance History**

Performance history is defined as meeting contract objectives within **delivery** and **cost schedules** on efforts, either past or on-going, which is comparable or related to the effort required by this RFP.

E. **Pertinent Contracts**

Pertinent contracts is defined as a listing of each related contract completed within the last three years or currently in process. The listing should include: 1) the contract number; 2) contracting agency; 3) contract dollar value; 4) dates contract began and ended (or ends); 5) description of contract work; 6) explanation of relevance of work to this RFP; 7) actual delivery and cost performance versus delivery and cost agreed to in the contract(s). For award fee contracts, separately state in dollars the base fee and award fee available and the award fee actually received. The same type of organizational experience and past performance data should be submitted.

F. **Pertinent Grants**

List grants supported by the Government that involved similar or related work to that called for in this RFP. Include the grant number, involved agency, names of the grant specialist and the Science Administrator, identification of the work, and when performed.

You are cautioned that omission or an inadequate or inaccurate response to this very important RFP requirement could have a negative effect on the overall selection process. Experience and past performance are factors which are relevant to the ability of the offerors to perform and are considered in the source selection process.

9. **Subcontractors**

If subcontractors are proposed, please include a commitment letter from the subcontractor detailing:

1. Willingness to perform as a subcontractor for specific duties (list duties).
2. What priority the work will be given and how it will relate to other work.
3. The amount of time and facilities available to this project.
4. Information on their cognizant field audit offices.
5. How rights to publications and patents are to be handled.
6. A complete cost proposal in the same format as the offeror's cost proposal.

10. **Proposer's Annual Financial Report**

A copy of the organization's most recent annual report must be submitted as part of the business proposal.
11. Travel Costs/Travel Policy

A. Travel Costs - Commercial

Costs for lodging, meals, and incidental expenses incurred by Contractor personnel shall be considered to be reasonable and allowable to the extent they do not exceed on a daily basis the per diem rates set forth in the Federal Travel Regulations, General Services Administration (GSA). Therefore, if travel costs are applicable and proposed by offerors, please be advised that they shall be calculated using the per diem rate schedule as established by GSA. Reimbursement of travel costs under any contract awarded from this RFP shall be in accordance with FAR 31.205-46.

B. Travel Policy

One copy of the offeror's (and any proposed subcontractor's) written travel policy shall be included in the business proposal (original only). If an offeror (or any proposed subcontractor) does not have a written travel policy, the offeror shall so state.

12. Certification of Visas for Non-U.S. Citizens

Proposed personnel under research projects are not required to be citizens of the United States. However, if non-U.S. citizens are proposed under a contract to be performed in the United States and its outlying areas, then the offeror must indicate in the proposal that these individuals have the required visas.

13. Total Compensation Plan

A. Instructions

1) Total compensation (salary and fringe benefits) of professional employees under service contracts may, in some cases, be lowered by recompetition of these contracts. Lowering of compensation can be detrimental in obtaining the necessary quality of professional services needed for adequate performance of service contracts. It is, therefore, in the best interest of the Government that professional employees, as defined in 29 CFR Part 541, be properly compensated in these contracts. All offerors as a part of their Business Proposal will submit a "Total Compensation Plan" (salaries and fringe benefits) for these professional employees for evaluation purposes.

2) The Government will evaluate the Total Compensation Plan to ensure that this compensation reflects a sound management approach and an understanding of the requirements to be performed. It will include an assessment of the offeror's ability to provide uninterrupted work of high quality. The total compensation proposed will be evaluated in terms of enhancing recruitment and retention of personnel and its realism and consistency with a total plan for compensation (both salaries and fringe benefits).

3) Evaluation for award, therefore, will include an assessment of the Total Compensation Plan submitted by each offeror.

b. Evaluation

1) Total Compensation Plan (Professional Employees)
In establishing compensation levels for professional employees, the total compensation (both salaries and fringe benefits) proposed shall reflect a clear understanding of the requirements of the work to be accomplished and the suitability of the proposed compensation structure to obtain and retain qualified personnel to meet mission objectives. The salary rates or ranges must recognize the distinct differences in professional skills and the complexity of varied disciplines as well as job difficulty. Proposals offering total compensation levels less than currently being paid by the predecessor Contractor for the same work will be evaluated, in addition to the above, on the basis of maintaining program continuity, uninterrupted work of high quality, and availability of required competent professional employees. Offerors are cautioned that instances of lowered compensation for essentially the same professional work may be considered a lack of sound management judgment in addition to indicating a lack of understanding of the requirement.

2) Cost (Professional Compensation)
Proposals which are unrealistically low or do not reflect a reasonable relationship of compensation to the professional job categories so as to impair the Contractor's ability to recruit and retain competent professional employees, may be viewed as reflecting a failure to comprehend the complexity of the contract requirements. The Government is concerned with the quality and stability of the work force to be employed on this contract. The compensation data required will be used in evaluation of the offeror's understanding of the contract requirements.

3) Other (Labor Relations)
An assessment of the potential for adverse effect upon performance and maintenance of the required number of professional employees with requisite skills resulting from an unrealistically low compensation structure will also be made.

4) Federal Acquisition Regulation Clauses incorporated by Reference
FAR Clause 52.222-46, Evaluation of Compensation for Professional Employees.

14. Salary Rate Limitation
Offerors are advised that no NIH funds may be used to pay the direct annual salary of an individual through any contract awarded as a result of this solicitation at a rate in excess of the Executive Schedule, Level II* (direct salary is exclusive of Overhead, Fringe Benefits and General and Administrative expenses, also referred to as "indirect cost" or "facilities and administrative (F&A) costs"). Direct salary has the same meaning as the term "institutional base salary." An individual's direct salary (or institutional base salary) is the annual compensation that the Contractor pays for an individual's appointment whether that individual's time is spent on research, teaching, patient care or other activities. Direct salary (or institutional base salary) excludes any income that an individual may be permitted to earn outside of duties to the Contractor.

This does not preclude the offeror from absorbing that portion of an employee's annual salary (plus the dollar amount for fringe benefits and associated indirect costs) that exceeds a rate of the Executive Schedule, Level II*. The Executive Schedule, Level II* annual salary rate limitation also applies to individuals proposed under subcontracts and to consultants.

*Note to Offerors: The current Fiscal Year Executive Level II Salary Rate shall be adhered to in the preparation of your proposal. All costs associated with any resultant contract award shall be in compliance with the current Fiscal Year Executive Level II Salary rates.

15. Intellectual Property

The awardee is solely responsible for the timely acquisition of all appropriate propriety rights, including intellectual property rights, and all materials needed for the awardee to perform the project. Before, during, and subsequent to the award, the U.S. Government is not required to obtain for the awardee any propriety rights, including intellectual property rights, or any materials needed by the awardee to perform the project.

The awardee is required to report to the U.S. Government all inventions made in the performance of the project, as specified by 35 U.S.C. Sect. 202 (Bayh-Dole Act).

16. Small Business Subcontracting Plan

If the proposed contract exceeds a total estimated cost of $700,000 for the entire period of performance, the offeror shall be required to submit an acceptable subcontracting plan in accordance with the terms of the clause entitled "Small Business Subcontracting Plan," FAR Clause No. 52.219-9. See link: https://www.hhs.gov/grants/contracts/contract-policies-regulations/subcontractplan/index.html for an example of such a plan.

a) THIS PROVISION DOES NOT APPLY TO SMALL BUSINESS CONCERNS.

b) For additional information about the elements required to be contained in the subcontracting plan, see FAR Clause 52.219-9, Small Business Subcontracting Plan.

c) HHS expects each procuring activity to establish minimum subcontracting goals for all procurements. The anticipated minimum goals for this BAA are as follows:

33% for Small Business; 5% for Small Disadvantaged Business; 5% for Women-Owned Small Business; 3% for HUBZone Small Business; and 3% for Veteran-Owned Small Business and Service-Disabled Veteran-Owned Small Business.

17. Mentor-Protégé Program, HHSAR 352.219-70 (December) 2015

A. Large business prime contractors serving as mentors in the HHS Mentor-Protégé Program are eligible for HHS subcontracting plan credit, and shall submit a copy of their HHS Office of Small and Disadvantaged Business Utilization (OSDBU) approved mentor-protégé agreements as part of their offers. The amount of credit provided by the Contracting Officer to a mentor firm for protégé firm developmental assistance costs shall be calculated on a dollar for dollar basis and reported by the mentor firm in the Summary Subcontract Report via the Electronic Subcontracting Reporting System (eSRS) at www.esrs.gov. The mentor firm and protégé firm shall submit to the Contracting Officer a signed joint statement agreeing on the dollar value of the developmental assistance the mentor firm provided. (For
example, a mentor firm would report a $10,000 subcontract awarded to a protégé firm and provision of $5,000 of developmental assistance as $15,000 of subcontracting plan credit.) The mentor firm may use this additional credit towards attaining its subcontracting plan participation goal under this contract.

B. The program consists of—

1) Mentor firms--large businesses that:

   (i) Demonstrate the interest, commitment, and capability to provide developmental assistance to small business protégé firms; and
   (ii) Have a Mentor-Protégé agreement approved by HHS' OSDBU;

2) Protégé firms--firms that:

   (i) Seek developmental assistance;
   (ii) Qualify as small businesses, veteran-owned small businesses, service-disabled veteran-owned small businesses, HUBZone small businesses, small disadvantaged businesses, or woman-owned small businesses; and
   (iii) Have a Mentor-Protégé agreement approved by HHS' OSDBU; and

3) Mentor-Protégé agreements--joint agreements, approved by HHS' OSDBU, which detail the specific terms, conditions, and responsibilities of the mentor-protégé relationship.

(End of provision)

18. HUBZone Small Business Concerns

Small Business offerors located in underutilized business zones, called "HUBZones," will be evaluated in accordance with FAR Clause 52.219-4, NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS, which is incorporated by reference in ARTICLE I.3. of this solicitation. Qualified HUBZone firms are identified in the Small Business Administration website at http://www.sba.gov/hubzone .

19. Formats for Submission of Line Item Summaries

The detailed breakdown shall be in the format as shown on the form Breakdown of Proposed Estimated Cost (plus fee) and Labor Hours. For each separate cost estimate, the Offeror must furnish a breakdown by cost element as indicated above. In addition, summary total amounts shall be furnished. In the event the BAA cites specific line items, by number, a cost breakdown for each line item must be furnished. See http://oamp.od.nih.gov/sites/default/files/DGS/contracting-forms/spshexcl_dec2012.xlsx

20. Cost Sharing

Cost sharing is permitted for proposals under this solicitation.

21. Representations, Certifications, and Other Statements of Offerors
IF YOU INTEND TO SUBMIT A PROPOSAL, YOU MUST:

a) Go to the System for Award Management (SAM) and complete the Representations and Certifications. The SAM website may be accessed at: http://www.sam.gov; and

b) Complete, and INCLUDE, the Representations and Certifications as part of your BUSINESS PROPOSAL.

V. EVALUATION FACTORS FOR AWARD

GENERAL

Proposals will be evaluated against the following evaluation factors in the order of importance: technical and cost. Although technical factors are of paramount consideration in the award of the contract, cost/price, and past performance are also important to the overall contract award decision. All evaluation factors other than cost or price, when combined, are significantly more important than cost or price. The estimated cost of an offer must be reasonable for the tasks to be performed and will be subject to analysis by the Government.

The merit of each technical proposal will be evaluated by a peer review group. The Government reserves the right to convene multiple peer review groups to evaluate proposals. Offerors must demonstrate in their proposals that they have the necessary expertise and capabilities for conducting the proposed research. The evaluation will be based on the demonstrated capabilities of the offerors in relation to the needs of the project as set forth in the BAA. Each proposal must demonstrate the feasibility of its approach and its relevance to the Research and Technical Objectives of the BAA. Offerors must submit information sufficient to evaluate their proposals based on the detailed criteria.

Each proposal will be reviewed by a peer review group selected for their competence in relevant scientific and technical fields. Each review group will be responsible for evaluating proposals for scientific and technical merit.

A contract may be awarded only if the proposal has been recommended as technically acceptable by the peer review group. Funding for any/all technically acceptable proposals is not guaranteed. Proposals that are found to be technically unacceptable by the peer review group will not be considered further for award.

Following the proposal evaluation, the Government will conduct negotiations with selected offerors to address identified weaknesses, questions, and areas for clarification, as well as to refine the proposed Statement of Work and deliverables. The selection of proposals for award is based upon the evaluation factors, importance to the agency programs, and fund availability.

PRE-AWARD SITE VISIT OR SITE AUDIT

Offerors selected for negotiations may be subject to a pre-award site visit or auditing of their facilities and Quality Assurance and Quality Control (QA/QC) capabilities. The decision to conduct a pre-award site visit or to audit specific facilities will be made by the Contracting Officer’s Representative. Offerors, including proposed subcontractors, will be requested to make specified (by the government) non-proprietary records, including previous regulatory inspection records, and staff available in
response to a pre-award site visit or audit by the NIAID or its designee. Due to timeline requirements, pre-award site visits may be made with short notice. Offerors are requested to make available key staff or other staff determined by the Government as essential for this site visit.

**TECHNICAL EVALUATION CRITERIA:**

The evaluation criteria are used by the peer review group when reviewing the technical proposals. The criteria below are listed in the order of relative importance with weights assigned for evaluation purposes. Subfactors are listed in order of equal importance.

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<tr>
<th>CRITERIA</th>
<th>WEIGHT</th>
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<tr>
<td>CRITERION 1: SCIENTIFIC AND TECHNICAL MERIT</td>
<td>50</td>
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<tr>
<td>A. Relevance and merit of the proposed scientific approach to the research and technical objectives of the BAA.</td>
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<td>B. Soundness of the supporting research used to justify the proposed work.</td>
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<td>C. Documented ability of the offeror to successfully complete the proposed activities as demonstrated through the technical approach.</td>
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<td>D. The potential of the research to: increase knowledge or understanding; the degree of innovation; and/or potential to advance the state-of-the-art.</td>
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<td>E. Sufficiency of the proposed strategy to ensure a robust and unbiased approach, as appropriate for the work proposed. Adequacy of the proposed plan to address relevant biological variables, including sex, as applicable, for studies in vertebrate animals and/or human subjects.</td>
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<td>CRITERION 2: SCIENTIFIC AND TECHNICAL PERSONNEL</td>
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<tr>
<td>Appropriateness and adequacy of the qualifications of the proposed Principal Investigator and scientific and technical personnel, including any proposed subcontractors and consultants, to perform the proposed Statement of Work.</td>
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<td>CRITERION 3: PROJECT MANAGEMENT</td>
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<tr>
<td>Appropriateness and adequacy of the proposed Project Management Plan, Staffing Plan, project management systems, and timelines.</td>
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<tr>
<td>CRITERION 4: ORGANIZATIONAL FACILITIES, EQUIPMENT, AND OTHER RESOURCES</td>
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Availability and adequacy of the necessary facilities, equipment, and other resources to safely and successfully implement the proposed research.

**TOTAL POSSIBLE WEIGHT:** 100

**COST/PRICE**

Offeror(s) cost/price proposal will be evaluated for reasonableness. For a price to be reasonable, it must represent a price to the government that a prudent person would pay when consideration is given to prices in the market. Normally, price reasonableness is established through adequate price competition, but may also be determined through cost and price analysis techniques.

Cost Realism: The specific elements of each offeror(s) proposed costs are realistic when the proposed cost elements are evaluated and found to: 1) be realistic for the work to be performed; 2) reflect a clear understanding of the requirements; and 3) be consistent with the unique methods of performance and materials described in the offeror(s) technical proposal.

Cost Realism will be evaluated only on the offeror(s) inputs which the Government will use to determine the most probable cost to perform the contract in a manner consistent with the offeror's proposal.

**HUMAN SUBJECT EVALUATION**

In the event an Offeror's research project involves human subjects, NIH Policy requires:

a. **Protection of Human Subjects from Research Risks**

The offeror's proposal must address the involvement of human subjects and protections from research risk relating to their participation, or provide sufficient information on the research subjects to allow a determination by NIAID that a designated exemption is appropriate.

If you claim that this research should be considered exempt from coverage by the Federal Regulations at 45 CFR 46, the proposal should address why you believe it is exempt, and under which exemption it applies.

The reviewers will evaluate the proposal with regard to four issues: Risks to Human Subjects, Adequacy of Protection Against Risks, Potential Benefits of the Proposed Research to the Subjects and Others, and Importance of the Knowledge to be Gained. See Section IV for a complete discussion of what is required to be addressed for each of these issues. Based on the response to this criterion, this section of the proposal may be rated "unacceptable" (i.e., concerns are identified as to the protections described against risk to human subjects or no discussion is found regarding protections against risk to human subjects) or "acceptable." If the reviewers find that this portion of the proposal is "unacceptable" they will provide a narrative supporting their finding.

If the Government holds discussions with your organization, you will be afforded the opportunity to address the concerns raised by the reviewers. You will be able to further discuss and/or clarify your position through proposal revision. Once discussions are closed, if your
proposed plan for the protection of human subjects from research risks is still found to be unaccepta
ble, then your proposal may not be considered further for award.

b. Women and Minorities

Women and members of minority groups and their subpopulations must be included in the study population of research involving human subjects, unless a clear and compelling rationale and justification are provided indicating that inclusion is inappropriate with respect to the health of the subjects or the purpose of the research. In addition, for NIH-Defined Phase III clinical trials, all proposals and/or protocols must provide a description of plans to conduct analyses, as appropriate, to detect significant differences in intervention effect (see NIH Guide http://grants.nih.gov/grants/funding/women_min/guidelines_amended_10_2001.htm, Definitions - Significant Difference) by sex/gender, racial/ethnic groups, and relevant subpopulations, if applicable, unless the Government has specified that this solicitation involves a sex/gender specific study or a single or limited number of minority population groups. The proposal also must include one of the following plans:

- Plans to conduct valid analysis to detect significant differences in intervention effect among sex/gender and/or racial/ethnic subgroups when prior studies strongly support these significant differences among subgroups,

  OR

- Plans to include and analyze sex/gender and/or racial/ethnic subgroups when prior studies strongly support no significant differences in intervention effect between subgroups (representation of sex/gender and/or racial/ethnic groups as subject selection criterion is not required; however, inclusion and analyses are encouraged),

  OR

- Plans to conduct valid analyses of the intervention effect in sex/gender and/or racial/ethnic subgroups (without requiring high statistical power for each subgroup) when the prior studies neither support nor negate significant differences in intervention effect between subgroups.

Also, the proposal must address the proposed outreach programs for recruiting women and minorities as participants.

Reviewers will consider the areas covered here and in Section IV of the solicitation in narrative form in their evaluation. Some of the issues they will evaluate include:

- whether the plan proposed includes minorities and both genders in adequate representation
- how the offeror addresses the inclusion of women and members of minority groups and their subpopulations in the development of a proposal that is appropriate to the scientific objectives of the solicitation
- the description of the proposed study populations in terms of sex/gender and racial/ethnic groups and the rationale for selection of such subjects
if exclusion is proposed, that the rationale is appropriate with respect to the health of the subjects and/or to the purpose of the research.

In addition, for gender exclusion, the reviewers will examine the rationale to determine if it is because:

- the purpose of the research constrains the offeror's selection of study participants by gender (e.g., uniquely valuable stored specimens or existing datasets are single gender; very small numbers of subjects are involved; or
- overriding factors dictate selection of subjects); or
- gender representation of specimens or existing datasets cannot be accurately determined, and this does not compromise the scientific objectives of the research.

For minority group exclusion, the reviewers will examine the rationale to determine if those minority groups are excluded because:

- inclusion of those groups would be inappropriate with respect to their health; or
- inclusion of those groups would be inappropriate with respect to the purpose of the research.

For NIH-defined Phase III clinical trials, reviewers will also consider whether there is an adequate description of plans to conduct analyses to detect significant differences of clinical or public health importance in intervention effect(s) by sex/gender and/or racial ethnic subgroups when the intervention effect(s) is expected in the primary analyses, or if there is an adequate description of plans to conduct valid analyses of the intervention effect in subgroups when the intervention effect(s) is not expected in the primary analyses.

If you determine that inclusion of women and minority populations is not feasible, you must submit a detailed rationale and justification for exclusion of one or both groups from the study population with the technical proposal. The Government will review the rationale to determine if it is appropriate with respect to the health of the subjects and/or the purpose of the research. Based on the evaluation of the response to this criterion, this section of the proposal may be rated "unacceptable" (i.e., no discussion can be found regarding the proposed gender/minority inclusion plans, or concerns are identified as to the gender or minority representation, or the proposal does not adequately address limited representation of one gender or minority; or the plan is not in accordance with NIH policy guidelines) or "acceptable." See Section IV of the solicitation for the requirements of women/minorities inclusion. If the reviewers find that this portion of the proposal is "unacceptable" they will provide a narrative supporting their finding.

If the Government holds discussions with your organization, you will be afforded the opportunity to address the concerns raised by the reviewers. You will be able to further discuss and/or clarify your position through proposal revision. Once discussions are closed, if your proposed plan for the inclusion/exclusion of women and minorities is still found to be unacceptable, then your proposal may not be considered further for award.

c. **Children**

Children (i.e. individuals under the age of 21) must be included in all human subject research unless there are clear and compelling reasons not to include them.

Your proposal must include a description of plans for including children. If you plan to exclude
children from the required research, your proposal must present an acceptable justification for the exclusion. If you determine that exclusion of a specific age range of child is appropriate, your proposal must also address the rationale for such exclusion. Also, the plan must include a description of the expertise of the investigative team for dealing with children at the ages included, of the appropriateness of the available facilities to accommodate the children, and the inclusion of a sufficient number of children to contribute to a meaningful analysis relative to the purpose/objective of the solicitation. Also, see Section IV of the solicitation for further specific requirements on inclusion of children.

Based on the reviewers' evaluation of the offeror's response, this section of the proposal may be rated "unacceptable" (i.e., no discussion can be found regarding the proposed inclusion plans for children; or concerns are identified as to the offeror's response regarding the inclusion of children; or the plan is not in accordance with NIH policy guidelines) or "acceptable." If the reviewers find that this portion of the proposal is "unacceptable" they will provide a narrative supporting their finding.

If the Government holds discussions with your organization, you will be afforded the opportunity to address the concerns raised by the reviewers. You will be able to further discuss and/or clarify your position through proposal revision. Once discussions are closed, if your proposed plan for the inclusion of children is still found to be unacceptable, then your proposal may not be considered further for award.

**LIVE VERTEBRATE ANIMALS EVALUATION**

If applicable, the offeror's proposal must include, as a separate section of the Technical Proposal titled "Vertebrate Animal Section," (VAS) a complete, concise (no more than 1-2 pages) description addressing the following criteria. (See NIH Guide Notice NOT-OD-16-006 at [http://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-006.html](http://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-006.html):

a. **Description of Procedures.** Provide a concise description of the proposed procedures to be used that involve vertebrate animals in the work outlined in the proposed Statement of Work. Identify the species, strains, ages, sex and total number of animals by species to be used in the proposed work. If dogs or cats are proposed, provide the source of the animals.

b. **Justifications.** Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model (e.g., computational, human, invertebrate, in vitro).

c. **Minimization of Pain and Distress.** Describe the interventions including analgesia, anesthesia, sedation, palliative care and humane endpoints to minimize discomfort, distress, pain and injury.

d. **Euthanasia.** State whether the method of euthanasia is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals. If not, describe the method and provide a scientific justification.

As part of the overall technical evaluation of proposals, the reviewers will consider the acceptability of the offeror's description in the VAS of the technical proposal. The discussion of all criteria will be addressed and evaluated. Based on the evaluation of this Section, the VAS may be rated "unacceptable" (i.e., concerns are identified as to the adequacy of the description addressing each of the criteria, or no discussion can be found regarding the VAS), or "acceptable." If the reviewers find that this Section of the technical proposal is "unacceptable" they will provide a narrative supporting their findings.
If the Government holds discussions with your organization, you will be afforded the opportunity to address the concerns raised by reviewers. You will be able to further discuss and/or clarify your position through proposal revision. Once discussions are closed, if your proposed description under the VAS is still found to be unacceptable, then your proposal may not be considered further for award.

**EVALUATION OF OPTIONS**

It is anticipated that any contracts awarded from this solicitation may contain option provisions.

In accordance with FAR Clause 52.217-5, Evaluation of Options, (July 1990), the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement, except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests. Evaluation of options will not obligate the Government to exercise the option(s).

**EVALUATION OF AUTHENTICATION OF KEY BIOLOGICAL AND/OR CHEMICAL RESOURCES**

If the offeror has proposed the use of key biological and/or chemical resources, the offeror’s plan for authentication will be reviewed for adequacy.

Any concerns associated with key biological and/or chemical resource authentication raised during the review process will need to be resolved prior to award.

**EVALUATION OF DATA SHARING PLAN**

The offeror’s plan for the sharing of final research data, or, if data sharing is not possible, the offeror’s documentation of its inability to share research data, shall be assessed for appropriateness and adequacy.

**EVALUATION OF PLAN FOR SHARING MODEL ORGANISMS FOR BIOMEDICAL RESEARCH**

If applicable, the offeror's proposal must address the plans for sharing model organisms, OR state appropriate reasons why such sharing is restricted or not possible. Offerors must also address as part of the sharing plan if, or how, they will exercise their intellectual property rights while making model organisms and research resources available to the broader scientific community. The discussion areas regarding intellectual property outlined in Section IV should be addressed.

If your proposal does not include a plan, appropriate reasons for restricting sharing, or, if the plan in your proposal is considered "unacceptable," and the Government holds discussions with your organization, you will be afforded the opportunity to further discuss, clarify or modify your plan for sharing model organisms during discussions and through proposal revision. If your plan for sharing model organisms is still considered "unacceptable," or your justification for restricting sharing is still considered inappropriate by the Government after discussions, your proposal may not be considered further for award.

**EVALUATION OF PLAN FOR SUBMISSION OF GENOME-WIDE ASSOCIATION STUDY (GWAS) DATA**

If applicable, the Offeror's plan for the submission of genome-wide association study (GWAS) data to
the NIH-designated GWAS data repository will be assessed for appropriateness and adequacy. Proposals submitted for GWAS in which the data submission expectation cannot be met will be considered for award on a case-by-case basis.

EVALUATION OF ELECTRONIC AND INFORMATION TECHNOLOGY ACCESSIBILITY - SECTION 508

The offeror's proposal must demonstrate compliance with the "Electronic and Information Technology Accessibility Provisions" set forth by the Architectural and Transportation Barriers Compliance Board (also referred to as the "Access Board") in 36 CFR part 1194 for all electronic and information technology (EIT) products and services developed, acquired, maintained, or used under this contract/order, including EIT deliverables such as electronic documents and reports.

If your proposal does not include a completed HHS "Section 508 Product Assessment Template" (hereafter referred to as the "Template") which demonstrates that EIT products and services proposed support applicable Section 508 accessibility standards, or, if the completed "Template" included in your proposal is considered "noncompliant," and the Government elects to negotiate with you, you will be afforded the opportunity to further discuss, clarify or modify the "Template" during discussions and in your Negotiated Proposal. If your "Template" is still considered "noncompliant" by the Government after discussions, your proposal may not be considered further for award.

VI. ATTACHMENTS

The following documents are incorporated into this solicitation:


Attachment 9 - Breakdown of Proposed Estimated Costs (plus fee) w/Excel Spreadsheet:
https://oamp.od.nih.gov/content/breakdown-proposed-estimated-cost-plus-fee-and-
labor-hours
https://oamp.od.nih.gov/sites/default/files/DFASDocs/buscntactprpsslprdsht08-
2014_508.xlsx

Attachment 10 - Offeror’s Points of Contact:

Attachment 11 - Certificate of Current Cost or Pricing Data:

Attachment 12 - Disclosure of Lobbying Activities, OMB Form SF-LLL:
http://www.gsa.gov/portal/forms/download/116430