

February 8, 2016

**ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY (FFO)
Graduate Student Measurement Science and Engineering (GMSE)
Fellowship Program**

EXECUTIVE SUMMARY

- **Federal Agency Name:** National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)
- **Funding Opportunity Title:** Graduate Student Measurement Science and Engineering (GMSE) Fellowship Program
- **Announcement Type:** Initial
- **Funding Opportunity Number:** 2016-NIST-GMSE-01
- **Catalog of Federal Domestic Assistance (CFDA) Number:** 11.620, Science, Technology, Business and/or Education Outreach

Dates: Applications must be received via Grants.gov (www.grants.gov) no later than 11:59 p.m. Eastern Time, Thursday, April 7, 2016. Applications received after the deadline will not be reviewed or considered. Applicants should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance at these times: from 12:01 a.m. Eastern Time, Saturday, February 20, 2016 until Monday, February 22, 2016 at 6:00 a.m. Eastern Time; and from 12:01 a.m. Eastern Time, Saturday, March 19, 2016 until Monday, March 21, 2016 at 6:00 a.m. Eastern Time, and that applications cannot be submitted during those time spans. The earliest anticipated start date for awards under this FFO is expected to be June 2016.

When developing your submission timeline, please keep in mind that (1) all applicants are required to have a current registration in the System for Award Management (SMA.gov); (2) the free annual registration process in the electronic System for Award Management (SAM.gov) (see Section IV.3. and Section IV.7.a.(1).b. of this FFO) may take between three and five business days or as long as more than two weeks; (3) applicants are required to have a current registration in Grants.gov; and (4) applicants using grants.gov will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Please note a federal assistance award cannot be issued if the designated recipient's registration in the System for Awards Management (SAM.gov) is not current at the time of the award).

- **Application Submission Address:** Applications will only be accepted using Grants.gov.
- **Funding Opportunity Description:** NIST is soliciting proposals from eligible applicants for a Graduate Student Measurement Science and Engineering (GMSE) Fellowship Program that will provide doctoral-level graduate students with opportunities and financial assistance to obtain laboratory experiences within the NIST laboratories in the science, technology, engineering and mathematics (STEM) disciplines. The recipient will work with NIST to foster collaborative STEM research relationships among NIST, doctoral-level graduate students, and the students' academic institutions.
- **Anticipated Amounts:** Approximately \$650,000 may be made available in Fiscal Year (FY) 2016 for the first year of multi-year awards to eligible applicants. New awards are expected to range from approximately \$200,000 to \$650,000 annually, with project performance periods of up to five (5) years, consistent with the multi-year funding policy described in Section II.2. of this FFO. Thus, NIST may fund up to approximately \$3,250,000 for the GMSE Fellowship Program over five (5) years. The specific number of awards will be determined during the selection process, based on the nature and quality of the proposals NIST receives.
- **Funding Instrument:** Cooperative agreement
- **Who Is Eligible:** Accredited institutions of higher education; non-profit organizations; commercial organizations; and state, local and Indian tribal governments. The applicant organization must be located in the United States and its territories. An eligible organization may work individually or include proposed sub-awards or contracts with others in a project proposal, effectively forming a team or consortium. Applicants are encouraged, but not required, to select underrepresented minorities for participation in the GMSE Fellowship Program.

NIST is not accepting applications from individual graduate-level researchers to conduct work within the NIST laboratories on any NIST campus. This FFO seeks only applications from institutions with the knowledge, skills, and abilities to develop and manage a GMSE Fellowship Program that will provide doctoral-level graduate students with opportunities and financial assistance to obtain laboratory experiences within the NIST laboratories.

- **Cost Sharing Requirements:** This Program does not require cost sharing.

Table of Contents

| | |
|-------------------------------------|---|
| I. Program Description | 3 |
| II. Federal Award Information | 4 |

| | |
|---|-----------|
| III. Eligibility Information | 5 |
| IV. Application and Submission Information..... | 6 |
| V. Application Review Information | 13 |
| VI. Federal Award Administration Information | 16 |
| VII. Federal Awarding Agency Contacts | 27 |

FULL ANNOUNCEMENT TEXT

I. Program Description

The statutory authorities for the Graduate Student Measurement Science and Engineering (GMSE) Fellowship Program are 15 U.S.C. § 278g-1(a) and (c); 15 U.S.C. §272(b) and (c).

The National Institute of Standards and Technology (NIST) is one of the nation's premiere research institutions for the physical and engineering sciences and, as the lead Federal agency for technology transfer, it provides a strong interface between government, industry and academia. NIST embodies a science culture, developed from a large and well-equipped research staff that enthusiastically blends programs that address the immediate needs of industry with longer-term research that anticipates future needs. In this context, NIST is soliciting proposals from eligible applicants to provide administrative support for the NIST Graduate Student Measurement Science and Engineering (GMSE) Fellowship Program. The awardee(s) in this program will enable graduate students accepted for the program to obtain laboratory experiences within the NIST laboratories in the science, technology, engineering and mathematics (STEM) disciplines that are pertinent to research priorities at NIST and support the students' work towards their graduate degrees.

The recipient will work with NIST to foster collaborative research relationships among NIST, doctoral-level graduate students, and the students' academic institutions in STEM disciplines that are pertinent to research priorities at NIST. The recipient may cooperate with any accredited U.S. institution(s) of higher learning and/or other organization(s) in planning and implementing the GMSE Fellowship Program.

Specifically, the recipient will work cooperatively with NIST to:

- 1) identify (with NIST) and financially support doctoral-level graduate students to conduct on-site collaborative research with NIST staff at NIST laboratories in Gaithersburg, Maryland; Charleston, South Carolina; and/or Boulder, Colorado;
- 2) engage a diverse, educated, and skilled pool of scientists and engineers in measurement science and engineering at NIST with academic institution faculty and their students to enable long-term collaborative relationships

- between NIST, doctoral-level graduate students and the students' academic institutions; and
- 3) conduct outreach to enhance student participation in the GMSE Fellowship Program in an effort to increase the STEM workforce.

The recipient will collaborate with the NIST International and Academic Affairs Office (IAAO) in selecting graduate-level researchers to participate in the GMSE Fellowship Program. In accordance with the procedures proposed by the recipient and included in the cooperative agreement, IAAO anticipates working with staff from the NIST Laboratories within the NIST Laboratory Directorate to review candidate graduate-level researchers in the GMSE Fellowship Program managed by the recipient. All seven of NIST's Laboratories – Center for Nanoscale Science and Technology (CNST), Communications Technology Laboratory (CTL), Engineering Laboratory (EL), Information Technology Laboratory (ITL), Material Measurement Laboratory (MML), Center for Neutron Research (NCNR), and Physical Measurement Laboratory (PML) – are expected to participate in the GMSE program and have graduate-level researchers participate in their respective research programs. Please refer to <http://www.nist.gov> for more information about NIST and the areas of research collaboration available to the GMSE Fellowship Program graduate student participants. The graduate-level researchers selected to be part of the GMSE Fellowship Program managed by the recipient will require a moderate amount of guidance and training from NIST staff as part of the collaboration.

Applicants should be aware that recipients' graduate students will be required to comply with NIST policies, including the requirement that any research data¹ generated from NIST funding be made accessible to the public. This requirement results from NIST's response to the Office of Science and Technology Memorandum for the Heads of Executive Departments and Agencies of February 22, 2013², *Increasing Access to the Results of Federally Funded Scientific Research*, as implemented through NIST Policy 5700.00³, *Managing Public Access to Results of Federally Funded Research*, and NIST Order 5701.00⁴, *Managing Public Access to Results of Federally Funded Research*.

II. Federal Award Information

1. **Funding Instrument.** The funding instrument that will be used is a cooperative agreement. The nature of NIST's "substantial involvement" will generally be collaboration between NIST and the recipient organization(s). This includes NIST collaboration with the recipient on the scope of work. Additional forms of substantial involvement that may arise are described in Chapter 5.C of the Department of Commerce Grants and Cooperative Agreements Manual, which is available at

¹ NIST adopted the definition of "research data" at 2 C.F.R. § 200.315(e)(3) (available at <http://go.usa.gov/3sZvQ>)

² https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf

³ <http://www.nist.gov/open/upload/Final-P-5700.pdf>

⁴ http://www.nist.gov/open/upload/Final-O-5701_0.pdf

<http://go.usa.gov/SNJd>. Please note the Department of Commerce Grants and Cooperative Agreements Manual is expected to be updated after the publication of this funding announcement and before awards are made under this FFO. Refer to Section VII. of this FFO, Federal Awarding Agency Contacts, Grants Rules, and Regulations, if you seek the information at this link and it is no longer working or you need more information.

2. **Multi-Year Funding Policy.** When a proposal for a multi-year award is approved, funding will usually be provided for only the first year of the program. If a project is selected for funding, NIST has no obligation to provide any additional funding in connection with that award. Continuation of an award to increase funding or extend the period of performance is at the sole discretion of NIST. Continued funding will be contingent upon satisfactory performance, continued relevance of the mission and priorities of the GMSE Fellowship Program, and the availability of funds.
3. **Funding Availability.** Approximately \$650,000 may be made available in FY2016 for the first year of multi-year awards to eligible applicants. New awards are expected to range from approximately \$200,000 to \$650,000 annually, with project performance periods of up to five (5) years, consistent with the multi-year funding policy described in Section II.2. of this FFO. Thus, NIST may fund up to approximately \$3,250,000 for the GMSE Fellowship Program over five (5) years. The specific number of awards will be determined during the selection process, based on the nature and quality of the proposals NIST receives.

III. Eligibility Information

1. **Eligible Applicants.** This program is open to accredited institutions of higher education; non-profit organizations; commercial organizations; and state, local and Indian tribal governments. The applicant organization must be located in the United States and its territories. An eligible organization may work individually or include proposed sub-awards or contracts with others in a project proposal, effectively forming a team or consortium. Applicants are encouraged, but not required, to select underrepresented minorities for participation in the GMSE Fellowship Program.

NIST is not accepting applications from individual graduate-level researchers to conduct work within the NIST laboratories on any NIST campus. This FFO seeks only applications from institutions with the knowledge, skills, and abilities to develop and manage a GMSE Fellowship Program that will provide doctoral-level graduate students with opportunities and financial assistance to obtain laboratory experiences within the NIST laboratories.

2. **Cost Sharing.** This program does not require cost sharing.

IV. Application and Submission Information

- 1. Address to Request Application Package.** The standard application package, consisting of the standard forms, i.e., SF-424, SF-424A, SF-424B, SF-LLL, and the CD-511, is available at www.grants.gov and at <http://www.nist.gov/iaao/index.cfm>. The standard application package may also be requested by contacting the NIST personnel listed below.

Dr. Susan Heller-Zeisler, National Institute of Standards and Technology, International and Academic Affairs Office, 100 Bureau Drive, Stop 1090, Gaithersburg, MD 20899-1090 (Email: susan.heller-zeisler@nist.gov; Phone: 301-975-3111)

2. Content and Format of Application Submission

a. Required Forms and Documents

- (1) SF-424, Application for Federal Assistance.** The SF-424 must be signed by an authorized representative of the applicant organization.

SF-424, Item 12, should list the FFO number 2016-NIST-GMSE-01.

For SF-424, Item 21, the list of certifications and assurances is contained in the SF-424B.
- (2) SF-424A, Budget Information – Non-Construction Programs.** The Grant Program Function or Activity on Line 1 under Column (a) should be entered as Science, Technology, Business and/or Education Outreach. The Catalog of Federal Domestic Assistance Number on Line 1 under Column (b) should be entered as 11.620.
- (3) SF-424B, Assurances – Non-Construction Programs**
- (4) SF-LLL, Disclosure of Lobbying Activities (if applicable)**
- (5) CD-511, Certification Regarding Lobbying.** Enter “2016-NIST-GMSE-01” in the Award Number field. Enter the title of the application used in field 15 of the SF-424, or an abbreviation of that title, in the Project Name field.
- (6) Technical Proposal.** The Technical Proposal is a word-processed document of no more than twenty-five (25) pages responsive to the program description (see Section I. of this FFO) and the evaluation criteria (see Section V.1. of this FFO). It should contain the following information:

- a) **Executive Summary.** The Executive Summary should briefly describe the proposed project and how the applicant will plan and implement the GMSE Fellowship Program (see Section I. of this FFO), consistent with the evaluation criteria (see Section V.1. of this FFO). The executive summary should not exceed one (1) single-sided page.
- b) **Project Approach/Methodology and Program Management Plan.** A detailed description of the proposed approach to plan and implement the GMSE Fellowship Program (see Section I. of this FFO), sufficient to permit evaluation of the proposal, in accordance with the Project Approach/Methodology and Program Management Narrative evaluation criterion (see Section V.1.a. of this FFO).
- c) **Qualifications and Experience.** A description of the applicant's qualifications for conducting the proposed project, sufficient to permit evaluation of the proposal in accordance with the Qualifications and Experience evaluation criterion (see Section V.1. b. of this FFO). Examples of key personnel's current and/or past experiences should include experiences with encouraging and assisting underrepresented students in STEM.
- d) **Staff and Institution Capability to Perform the Work.** A description of the applicant's staff, as demonstrated by resumes, and a description of how the applicant plans to utilize their staff to effectively administer the GMSE Fellowship Program. The applicant's plans to coordinate with the GMSE Fellowship Program Coordinator in IAAO and the NIST Technical Advisors in Gaithersburg, Maryland, Boulder, Colorado, and/or Charleston, South Carolina, as applicable, should also be described. This section should be sufficient to permit evaluation of the proposal, in accordance with the Staff and Institution Capability to Perform the Work evaluation criterion (see Section V.1.c. of this FFO).
- e) **Connections to academic institutions.** A description of the proposed approach to create and maintain connections to U.S. academic institutions, sufficient to permit evaluation of the proposal, in accordance with the Connections to Academic Institutions evaluation criterion (see Section V.1.d. of this FFO).

- (7) **Budget Narrative.** Applicants should use the SF-424A form to complete the budget submission (see section IV.2.a.(2) of this FFO). In addition to the SF-424A form, applicants must provide a detailed budget narrative to explain fully and justify all proposed project expenses. Applications must include a budget for each funding period (budget year). Each applicant should determine its capabilities for managing a select number of fellows. This section should be the primary, but not only, means by which the proposal will be evaluated according to the Budget Narrative criterion (see Section V.1.e. of this FFO).

- a) Eligible costs are:
 - i. stipend (minimum of \$20,000 per year per fellow),
 - ii. full tuition assistance for students calculated at the in-state rate,
 - iii. fringe benefits, including health insurance, and
 - iv. additional financial support for summer or other limited terms of on-site work at the appropriate NIST campus.

- b) In addition to these costs, the applicant may include the following optional costs:
 - i. applicant's indirect costs (including administrative and operation costs and costs to administer travel for GMSE program participants), as appropriate, and
 - ii. necessary costs to provide oversight and implementation of the program.

- (8) Indirect Cost Rate Agreement.** If indirect costs are included in the proposed budget, provide a copy of the approved negotiated agreement if this rate was negotiated with a cognizant Federal audit agency. If the rate was not established by a cognizant Federal audit agency, provide a statement to this effect. If the successful applicant includes indirect costs in the budget and has not established an indirect cost rate with a cognizant Federal audit agency, the applicant will be required to obtain such a rate in accordance with the Department of Commerce Financial Assistance Standard Terms and Conditions available at: <http://go.usa.gov/hKbj>.

Alternatively, in accordance with 2 C.F.R. § 200.414(f), applicants that have never received a negotiated indirect cost rate may elect to charge indirect costs to an award pursuant to a de minimis rate of 10 percent of modified total direct costs (MTDC), in which case a negotiated indirect cost rate agreement is not required. Applicants proposing a 10 percent de minimis rate pursuant to 2 C.F.R. § 200.414(f) should note this election as part of the budget and budget narrative portion of the application.

- (9) Resumes of key personnel** (these do not contribute to the total number of pages)

Items IV.2.a.(1) through IV.2.a.(5) above are part of the standard application package in Grants.gov and can be completed through the download application process. **Items IV.2.a.(6) through IV.2.a.(9) must be completed and attached by clicking on “Add Attachments” found in item 15 of the SF-424, Application for Federal Assistance. This will create a zip file that allows for transmittal of the documents electronically via Grants.gov.**

Applicants should carefully follow specific Grants.gov instructions at www.grants.gov to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicates an application is received but does not provide information about whether all attachments (or how many attachments) have been transferred successfully. Applicants using Grants.gov will receive email notification over a period of up to two business days as the application moves through intermediate systems before the applicants learns via a validation or rejection notification whether NIST has received the application.

b. Application Format

- (1) **Mail, e-mail and facsimile (fax) submissions.** Will not be accepted.
- (2) **Figures, graphs, images, and pictures.** Should be of a size that is easily readable or viewable and may be landscape orientation.
- (3) **Font.** Easy to read font (10-point minimum). Smaller type may be used in figures and tables but must be clearly legible.
- (4) **Line spacing.** Applicants may use single spacing or double spacing.
- (5) **Margins.** One (1) inch top, bottom, left, and right.
- (6) **Page layout.** The Technical Proposal (see Section IV.2.a.(6)) must be in portrait orientation except for figures, graphs, images, and pictures. Paragraphs are to be clearly separated from each other by double spacing paragraph formatting or equivalent.
- (7) **Page Limit.** Technical Proposals are limited to twenty-five (25) pages.
 - a) Page limit includes: Table of contents (if included), Technical Proposal with all required sections, including management information and qualifications, figures, graphs, tables, images, and pictures.
 - b) Page limit excludes: SF-424, Application for Federal Assistance; SF-424A, Budget Information – Non-Construction Programs; SF-424B, Assurances – Non-Construction Programs; SF-LLL, Disclosure of Lobbying Activities; CD-511, Certification Regarding Lobbying; Budget Narrative; and Indirect Cost Rate Agreement, and Resumes.
- (8) **Page numbering.** Number pages sequentially.

(9) **Paper size.** 21.6 by 27.9 centimeters (8 ½ by 11 inches).

(10) **Proposal language.** English.

- c. Applicant Replacement Pages.** Applicants may not submit replacement pages and/or missing documents once an application has been submitted. Any revisions must be made by submission of a new application that must be received by NIST by the submission deadline.
- d. Pre-Applications.** NIST is not accepting pre-applications or white papers under this FFO.
- e. Certifications Regarding Federal Felony and Federal Criminal Tax Convictions, Unpaid Federal Tax Assessments and Delinquent Federal Tax Returns.** In accordance with Federal Appropriations law, an authorized representative of the selected applicants(s) may be required to provide certain pre-award certifications regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns.
- 3. Unique Entity Identifier and System for Award management (SAM).** Pursuant to 2 C.F.R part 25, applicants and recipients (as the case may be) are required to: (i) be registered in SAM before submitting its application; (ii) provide a valid unique entity identifier in its application; and (iii) continue to maintain an active SAM registration with current information at all times during which it has an active federal award or an application or plan under consideration by a Federal awarding agency, unless otherwise excepted from these requirements pursuant to 2 C.F.R. 25. 110. NIST will not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and Sam requirements and, if an applicant has not fully complied with the requirements by the time that NIST is ready to make a Federal award pursuant to this FFO, NIST may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.
- 4. Submission Dates and Times.** Applications must be received no later than 11:59 p.m. Eastern Time, Thursday, April 7, 2016. Applications received after this deadline will not be reviewed or considered. NIST will consider the date and time stamped on the validation generated by www.grants.gov as the official submission time. Applicants should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance at these times: from 12:01 a.m. Eastern Time, Saturday, February 20, 2016 until Monday, February 22, 2016 at 6:00 a.m. Eastern Time; and from 12:01 a.m. Eastern Time, Saturday, March 19, 2016 until Monday, March 21, 2016 at 6:00 a.m. Eastern Time, and that applications cannot be submitted during those time spans.

NIST strongly recommends that applicants do not wait until the last minute to submit an application. NIST will not make allowance for any late submissions. To avoid any potential processing backlogs due to last minute Grants.gov registrations, applicants are highly encouraged to begin their Grants.gov registration process early.

When developing your submission timeline, please keep in mind that (1) all applicants are required to have a current registration in the System for Award Management (SAM.gov); (2) the free annual registration process in the electronic System for Award Management (SAM.gov) (see Section IV.3. and Section IV.7.a.(1).b. of this FFO) may take between three and five business days, or as long as more than two weeks; (3) applicants are required to have a current registration in Grants.gov; and (4) applicants will receive a series of e-mail messages from Grants.gov over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Please note that a federal assistance award cannot be issued if the designated recipient's registration in the System for Award Management (SAM.gov) is not current at the time of the award.

Applicants will find instructions on registering with SAM.gov as part of the Grants.gov process at: <http://www.grants.gov/web/grants/applicants/organization-registration.html>.

5. **Intergovernmental Review.** Applicants under this Program are not subject to Executive Order 12372.
6. **Funding Restrictions.** Profit or fee is not an allowable cost.
7. **Other Submission Requirements**
 - a. **Applications must be submitted electronically through www.grants.gov.** NIST will not accept applications submitted by mail, facsimile, or e-mail.
 - (1) Proposals must be submitted via Grants.gov at www.grants.gov, under announcement 2016-NIST-GMSE-01.
 - a) Submitters of proposals should carefully follow specific Grants.gov instructions to ensure the attachments will be accepted by the Grants.gov system. A receipt from Grants.gov indicating a proposal is received does not provide information about whether attachments have been received. For further information or questions regarding applying for the 2016-NIST-GMSE-01 announcement, contact Christopher Hunton by phone at 301-975-5718 or by e-mail at grants@nist.gov.
 - b) Applicants are strongly encouraged to start early and not wait until the approaching due date before logging on and reviewing the instructions for

submitting an application through Grants.gov. The Grants.gov registration process must be completed before a new registrant can apply electronically. If all goes well, the registration process takes three (3) to five (5) business days. If problems are encountered, the registration process can take up to two (2) weeks or more. Applicants must have a valid unique entity identifier number and must maintain a current registration in the Federal government's primary registrant database, the System for Award Management (<https://www.sam.gov/>), as explained on the Grants.gov Web site. See also Section IV.3. of this FFO. After registering, it may take several days or longer from the initial log-on before a new Grants.gov system user can submit an application. Only individuals authorized as organization representatives will be able to submit the application, and the system may need time to process a submitted application. Applicants should save and print the proof of submission they receive from Grants.gov. If problems occur while using Grants.gov, the applicant is advised to (a) print any error message received and (b) call Grants.gov directly for immediate assistance. If calling from within the United States or from a U.S. territory, please call 800-518-4726. If calling from a place other than the United States or a U.S. territory, please call 606-545-5035. Assistance from the Grants.gov Help Desk will be available around the clock every day, with the exception of Federal holidays. Help Desk service will resume at 7:00 a.m. Eastern Time the day after Federal holidays. For assistance using Grants.gov, you may also contact support@grants.gov.

- c) To find instructions on submitting an application on Grants.gov, Applicants should refer to the "Applicants" tab in the banner just below the top of the www.grants.gov home page. Clicking on the "Applicants" tab produces two exceptionally useful sources of information, Applicant Actions and Applicant Resources, which applicants are advised to review.

Applicants will receive a series of e-mail messages over a period of up to two business days before learning whether a Federal agency's electronic system has received its application. Closely following the detailed information in these subcategories will increase the likelihood of acceptance of the application by the Federal agency's electronic system.

Applicants should pay close attention to the guidance under "Applicant FAQs," as it contains information important to successful submission on Grants.gov, including essential details on the naming conventions for attachments to Grants.gov applications.

The application must be both received and validated by Grants.gov. The application is "received" when Grants.gov provides the applicant a confirmation of receipt and an application tracking number. If an applicant does not see this confirmation and tracking number, the application has not been received. After the application has

been received, it must still be validated. During this process, it may be “validated” or “rejected with errors.” To know whether the application was rejected with errors and the reasons why, the applicant must log in to Grants.gov, select “Applicants” from the top navigation, and select “Track my application” from the drop-down list. If the status is “rejected with errors,” the applicant may still seek to correct the errors and resubmit your application before the deadline. If the applicant does not correct the errors, the application will not be forwarded to NIST by Grants.gov.

All applicants should be aware that adequate time must be factored into applicants’ schedules for delivery of their application. Applicants are advised that the volume on Grants.gov may be extremely heavy leading up to the deadline date.

Refer to important information in Section IV.4. Submission Dates and Times, to help ensure your application is received on time.

- b. Amendments.** Any amendments to this FFO will be announced through Grants.gov. Applicants may sign up for Grants.gov FFO amendments or may request copies from Dr. Susan Heller-Zeisler by telephone at (301) 975-3111, or by e-mail to susan.heller-zeisler@nist.gov.

V. Application Review Information

1. Evaluation Criteria

The evaluation criteria that will be used in evaluating these proposals and assigned weights are as follows:

- a. Project Approach/Methodology and Program Management Plan (0 – 25 points).** Reviewers will evaluate the applicant's proposal based on:
- The responsiveness to and quality of the plan to provide qualified graduate students with the opportunity to obtain doctoral-level research experience within the NIST laboratories.
 - A demonstrated ability to ensure the availability of graduate students for on-site work at one of the NIST campuses (Gaithersburg, Maryland, Boulder Colorado, or Charleston, South Carolina) during their tenure as students. If this will be a new or developing activity for an applicant, reviewers will evaluate the sufficiency and reasonableness of the applicant's plan to implement the new program.
 - The responsiveness to and quality of the plan that establishes the ability to collaborate with the GMSE Program Coordinator in IAAO in the selection of graduate-level researchers.
 - The quality of and extent to which the stated expectations regarding the outcomes and benefits to the applicant and to the participating student(s) are expressed in measurable terms.

- b. Qualifications and Experience (0 – 30 points).** Reviewers will evaluate the applicant's proposal based on:
- The applicant's demonstrated experience in placing graduate students in research laboratories, or other appropriate settings, consistent with furthering the students' education and research experiences. This includes the extent to which the applicant demonstrates a commitment to encouraging and assisting underrepresented students in NIST fields of research.
 - If this will be a new or developing activity for an applicant, reviewers will assess the applicant's qualifications to plan and implement the new program.

c. Staff and Institution Capability to Perform the Work (0 – 10 points).

Reviewers will evaluate:

- The extent to which the resumes of the applicant's staff demonstrate the necessary qualifications and experience to administer the GMSE Fellowship Program.
- The reasonableness and sufficiency of the plans for utilizing the applicant's staff to effectively administer the GMSE Fellowship Program, including the extent of the applicant's ability to coordinate with the GMSE Fellowship Program Coordinator and the NIST Technical Advisors in Gaithersburg, Maryland, Boulder, Colorado, and Charleston, South Carolina.

- d. Connections to Academic Institutions (0 – 25 points).** Reviewers will evaluate the degree to which the applicant demonstrates current relationships to U.S. academic institutions that grant doctoral degrees in STEM fields, including any plans to maintain such established relationships. In cases where current connections do not exist, the reviewers will assess the reasonableness of and extent to which the applicant proposes to develop and maintain such connections.

- e. Budget Narrative (0 – 10 points).** An assessment of the budget against the proposed activities (proposed fellowships and other proposed costs the applicant will incur) will be conducted to determine the reasonableness and practicality of the proposed budget with respect to developing and implementing the GMSE Program as described in Section I. of this FFO.

- 2. Selection Factors.** The Selecting Official, who is the Senior Academic Program Manager in IAAO, or designee, will make final application selections. The Selecting official shall recommend applications for awards based upon the rank order of the applications, but may recommend applications out of rank based on one or more of the following selection factors:

- a.** results of the reviewers' evaluations,

- b. the objectives as set forth in the Funding Opportunity description (see Section I. of this FFO), and
- c. the availability of Federal funds.

3. Review and Selection Process

Proposals, reports, documents and other information related to applications submitted to NIST and/or relating to financial assistance awards issued by NIST will be reviewed and considered by Federal employees, Federal agents and contractors, and/or by non-Federal personnel, all of which enter into appropriate nondisclosure agreements covering such information.

- a. **Initial Screening of all Program Applications.** An initial administrative review of timely received applications will be conducted to determine applicant eligibility, completeness, and responsiveness to this FFO and the scope of the stated program objectives. Applications determined to be ineligible, incomplete, or non-responsive may be eliminated from further review. However, NIST, in its sole discretion, may continue the review process for an application that is missing non-substantive information which may easily be rectified or cured.
- b. **Review of Eligible, Complete, and Responsive Applications.** Applications that are determined to be eligible, complete, and responsive will proceed for full reviews in accordance with the review and selection process below:

Each application will be reviewed by at least three (3) independent, objective merit reviewers who are knowledgeable in the subject matter of this FFO and its objectives and who are able to conduct a review based on the evaluation criteria (see Section V.1. of this FFO). The reviewers may discuss the proposals with each other, but scores will be determined on an individual basis, not as a consensus. Based on the average of the reviewers' scores, a rank order will be prepared and provided to the Selecting Official for further consideration. The Selecting Official will then recommend applications for funding based upon the rank order and the selection factors (see Section V.2. of this FFO).

NIST reserves the right to negotiate the budget costs with the selected applicant. Negotiations may include requesting that the applicant remove certain costs. Additionally, NIST may request that the applicant modify objectives or work plans and provide supplemental information required by the agency prior to award. NIST also reserves the right to reject an application where information is uncovered that raises a reasonable doubt as to the responsibility of the applicant. NIST may select some, all, or none of the applications, or part(s) of any particular application. The final approval of selected applications and issuance of awards will be by the NIST Grants Officer. The award decisions of the Grants Officer are final.

- c. **Federal Awarding Agency Review of Risk Posed by Applicants.** After applications are proposed for funding by the Selecting Official, the NIST Grants Management Division (GMD) performs pre-award risk assessments in accordance with 2 C.F.R. § 200.205, which may include a review of the financial stability of an applicant, the quality of the applicant's management systems, the history of performance, reports and finding from financial assistance audits, and/or the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities.

In addition, prior to making an award where the total Federal share is expected to exceed the simplified acquisition threshold (currently \$150,000), NIST GMD will review and consider the publicly available information about that applicant in the Federal Awardee Performance and Integrity Information System (FAPIIS). An applicant may, at its option, review and comment on information about itself previously entered into FAPIIS by a Federal awarding agency. As part of its review of risk posed by applicants, NIST GMD will consider any comments made by the applicant in FAPIIS in making its determination about the applicant's integrity, business ethics, and record of performance under Federal awards.

Upon completion of the pre-award risk assessment, the Grants Officer will make a responsibility determination concerning whether the applicant is qualified to receive the subject award and, if so, whether appropriate special conditions that correspond to the degree of risk posed by the applicant should be applied to an award.

4. **Anticipated Announcement and Award Dates.** The earliest anticipated start date for awards under this FFO is expected to be June 2016.

5. **Additional Information**

- a. **Notification to Unsuccessful Applicants.** Unsuccessful applicants will be notified in writing.
- b. **Retention of Unsuccessful Applications.** An electronic copy of each non-selected application will be retained for three (3) years for record keeping purposes. After three (3) years, it will be destroyed.

VI. Federal Award Administration Information

1. **Award Notices.** Successful applicants will receive an award package from the NIST Grants Officer. The award cover page, i.e., CD-450, Financial Assistance Award is available at <http://go.usa.gov/SNMR>.
2. **Administrative and National Policy Requirements**
 - a. **Uniform Administrative Requirements, Cost Principles and Audit**

Requirements. Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards in this program. Refer to <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBg4>.

- b. Department of Commerce Financial Assistance Standard Terms and Conditions.** The Department of Commerce will apply the Financial Assistance Standard Terms and Conditions dated December 26, 2014, accessible at <http://go.usa.gov/hKbj>, to this award. Refer to Section VII. of this FFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- c. Pre-Award Notification Requirements.** The Department of Commerce will apply the Pre-Award Notification Requirements for Grants and Cooperative Agreements dated December 30, 2014 (79 FR 78390), accessible at <http://go.usa.gov/hKkR>. Refer to Section VII. of this FFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if you seek the information at this link and it is no longer working or you need more information.
- d. Funding Availability and Limitation of Liability.** Funding for the program listed in this FFO is contingent upon the availability of appropriations. In no event will NIST or the Department of Commerce be responsible for application preparation costs if this program fails to receive funding or is cancelled because of agency priorities. Publication of this FFO does not obligate NIST or the Department of Commerce to award any specific project or to obligate any available funds.
- e. Collaborations with NIST Employees.** All applications should include a description of any work proposed to be performed by an entity other than the applicant, and the cost of such work should ordinarily be included in the budget.

If an applicant proposes collaboration with NIST, the statement of work should include a statement of this intention, a description of the collaboration, and prominently identify the NIST employee(s) involved, if known. Any collaboration by a NIST employee must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the approval of the proposed collaboration. Any unapproved collaboration will be stricken from the application prior to the merit review. Any collaboration with an identified NIST employee that is approved by appropriate NIST management will not make an application more or less favorable in the competitive process.

- f. Use of NIST Intellectual Property.** If the applicant anticipates using any NIST-owned intellectual property to carry out the work proposed, the applicant should identify such intellectual property. This information will be used to ensure that no NIST employee involved in the development of the intellectual property will participate in the review process for that competition. In addition, if the applicant intends to use NIST-owned intellectual property, the applicant must comply with all

statutes and regulations governing the licensing of Federal government patents and inventions, described in 35 U.S.C. §§ 200-212, 37 C.F.R. Part 401, 2 C.F.R. §200.315, and in Section D.03 of the DoC Financial Assistance Terms and Conditions dated December 26, 2014, found at <http://go.usa.gov/hKbj>. Questions about these requirements may be directed to Chief Counsel for NIST, (301) 975-2803, nistcounsel@nist.gov.

Any use of NIST-owned intellectual property by an applicant is at the sole discretion of NIST and will be negotiated on a case-by-case basis if a project is deemed meritorious. The applicant should indicate within the statement of work whether it already has a license to use such intellectual property or whether it intends to seek one.

If any inventions made in whole or in part by a NIST employee arise in the course of an award made pursuant to this FFO, the United States government may retain its ownership rights in any such invention. Licensing or other disposition of NIST's rights in such inventions will be determined solely by NIST, and include the possibility of NIST putting the intellectual property into the public domain.

- g. Research Activities Involving Human Subjects, Human Tissue, Data or Recordings Involving Human Subjects Including Software Testing.** Any application that includes research activities involving human subjects, human tissue/cells, or data or recordings from or about human subjects, must satisfy the requirements of the Common Rule for the Protection of Human Subjects (“Common Rule”), codified for the Department of Commerce at 15 C.F.R. Part 27. Research activities involving human subjects who fall within one or more of the classes of vulnerable subjects found in 45 C.F.R. Part 46, Subparts B, C and D must satisfy the requirements of the applicable subpart(s). In addition, any such application that includes research activities on these subjects must be in compliance with all applicable statutory requirements imposed upon the Department of Health and Human Services (DHHS) and other Federal agencies, all regulations, policies and guidance adopted by DHHS, the Food and Drug Administration, and other Federal agencies on these topics, and all Executive Orders and Presidential statements of policy on applicable topics. (Regulatory Resources: <http://www.hhs.gov/ohrp/humansubjects/index.html> which includes links to FDA regulations, but may not include all applicable regulations and policies).

NIST uses the following Common Rule definitions for research and human subjects research:

Research: A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activity.

Human Subject: A living individual about whom an investigator (whether professional or student) conducting research obtains data through intervention or interaction with the individual or identifiable private information.

- (1) *Intervention* includes both physical procedures by which data are gathered and manipulations of the subject or the subject's environment that are performed for research purposes.
- (2) *Interaction* includes communication or interpersonal contact between investigator and subject.
- (3) *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator associated with the information) in order for obtaining the information to constitute research involving human subjects.

See 15 C.F.R. § 27.102 Definitions.

- 1) **Requirement for Federalwide Assurance.** If the application is accepted for [or awarded] funding, organizations that have an IRB are required to follow the procedures of their organization for approval of exempt and non-exempt research activities that involve human subjects. Both domestic and foreign organizations performing non-exempt research activities involving human subjects will be required to have protocols approved by a cognizant, active IRB currently registered with the Office for Human Research Protections (OHRP) within the DHHS that is linked to the engaged organizations. All engaged organizations must possess a currently valid Federalwide Assurance (FWA) on file from OHRP. Information regarding how to apply for an FWA and register an IRB with OHRP can be found at <http://www.hhs.gov/ohrp/assurances/index.html>. NIST relies only on OHRP-issued FWAs and IRB Registrations for both domestic and foreign organizations for NIST supported research involving human subjects. NIST will not issue its own FWAs or IRB Registrations for domestic or foreign organizations.
- 2) **Administrative Review.** NIST reserves the right to make an independent determination of whether an applicant's activities include research involving human subjects. NIST will conduct an independent administrative review of all applications accepted for funding that include research involving human subjects that were approved by a non-NIST Institutional Review Board (IRB). Research may not start until the NIST Human Subjects Protection Office (HSPO) issues

institutional review approval for final action by the NIST Grants Officer. (15 C.F.R. § 27.112 Review by Institution.) If NIST determines that an application includes research activities which involve human subjects, the applicant will be required to provide additional information for review and approval. The documents required for funded proposals are listed in each section below. Most such documents will need to be produced during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be produced at an appropriate designated time post-award. If an award is issued, no research activities involving human subjects shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer issues written approval. Retroactive approvals are not permitted.

3) **Required documents for proposal review. All applications involving human subject research must clearly indicate, by separable task, all research activities believed to be exempt or non-exempt research involving human subjects, the expected institution(s) where the research activities involving human subjects may be conducted, and the institution(s) expected to be engaged in the research activities.**

a. **Not research determination.** If an activity/task involves human subjects as defined in the Common Rule, but the applicant participant(s) indicates to NIST that the activity/task is not research as defined in the Common Rule, the following information may be requested for that activity/task:

- (1) Justification, including the rationale for the determination and such additional documentation as may be deemed necessary by NIST to review and/or support a determination that the activity/task in the application is not research as defined in the Common Rule.
- (2) If the applicant participant(s) used a cognizant IRB that provided a determination that the activity/task is not research, a copy of that determination documentation must be provided to NIST. The applicant participant(s) is not required to establish a relationship with a cognizant IRB if they do not have one.

NIST will review the information submitted and may coordinate further with the applicant before determining whether the activity/task will be defined as research under the Common Rule in the applicable NIST financial assistance program or project.

b. **Exempt research determination with no IRB.** If the application appears to NIST to include exempt research activities, and the performer of the activity or the supplier and/or the receiver of the biological materials or data from human subjects **does not** have a cognizant IRB to provide an exemption determination, the following information may be requested during the review process so that NIST can evaluate whether an exemption under the Common Rule applies (see 15 C.F.R. § 27.101(b), (c) and (d)).

- (1) The name(s) of the institution(s) where the exempt research will be conducted.
- (2) The name(s) of the institution(s) providing the biological materials or data from human subjects will be provided.
- (3) A copy of the protocol for the research to be conducted; and/or the biological materials or data from human subjects to be collected/provided, not pre-existing samples (*i.e.*, will proposed research collect only information without personal identifiable information, will biological materials or data be de-identified and when and by whom was the de-identification performed, how were the materials or data originally collected).
- (4) For pre-existing biological materials or data from human subjects, provide copies of the consent forms used for collection and a description of how the materials or data were originally collected and stripped of personal identifiers. If copies of consent forms are not available, explain.
- (5) Any additional clarifying documentation that NIST may deem necessary in order to make a determination whether the activity/task or use of biological materials or data from human subjects is exempt under the Common Rule.

c. **Research review with an IRB.** If the application appears to NIST to include research activities (exempt or non-exempt) involving human subjects, and the proposed performer of the activity has a cognizant IRB registered with OHRP, and linked to their Federalwide Assurance, the following information may be requested during the review process:

- (1) The name(s) of the institution(s) where the research will be conducted;
- (2) The name(s) and institution(s) of the cognizant IRB(s), and the IRB registration number(s);
- (3) The FWA number of the applicant linked to the cognizant IRB(s);
- (4) The FWAs associated with all organizations engaged in the planned research activity/task, linked to the cognizant IRB;
- (5) If the IRB review(s) is pending, the estimated start date for research involving human subjects;
- (6) The IRB approval date (if currently approved for exempt or non-exempt research);
- (7) If any of the engaged organizations has applied for or will apply for an FWA or IRB registration, those details should be clearly provided for each engaged organization.

If the application includes research activities involving human subjects to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities:

- (1) A signed (by the study principal investigator) copy of each applicable final IRB-approved protocol;
- (2) A signed and dated approval letter from the cognizant IRB(s) that includes the name of the institution housing each applicable IRB, provides the start and end dates for the approval of the research activities, and any IRB-required interim reporting or continuing review requirements;
- (3) A copy of any IRB-required application information, such as documentation of approval of special clearances (*i.e.*, biohazard, HIPAA, etc.) conflict-of-interest letters, or special training requirements;
- (4) A brief description of what portions of the IRB submitted protocol are specifically included in the application submitted to NIST, if the protocol includes tasks not included in the application, or if the protocol is supported by multiple funding sources. For protocols with multiple funding sources, NIST will not approve the study without a non-duplication-of-funding letter indicating that no other federal funds will be used to support the tasks proposed under the proposed research or ongoing project;
- (5) If a new protocol will only be submitted to an IRB if an award from NIST is issued, a draft of the proposed protocol;
- (6) Any additional clarifying documentation that NIST may request during the review process to perform the NIST administrative review of research involving human subjects. (See 15 C.F.R. § 27.112 Review by Institution.)

This clause reflects the existing NIST policy and requirements for Research Involving Human Subjects. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving human subjects, contact Anne Andrews, Director, NIST Human Subjects Protection Office (e-mail: anne.andrews@nist.gov; phone: (301) 975-5445).

h. Research Activities Involving Live Vertebrate Animals. Any application that includes research activities involving live vertebrate animals, that are being cared for, euthanized, or used by participants in the application to accomplish research goals, teaching, or testing, must meet the requirements of the Animal Welfare Act (AWA) (7 U.S.C. § 2131 et seq.), and the AWA final rules (9 C.F.R. Parts 1, 2, and 3), and if appropriate, the Good Laboratory Practice for Non-clinical Laboratory Studies (21 C.F.R. Part 58). In addition, such applications should be in compliance with the “*U.S. Government Principles for Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training.*” The Principles and guidance on these Principles are available in the National Research Council’s “Guide for the Care and Use of Laboratory Animals,” which can be obtained from National Academy Press, 500 5th Street, N.W., Department 285, Washington, DC 20055, or as a free PDF

online at <http://www.nap.edu/catalog/12910/guide-for-the-care-and-use-of-laboratory-animals-eighth>.

The following requirements do not apply to proposed research using preexisting images of animals or to research plans that do not include live animals. These regulations also do not apply to obtaining stock items from animal material suppliers (e.g., tissue banks), such as cell lines and tissue samples, or from commercial food processors, where the vertebrate animal was euthanized for food purposes and not for the purpose of sample collection.

Custom Collections Harvested from Live Vertebrate Animals: NIST requires documentation for obtaining custom samples from live vertebrate animals from animal material suppliers and other organizations (i.e., universities, companies, and government laboratories, etc.). Custom samples includes samples from animal material suppliers, such as when a catalog item indicates that the researcher is to specify the characteristics of the live vertebrate animal to be used, or how a sample is to be collected from the live vertebrate animal.

Field Studies of Animals: Some field studies of animals may be exempt under the Animal Welfare Act from full review and approval by an animal care and use committee, as determined by each institution. Field study is defined as “...a study conducted on free-living wild animals in their natural habitat.” However, this term excludes any study that involves an invasive procedure or that harms or materially alters the behavior of an animal under study. Field studies, with or without invasive procedures, may also require obtaining appropriate federal or local government permits (e.g., marine mammals, endangered species etc.). If the applicant’s institution requires review and approval by an animal care and use committee, NIST will require that documentation to be provided as described below.

1) Requirement for Assurance. An applicable assurance for the care and use of the live vertebrate animal(s) to be used in the proposed research is required. NIST accepts three types of assurances, as may be applicable. NIST may request documentation to confirm an assurance, if adequate confirmation is not available through an assuring organization’s website.

The cognizant Institutional Animal Care and Use Committee (IACUC) where the research activity is located may hold one or more applicable assurance, including:

- Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) indicated by the OLAW assurance number, i.e., A-1234;
- USDA Animal Welfare Act certification indicated by the certification number, i.e., 12-R-3456;
- Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) indicated by providing the organization name accredited by AAALAC as listed in the AAALAC Directory of Accredited Organizations.

- 2) **Administrative Review.** NIST reserves the right to make an independent determination of whether an applicant's research activities involve live vertebrate animals or custom samples from, or field studies with live vertebrate animals. If NIST determines that the application includes research activities, field studies, or custom samples involving live vertebrate animals, the applicant will be required to provide additional information for review and approval. The documents required for funded proposals are listed in each section below. Some may be requested for a pre-review during the proposal review process; however, the Grants Officer may allow final versions of certain required documents to be produced at an appropriate designated time post-award. If an award is issued, no research activities involving live vertebrate animals subjects shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer issues written approval.
- 3) **Required documents for proposal review.** *The applicant should clearly indicate in the application, by separable task, all research activities believed to include research involving live vertebrate animals and the institution(s) where the research activities involving live vertebrate animals may be conducted.*

Documentation of Research Review by an IACUC: If the applicant's application appears to include research activities, field studies, or custom sample collections involving live vertebrate animals the following information regarding review by an applicable IACUC may be requested during the application review process:

1. The name(s) of the institution(s) where the research involving live vertebrate animals will be conducted and/or custom samples collected;
2. The assurance type and number, as applicable, for the cognizant Institutional Animal Care and Use Committee (IACUC) where the research activity is located. [For example: Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) should be indicated by the OLAW assurance number, i.e. A-1234; an USDA Animal Welfare Act certification should be indicated by the certification number i.e. 12-R-3456; and an Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) should be indicated by AAALAC.]
3. The IACUC approval date for the Animal Study Protocol (ASP) (if currently approved);
4. If the review by the cognizant IACUC is pending, the estimated- start date for research involving vertebrate animals;
5. If any assurances or IACUCs need to be obtained or established, that should be clearly stated.
6. If any special permits are required for field studies, those details should be clearly provided for each instance, or indicated as pending.

If the application includes research activities involving vertebrate animals to be performed in the first year of an award, additional documentation may be requested by NIST during pre-award review for those performers, and may include the following for those research activities, which may also include field studies, custom sample collections involving live vertebrate animals:

1. A signed (by the Principal Investigator) copy of the IACUC approved ASP;
2. Documentation of the IACUC approval indicating the approval and expiration dates of the ASP; and
3. If applicable, a non-duplication-of-funding letter if the ASP is funded from several sources.
4. If a new ASP will only be submitted to an IACUC if an award from NIST is issued, a draft of the proposed ASP may be requested.
5. Any additional clarifying documentation that NIST may request during review of applications to perform the NIST administrative review of research involving live vertebrate animals.

This clause reflects the existing NIST policy for Research Involving Live Vertebrate Animals. Should the policy be revised prior to award, a clause reflecting the policy current at time of award may be incorporated into the award.

If the policy is revised after award, a clause reflecting the updated policy may be incorporated into the award.

For more information regarding research projects involving live vertebrate animals, contact Linda Beth Schilling, Senior Analyst (e-mail: linda.schilling@nist.gov; phone: 301-975-2887).

- i. **Collaborations Making Use of Federal Facilities.** All applications should include a description of any work proposed to be performed using Federal facilities.

If an applicant proposes use of NIST facilities, the statement of work should include a statement of this intention and a description of the facilities. Any use of NIST facilities must be approved by appropriate NIST management and is at the sole discretion of NIST. Prior to beginning the merit review process, NIST will verify the availability of the facilities and approval of the proposed usage. Any unapproved facility use will be stricken from the application prior to the merit review. Examples of some facilities that may be available for collaborations are listed on the following NIST Web site: <http://www.nist.gov/user-facilities.cfm>.

- j. **Safety.** Safety is a top priority at NIST. Graduate students participating in the GMSE Fellowship Program will be expected to be safety-conscious, to attend NIST safety training, and to comply with all NIST safety policies and procedures, and with all applicable NIST visitor policies.

3. Reporting

a. Reporting Requirements. The following reporting requirements described in Sections A.01 Performance (Technical) Reports and B.02 Financial Reports of the DoC Financial Assistance Standard Terms and Conditions dated December 26, 2014, <http://go.usa.gov/hKbj>, apply to awards in this program:

(1) Financial Reports. Each award recipient will be required to submit an SF-425, Federal Financial Report on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period to the NIST Grants Officer and Grants Specialist named in the award documents. A final financial report is due within 90 days after the end of the project period.

(2) Performance (Technical) Reports. Each award recipient shall require each GMSE Fellowship Program graduate student participating in the program to submit a brief annual report describing their experiences and accomplishments by each August 31st of their fellowship terms. The GMSE Fellowship Program participants who leave the program without completing their fellowship terms will be required to submit their reports within 30 days of their departures.

Additionally, each award recipient will be required to submit a technical progress report to the NIST Grants Officer and Grants Specialist named in the award documents on a semi-annual basis for the periods ending March 31 and September 30 of each year. Reports will be due within 30 days after the end of the reporting period. Technical progress reports shall contain information as prescribed in 2 C.F.R. § 200.328.

(3) Patent and Property Reports. From time to time, and in accordance with the Uniform Administrative Requirements and other terms and conditions governing the award, the recipient may need to submit property and patent reports.

(4) Recipient Integrity and Performance Matters. In accordance with section 872 of Public Law 110-417 (as amended; see 41 U.S.C. 2313), if the total value of a recipient's currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds \$10,000,000 for any period of time during the period of performance of an award made under this FFO, then the recipient shall be subject to the requirements specified in Appendix XII to 2 C.F.R. Part 200, <http://go.usa.gov/cTBwC>, for maintaining the currency of information reported to SAM that is made available in FAPIIS about certain civil, criminal, or administrative proceedings involving the recipient

b. Audit Requirements. 2 C.F.R. Part 200 Subpart F, adopted by the Department of Commerce through 2 C.F.R. § 1327.101 requires any non-Federal entity (*i.e.*, including non-profit institutions of higher education and other non-profit organizations) that expends Federal awards of \$750,000 or more in the recipient's fiscal year to conduct a single or program-specific audit in accordance with the

requirements set out in the Subpart. Applicants are reminded that NIST, the DoC Office of Inspector General, or another authorized Federal agency may conduct an audit of an award at any time.

- c. Federal Funding Accountability and Transparency Act of 2006.** In accordance with 2 C.F.R. Part 170, all recipients of a Federal award made on or after October 1, 2010, are required to comply with reporting requirements under the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282). In general, all recipients are responsible for reporting sub-awards of \$25,000 or more. In addition, recipients that meet certain criteria are responsible for reporting executive compensation. Applicants must ensure they have the necessary processes and systems in place to comply with the reporting requirements should they receive funding. Also see the *Federal Register* notice published September 14, 2010, at 75 FR 55663 available here <http://go.usa.gov/hKnQ>.

VII. Federal Awarding Agency Contacts

Questions should be directed to the following contact persons:

| Subject Area | Point of Contact |
|--|---|
| Programmatic and Technical Questions | Susan Heller-Zeisler Phone: 301-975-3111 E-mail: susan.heller-zeisler@nist.gov |
| Technical Assistance with Grants.gov Submissions | Christopher Hunton Phone: 301-975-5718 Fax: 301-975-8884 E-mail: grants@nist.gov or Grants.gov Phone: 800-518-4726 E-mail: support@grants.gov |
| Grant Rules and Regulations | Husai Rahman Phone: 301-975-4355 Fax: 301-975-8884 E-mail: husai.rahman1@nist.gov |