

December 14, 2016

**NOTICE OF FUNDING OPPORTUNITY (NOFO)
National Institute of Standards and Technology (NIST)
Research Experience for Teachers (NIST RET) Program**

EXECUTIVE SUMMARY

- **Federal Agency Name:** National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC)
- **Funding Opportunity Title:** NIST Research Experience for Teachers (NIST RET) Program
- **Announcement Type:** Initial
- **Funding Opportunity Number:** 2017-NIST-RET-01
- **Catalog of Federal Domestic Assistance (CFDA) Number:** 11.620, Science, Technology, Business and/or Education Outreach
- **Dates.** Electronic applications must be received no later than 11:59 p.m. Eastern Time, Friday, March 3, 2017. Paper applications must be received by NIST by 5:00 p.m. Eastern Time, Friday, March 3, 2017. Applications received after the respective deadline will not be reviewed or considered. **Submitters of electronic applications should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance from 12:01 Eastern Time, Saturday, December 17, 2016 until Monday, December 19, 2016 at 6:00 a.m. Eastern Time, and also from 12:01 Eastern Time, Saturday, January 21, 2017 until Monday, January 23, 2017 at 6:00 a.m. Eastern Time, and again from 12:01 Eastern Time, Saturday, February 18, 2017 until Tuesday, February 21, 2017 at 6:00 a.m. Eastern Time. Electronic applications cannot be submitted when Grants.gov is closed.**

The earliest anticipated start date for awards under this NOFO is expected to be June 1, 2017. **The selected teachers will attend the NIST RET Program during the summer of 2017 for six (6) continuous weeks (exact dates to be decided by the teachers and NIST scientists and engineers).**

Applicants are strongly urged to read Section IV.2.b., Attachment of Required Application Documents, found on page 8 of this NOFO, with great attention. Applicants should carefully follow the instructions and recommendations regarding attachments and using Grants.gov's Download Submitted Applications feature to check that all required attachments were contained in their submission. Applications submitted without the required documents will

not pass the Initial Administrative Review, described in Section V.3.a. of this NOFO. When developing a 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 SAM.gov (see Section IV.3. and Section IV.7.a.(2).b) of this NOFO) often takes between three and five business days and may take as long as two weeks; and (3) submitters of electronic applications are required to have a current registration in Grants.gov; and (4) applicants using Grants.gov will receive e-mail notifications over a period of up to two business days as the application moves through intermediate systems before the applicant learns via a validation or rejection notification whether NIST has received the application. (See <http://www.grants.gov> for full information on application and notification through Grants.gov). **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.**

- **Application Submission Address:** See Section IV.7.a.(1) and (2) in the Full Announcement Text of this NOFO.
- **Funding Opportunity Description:** NIST is soliciting applications from eligible public school districts and accredited private educational institutions in the U.S. and its territories. These eligible institutions would nominate sixth (6th), seventh (7th) and eighth (8th) grade science teachers to participate in the NIST RET Program. The nominated **teachers must have completed the NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) Program prior to being nominated for the NIST RET Program.** The NIST RET Program will allow the selected teachers to participate in scientific research with NIST scientists and engineers at the NIST Campus in Gaithersburg, Maryland **during the summer of 2017 for six (6) continuous weeks (exact dates to be decided by the teachers and NIST scientists and engineers).**
- **Anticipated Funding Amounts:** Approximately \$16,000 may be available for new awards. NIST anticipates funding individual awards to public school districts and/or accredited private educational institutions in the U.S. and/or its territories to support a total of approximately two (2) teachers at no more than \$8,000 per teacher.
- **Funding Instrument:** Cooperative Agreement
- **Who Is Eligible:** Public school districts and accredited private educational institutions in the U.S. and its territories that offer science classes at grade levels six (6), seven (7), and/or eight (8) (often termed middle school), and whose nominated teachers have successfully completed the NIST Summer Institute Program. Applicant school districts and institutions must offer instruction in general science fields, such as earth science, physical science, chemistry, physics, and/or biology. Individual public school teachers and individual public middle schools are not eligible

to submit applications directly to NIST and instead must be nominated by their school district. Individual teachers at private educational institutions are not eligible to submit applications directly to NIST and instead must be nominated by their private educational institution. Individual teachers nominated to participate in the NIST RET Program must meet the eligibility requirements in Section III.1. of this NOFO.

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

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FULL ANNOUNCEMENT TEXT

I. Program Description

The statutory authorities for NIST Research Experience for Teachers (NIST RET) Program are 15 U.S.C. § 272(b)(4) and 15 U.S.C. § 278g-2a.

NIST is soliciting applications from eligible public school districts and accredited private educational institutions in the U.S. and its territories. These eligible institutions would nominate sixth (6th), seventh (7th) and eighth (8th) grade science teachers to participate in the NIST RET Program. The nominated teachers must have completed the NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) Program prior to being nominated for the NIST RET Program. The NIST RET Program will allow the selected teachers to participate in scientific research with NIST scientists and engineers at the NIST Campus in Gaithersburg, Maryland during the summer of 2017 for six (6) continuous weeks (exact dates to be decided by the teachers and NIST scientists and engineers). Applicant school districts and institutions must offer instruction in general science fields, such as earth science, physical science, chemistry, physics, and/or biology.

The NIST RET Program will enable two (2) qualified sixth (6th), seventh (7th) and eighth (8th) grade science teachers to take advantage of resources from the nation's premier standards and measurement laboratory, NIST. The aim is to provide teachers who have successfully completed the NIST Summer Institute Program an opportunity to further their understanding of how scientific research is performed by participating in research at NIST for six (6) continuous weeks. **Teachers must have completed the NIST Summer Institute Program prior to being nominated for the NIST RET Program.**

Selected teachers will work side-by-side with NIST research scientists and engineers on projects that combine research with direct applications tailored to developing, maintaining, advancing, and enabling the measurement system for the nation. The selection of the research projects in which the teachers will engage will be based on the teachers' interests and the NIST mission. For more information, see <http://www.nist.gov/iaao/teachlearn/>.

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 organizations. This includes NIST collaboration with a recipient on the scope of work.
- 2. Funding Availability.** NIST anticipates that a total of up to \$16,000 may be made available in Fiscal Year 2017 to support a total of two (2) teachers to attend the NIST RET Program. The selected teachers will be required to attend the NIST RET Program during the summer of 2017 for six (6) continuous weeks (exact dates to be decided by the teachers and NIST scientists and engineers), at NIST in Gaithersburg, Maryland.

Each teacher selected from each successful applicant will receive \$8,000 as a stipend for participation in the six (6) continuous full weeks of the NIST RET Program through their school district or private educational institution. Neither housing nor travel allowances are provided to the teachers.

III. Eligibility Information

- 1. Eligible Applicants.** Public school districts and accredited private educational institutions in the U.S. and its territories that offer science classes at grade levels six (6), seven (7), and/or eight (8) (often termed middle school) **and whose nominated teachers have successfully completed the NIST Summer Institute Program.**

Applicant school districts and institutions must offer instruction in general science fields, such as earth science, physical science, chemistry, physics, and/or biology.

Individual public school teachers and individual public middle schools **are not eligible** to submit applications directly to NIST and instead must be nominated by their school district. Individual teachers at private educational institutions **are not eligible** to submit applications directly to NIST and instead must be nominated by their private educational institution.

Each individual teacher nominated to participate in the NIST RET Program must meet all of the following eligibility requirements at the time of application and at the time of award:

- a. Be a U.S. citizen or permanent U.S. resident.
- b. **Be available to commit to six (6) full continuous weeks (Monday through Friday) from 8:30 a.m. to 5:00 p.m., during the summer of 2017, to participate in the NIST RET Program, at the NIST Campus in Gaithersburg, Maryland.**
- c. Be employed for the 2017-2018 school year to teach science at grade levels six (6), seven (7), and/or eight (8) in a public school district and/or accredited private educational institution in the U.S. or its territories. A note: if the teacher is contemplating changing school districts for the 2017/2018 school year, the teacher's current school district will not be able to transfer the funds for financial support for the teacher's attendance of the Summer Institute. The topics taught by each nominee must include science and related fields, such as earth science, physical science, chemistry, physics, and/or biology.
- d. Have previously successfully completed the NIST Summer Institute.

Applicants are encouraged, but are not required, to nominate eligible teachers from a "high-need school" as defined in 20 U.S.C. § 1021(11).

2. Cost Sharing or Matching. This Program does not require cost sharing.

IV. Application and Submission Information

- 1. Address to Request Application Package.** The full application package, consisting of all of the required forms (see Section IV.2.a. of this NOFO), is available at <http://www.nist.gov/iaao/teachlearn/>. The full application package may be requested by contacting the NIST personnel listed below.

Dr. Catherine Rimmer, National Institute of Standards and Technology, International and Academic Affairs Office, 100 Bureau Drive, Stop 1090, Gaithersburg, MD 20899-1090, Phone: (301) 975-3651, e-mail: catherine.rimmer@nist.gov.

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, must list the NOFO number 2017-NIST-RET-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 in 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 “2017-NIST-SUMMER-INSTITUTE-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) Additional Applicant Information.** This is a word-processed document, not to exceed five (5) pages, written by the applicant; it must contain the following information:

- (a) Description of the applicant's education programs that make it eligible to submit a NIST RET Program application, specifically, offering science classes at grade levels six (6), seven (7), and/or eight (8) (often termed middle school). Applicants must offer instruction in general science fields, such as earth science, physical science, chemistry, physics, and/or biology.

- (b) Summary list of the teacher(s) being nominated and certification that:

- i. Each nominated teacher will have teaching responsibilities in science and related fields in grades six (6), seven (7), and/or eight (8) (often termed middle school) in the 2017-2018 school year. (Applicants must certify to the best current knowledge/plans of the public school district or accredited private educational institution in the U.S. or its territories at the time of application submission.);

- ii. Each nominated teacher is a U.S. citizen or permanent U.S. resident; and
 - iii. If applicable, that the nominated teacher is from a “high-need school” as defined in 20 U.S.C. § 1021(11).
- (c) Description of how the applicant satisfies the evaluation criterion “Applicant's Commitment to Program Goals” (see Section V.1.a. of this NOFO). Applicants should include a statement describing whether and how they supported the nominated teacher(s) implementation of what they learned during the NIST Summer Institute Program in the classroom. If what the nominated teacher(s) learned during the NIST Summer Institute Program was not implemented in the classroom, applicants should include an explanation as to why not. Applicants should also describe their intent to support the nominated teacher(s) use of knowledge and resources gained during the NIST RET Program, as related to the middle school curriculum in the classroom.

(7) NIST-1103, Teacher Application for the NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) or the NIST Research Experience for Teachers (NIST RET), found at <http://www.nist.gov/iaao/teachlearn/upload/NIST-1103.pdf>. This is a description of the nominated teacher(s) interest in participating in the NIST RET Program and will be evaluated as described in Section V.1.b. of this NOFO.

IMPORTANT: All of the required application documents listed above may only be submitted by the applicant school district or accredited private educational institution in the U.S. or its territories. In addition, submission of separate NIST-1103 forms (see Section IV.2.a.(7) of this NOFO) without all of the required application documents (see Section IV.2.a. of this NOFO) is not permitted. If NIST receives such submissions, NIST will return them without review.

Teachers interested in the NIST RET Program should contact their schools directly to express their interest. Public schools interested in the NIST RET Program should contact their school district early on to work closely in the preparation of the application, which only the school district may submit to NIST. Private educational institutions should prepare their applications for direct submission to NIST.

b. Attachment of Required Application Documents

If submitting the application electronically via Grants.gov, 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) and IV.2.a.(7) 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.

Submitters of electronic applications 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 does not provide details concerning whether all attachments (or how many attachments) transferred successfully.*** 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.

Submitters of electronic applications are strongly advised to use Grants.gov's Download Submitted Applications option to check that their application's required attachments were contained in their submission. After submitting the application, follow the directions found in the Grants.gov Online

Users Guide (<http://go.usa.gov/cjaEh>). Click first on Applicants; then click on Applicant Actions; go then to the "Check My Application Status" option, and choose Download Submitted Applications.

If any, or all, of the required attachments are absent from the submission, follow the attachment directions found above, resubmit the application, and check again for the presence of the required attachments.

Applicants can track their submission in the Grants.gov system by following the procedures at the Grants.gov site (<http://go.usa.gov/cjamz>). It can take up to two business days for an application to fully move through the Grants.gov system to NIST.

NIST uses the Tracking Numbers assigned by Grants.gov, and does not issue Agency Tracking Numbers.

If submitting an application by paper, all of the required application documents should be submitted in the order listed above.

c. Application Format

- (1) Application language.** English.
- (2) Double-sided copy.** For paper submissions, print on both sides of the paper (front to back counts as two pages).
- (3) Facsimile submissions (fax).** Will not be accepted.

- (4) **Font.** Easy to read font (10-point minimum). Smaller type may be used in figures and tables but must be clearly legible.
- (5) **Line spacing.** Single.
- (6) **Margins.** One (1) inch top, bottom, left, and right.
- (7) **Number of paper copies.** For paper submissions, one (1) signed, stapled original. If submitting electronically by Grants.gov, paper copies are not required.
- (8) **Page layout.** Portrait orientation only.
- (9) **Page limit.** Five (5) pages for Additional Applicant Information (see Section IV.2.a.(6). of this NOFO).

Page limit excludes: The following forms, including required attachments, are not included in the page limit: 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; NIST-1103, Teacher Application for the NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) or the NIST Research Experience for Teachers (NIST RET).

- (10) **Page numbering.** Number pages sequentially.
 - (11) **Paper size.** 21.6 by 27.9 centimeters (8 ½ by 11 inches).
 - (12) **Table of contents.** Do not include; not required. If included, will count toward page limit.
 - (13) **Typed document.** All applications, including forms, must be typed.
- e. **Application 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.
 - f. **Pre-Applications.** NIST is not accepting pre-applications or white papers under this NOFO.
 - g. **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 applicant(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 NOFO, 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.** Electronic applications must be received no later than 11:59 p.m. Eastern Time, Friday, March 3, 2017. Paper applications must be received by NIST by 5:00 p.m. Eastern Time, Friday, March 3, 2017. Applications received after the respective deadline will not be reviewed or considered.

Submitters of electronic applications should be aware, and factor in their application submission planning, that the Grants.gov system is expected to be closed for routine maintenance from 12:01 Eastern Time, Saturday, December 17, 2016 until Monday, December 19, 2016 at 6:00 a.m. Eastern Time, and also from 12:01 Eastern Time, Saturday, January 21, 2017 until Monday, January 23, 2017 at 6:00 a.m. Eastern Time, and again from 12:01 Eastern Time, Saturday, February 18, 2017 until Tuesday, February 21, 2017 at 6:00 a.m. Eastern Time. Electronic applications cannot be submitted when Grants.gov is closed.

NIST determines whether paper applications have been timely received by the deadline by date and time receipt they are physically received by NIST at its Gaithersburg, Maryland campus. For electronic applications, the date and time recorded by www.grants.gov will be considered the official time that the application was received by NIST. Applicants are cautioned that the validation process may take up to two full business days after the application is submitted to Grants.gov.

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. The responsibility for ensuring a complete application is received by NIST by the deadline is the sole responsibility of the applicant. To avoid any potential processing backlogs due to last minute Grants.gov registrations, applicants are strongly

encouraged to start their Grants.gov registration process at least four (4) weeks prior to the application due date.

Submitters of paper applications should allow adequate time to ensure a paper application will be received on time, taking into account that Federal Government security screening for U.S. Postal Service mail may delay receipt of mail for up to two (2) weeks and that guaranteed express mailings and/or couriers are not always able to fulfill their guarantees.

When developing the submission timeline, please in mind that (1) applicants are required to have current registrations in both the System for Award Management (SAM.gov) and in Grants.gov; (2) the free annual registration process in the SAM.gov (see Section IV.3. of this NOFO) often takes between three and five business days and may take as long as two weeks; and (3) submitters of electronic applications are required to have a current registration in Grants.gov; and (4) applicants using Grants.gov will receive e-mail notifications over a period of up to two business days as the application moves through intermediate systems before the applicant learns via a validation or rejection notification whether NIST has received the application. (See <http://www.grants.gov> for full information on application and notification through Grants.gov). **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.**

Submitters of electronic applications 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>.

Paper applicants will find instructions on registering with SAM.gov by going to www.sam.gov and choosing "Create User Account". Carefully read Section IV.3. of this NOFO to understand the steps involved.

5. **Executive Order 12372 (Intergovernmental Review of Federal Programs).**
Applications under this Program are not subject to Executive Order 12372.
6. **Funding Restrictions.** The NIST RET Program will not authorize funds for housing nor travel allowances. Additionally, the award for teacher(s) to attend the NIST RET Program does not allow for any indirect costs. Although NIST awards will be made directly to school districts and/or institutions, NIST's intent is that all funding awarded be provided to the selected teachers as stipends.
7. **Other Submission Requirements**
 - a. **Applications may be submitted by paper or electronically.**

- (1) Paper applications must be submitted to the NIST personnel identified below, and must be received by 5:00 p.m. Eastern Time, Friday, March 3, 2017.

Dr. Catherine Rimmer, National Institute of Standards and Technology,
International and Academic Affairs Office, 100 Bureau Drive, Stop 1090,
Gaithersburg, MD 20899-1090, Phone (301) 975-3651.

- (2) Electronic applications must be submitted via Grants.gov at www.grants.gov, under announcement 2017-NIST-RET-01.

- a) Submitters of electronic applications 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 an application is received does not provide information about whether attachments have been received. For further information or questions regarding applying electronically for the 2017-NIST-RET-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 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 NOFO. 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 authorized individual(s) 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, one 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.

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

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.

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 the application before the deadline. If the applicant does not correct the errors, the application will not be forwarded to NIST by Grants.gov.

- b. Amendments.** Any amendments to this NOFO will be announced through Grants.gov and posted on the NIST Web site <http://www.nist.gov/iaao/teachlearn/>. Applicants may sign up for Grants.gov NOFO amendments or may request copies from Dr. Catherine Rimmer by telephone at (301) 975-3651, or by e-mail to catherine.rimmer@nist.gov.

V. Application Review Information

1. **Evaluation Criteria.** The evaluation criteria that will be used in evaluating applications are as follows:
 - a. **Applicant's Commitment to Program Goals.** Reviewers will evaluate the applicant's support of the nominated teacher's use of what was learned during the NIST Summer Institute Program in the classroom, as appropriate for the middle school curriculum. Reviewers will also evaluate the applicant's intent to support the nominated teacher's use of knowledge and resources gained during the NIST RET Program in the classroom, as appropriate for the middle school curriculum in the classroom. Reviewers may also consider the applicant's explanation for not implementing what was learned during the Summer Institute Program.
 - b. **Teacher's Interest in Participating in the Program.** The NIST-1103, Teacher Application for the NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) or the NIST Research Experience for Teachers (NIST RET) must be completed and will be reviewed and evaluated as described below. The form may be found at <http://www.nist.gov/iaao/teachlearn/upload/NIST-1103.pdf> (see Section IV.2.a.(7) of this NOFO). **An applicant's failure to complete a NIST-1103 Form for each nominated teacher may result in NIST determining an application to be non-responsive to this NOFO and may eliminate that application from further review, as described in Section V.3.a. of this NOFO.**
 - i. Information in **Items 1 through Item 11** on the NIST-1103 Form is for contact purposes but will be reviewed only to ensure the items are completed.
 - ii. Information in **Item 12** on the NIST-1103 Form **will be used to determine eligibility**. If a nominated teacher is not available to commit to six (6) full continuous weeks to participate in the NIST RET Program, that nominated teacher will be considered ineligible, as described in Section III.1.b. of this NOFO, and may be eliminated from further review, as described in Section V.3.a. of this NOFO.
 - iii. Information in **Items 13 through Item 22** on the NIST-1103 Form will be used to match a nominated teacher with an appropriate mentor.
 - iv. Information in **Item 23** on the **NIST-1103** Form **will be used to determine eligibility**. If a nominated teacher did not attend a prior NIST Summer Institute, as described in Section III.1.d. of this NOFO, that nominated teacher will be considered ineligible and may be eliminated from further review, as described in Section V.3.a. of this NOFO.

- v. Information in **Item 24, Statement of Motivation**, on the NIST-1103 Form **will be evaluated**. Specifically, reviewers will consider how a nominated teacher's participation in the NIST RET Program will further their career goals related to gaining more experience on projects that combine research with direct applications tailored to developing, maintaining, advancing, and enabling the measurement system for the nation and transcending these projects, and scientific research, into activities for use in the middle school classroom. Reviewers also will consider a nominated teacher's interest in the NIST RET Program goal to enable middle school teachers to better encourage students to pursue careers in science and related fields. Reviewers will also consider each nominated teacher's interest in working in a laboratory environment during the NIST RET Program; nominated teachers should clearly express their interest in obtaining laboratory experience and why they feel this is important to them for their careers and for their student curriculum development activities.

Section V.1.a. and Section V.1.b.v. will be given equal weight in the evaluation process.

- 2. **Selection Factors.** The Selecting Official shall select applications for award based upon the rank order of the applications (see Section V.3.b. of this NOFO) and may select an application out of rank based on one or more of the following selection factors:
 - a. Fit of the nominated teacher's stated interest to the program priorities of NIST. NIST program priorities are all applicable fields of science that complement those of NIST; specifically, these include science related to measurements. More information about those programs can be found on the agency's Web site (www.nist.gov).
 - b. Fit of the nominated teacher's interests and abilities to the available project and/or NIST scientists and engineers;
 - c. Preference may be given to teachers from "high-need schools," as defined in 20 U.S.C. § 1021(11) (see Section 406 of the America COMPETES Reauthorization Act of 2010 (Pub. L. 111-358, codified at 15 U.S.C. § 278g-2a(c)); and
 - d. 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 who have entered into nondisclosure agreements covering such information, when applicable.

- a. Initial Administrative Review of Applications.** An initial administrative review of timely received applications will be conducted to determine applicant and nominated teacher eligibility, completeness, and responsiveness to this NOFO and the scope of the stated program objectives. Applications determined to be ineligible, incomplete, or non-responsive based on this NOFO 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, the absence of which may easily be rectified.
- b. Full Review of Eligible, Complete, and Responsive Applications.** Applications determined to be eligible, complete, and responsive will be separated into teacher/applicant packets and proceed for full reviews in accordance with the review and selection process below:

 - (1) Each NIST RET Program teacher/applicant packet will be reviewed by at least three (3) independent, objective NIST scientists and engineers (federal employees) who are knowledgeable in the subject matter of this NOFO and its objectives and who are able to conduct a review based on the evaluation criteria (see Section V.1. of this NOFO). Each reviewer will assign a numeric score for each application. Based on the average of the reviewers' scores, a rank order of the teacher/applicant packets will be prepared and provided to the Selecting Official for further consideration.
 - (2) In making final selections, the Selecting Official, who is the International and Academic Affairs Officer at NIST, will select funding recipients in rank order of the teacher/applicant packets. The Selecting Official may select an application out of rank order based on the selection factors (see Section V.2. of this NOFO).

NIST reserves the right to negotiate the budget costs with the applicants that have been selected to receive awards, which 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. Substitutions for teachers who decline offers will be made from the remaining pool of ranked teacher/applicant packets consistent with the review and selection process (see Section V.3. of this NOFO). 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 NIST 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 administrative reviews, which may include a review of the financial stability of an applicant, the quality of the applicant's management systems, the history of performance, and/or the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. Upon review of these factors, if appropriate, special conditions that correspond to the degree of risk may be applied to an award.

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.

- 4. Anticipated Announcement and Award Date.** The earliest anticipated start date for awards made under this NOFO is expected to be June 1, 2017.

5. Additional Information

- a. Application 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.
- b. Notification to Unsuccessful Applicants.** Unsuccessful applicants will be notified in writing.
- c. Retention of Unsuccessful Applications.** For paper applications, one (1) 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. For electronic copies, one (1) 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. Federal Award Notices.** Successful applicants will receive an award package from the NIST Grants Officer.
- 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 NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if this link and it is no longer working or more information is needed.
- c. **Department of Commerce 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 NOFO, Federal Awarding Agency Contacts, Grant Rules and Regulations, if this link is no longer working or more information is needed.
- d. **Funding Availability and Limitation of Liability.** Funding for the program listed in this notice is contingent upon the availability of Fiscal Year 2017 appropriations. NIST issues this notice subject to the appropriations made available under the current continuing resolution funding the Department of Commerce, the Further Continuing and Security Assistance Appropriations Act, 2017, Public Law 114-254 (December 10, 2016). NIST anticipates making awards for the program listed in this notice provided that funding for the program is continued beyond April 28, 2017, the expiration of the current continuing resolution. In no event will NIST or the Department of Commerce be responsible for proposal preparation costs if these programs fail to receive funding or are cancelled because of agency priorities. Publication of this announcement does not oblige NIST or the Department of Commerce to award any specific project or to obligate any available funds.
- e. **Collaborations with NIST Employees.** The Program Description specifically anticipates that participating teachers will collaborate with NIST. Applicants are not required to collaborate with specific NIST employees; however, if the applicant wishes to propose collaboration with a specific NIST employee, 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 Department of Commerce 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 NOFO, 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 (FDA), 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 activities.

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.** The NIST Human Subjects Protection Office (HSPO) reserves the right to conduct an administrative review¹ of all applications that potentially include research involving human subjects and were approved by an authorized non-NIST institutional entity (an IRB or entity analogous to the NIST HSPO) under 15 C.F.R. § 27.112 (Review by Institution). If the NIST HSPO determines that an application includes research activities that potentially involve human subjects, the applicant will be required to provide additional information to NIST for review and approval. The documents required for funded proposals are listed in each section below. Most 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. Research involving human subjects may not start until the NIST Grants Officer issues an award explicitly authorizing such research. In addition, all amendments, modifications, or changes to approved research and requests for continuing review and closure will be reviewed by the NIST HSPO.
- 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

¹ Conducting an “administrative review” means that the NIST HSPO will review and verify the performing institution’s determination for research not involving human subjects or exempt human subjects research. In addition, for non-exempt human subjects research, the NIST HSPO will review and confirm that the research and performing institution(s) are in compliance with 15 C.F.R. Part 27, which means HSPO will 1) confirm the engaged institution(s) possess, or are covered under a Federalwide Assurance, 2) review the research study documentation submitted to the IRB and verify the IRB’s determination of level of risk and approval of the study for compliance with 15 C.F.R. Part 27, 3) review and verify IRB-approved substantive changes to an approved research study before the changes are implemented, and 4) review and verify that the IRB conducts an appropriate continuing review at least annually.

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. **Research not involving human subjects.** If an activity/task is determined to be research and involves human subjects, but is determined to be *not human subjects research* (or *research not involving human subjects*) under 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 research not involving human subjects, 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.

- c. **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.
- (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.

d. **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.

- h. 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).
- i. **Research Activities Involving Live Vertebrate Animals or Pre-Existing Cell Lines/Tissues From Vertebrate Animals.** Any application that proposes research activities involving live vertebrate animals that are to be cared for, euthanized, or used by award recipients 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 Nonclinical Laboratory Studies (21 C.F.R. Part 58). In addition, such research activities should be in compliance with the “*U.S. Government Principles for Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training*” (Principles). 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>.

- 1) **Administrative Review.** NIST reserves the right to conduct an administrative review² of all applications that potentially include research activities that involve live vertebrate animals, or custom samples from, or field studies with live vertebrate animals. If 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. In addition, NIST will verify the applicant's determination(s) of excluded samples from vertebrate animals. 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 shall be initiated or costs incurred for those activities under the award until the NIST Grants Officer issues written approval. In addition, all re-approvals, amendments, modifications, changes, annual reports and closure will be reviewed by NIST.
- 2) **Required documents for NIST 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. In addition, the applicant should indicate any activity/task that involves an excluded or custom collection from vertebrate animals, or a field study with animals.*
 - a) **Excluded Collections from Vertebrate Animals:** The requirements for review and approval by an Institutional Animal Care and Use Committee (IACUC) 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 or pre-existing items from animal material suppliers (e.g., tissue banks), such as pre-existing 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.

For pre-existing cell lines and tissue samples originating from vertebrate animals, NIST requires that the proposer provide documentation or the

² Conducting an "administrative review" means that the NIST HSPO will review and verify the performing institution's IACUC's approval of research with live vertebrate animals, and confirm that the research and performing institution(s) have an appropriate assurance and are in compliance with applicable regulations. HSPO will 1) confirm the engaged institution(s) possess, or are covered under an applicable assurance, 2) review the research study documentation submitted to the IACUC and verify the IACUC's determination of level of risk and approval of the study for compliance with applicable regulations, 3) review and verify IACUC-approved substantive changes to an approved research study before the changes are implemented, and 4) review and verify that the IACUC receives an annual report for the study and conducts an appropriate continuing review at least every three years.

rationale for the determination that the cell line or tissue is pre-existing and not a custom collection from live vertebrate animals for an activity/task within the proposal. NIST may require additional documentation to review and/or support the determination that the cells and/or tissues from vertebrate animals are excluded from IACUC review.

- b) **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.
- c) **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...*”. 9 C.F.R. § 1.1. 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 (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.
- d) **For custom collections or studies with live vertebrate animals that require review and approval by an animal care and use committee the following documentation is required:**
 - (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 may request documentation to confirm an assurance, if adequate confirmation is not available through an assuring organization’s website. The cognizant IACUC where the research activity is located may hold one or more assurances applicable to the research activity that are acceptable to NIST. These three assurances are:
 - i. Animal Welfare Assurance from the Office of Laboratory Animal Welfare (OLAW) indicated by the OLAW assurance number, *i.e.*, A-1234;
 - ii. USDA Animal Welfare Act certification indicated by the certification number, *i.e.*, 12-R-3456;
 - iii. 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) **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.
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).

- j. **Safety.** Safety is a top priority at NIST. Teachers participating in the NIST RET Program will be expected to be safety-conscious, attend NIST safety training(s), and comply with all NIST safety policies and procedures, as required by their guest research agreement.
- k. **NIST Guest Researcher Agreement.** Teachers participating in the NIST RET Program will be expected to sign a domestic guest researcher agreement when they arrive at NIST. Copies of the agreement may be obtained by contacting Dr. Catherine Rimmer, National Institute of Standards and Technology, International and Academic Affairs Office, 100 Bureau Drive, Stop 1090, Gaithersburg, MD 20899-1090, Phone (301) 975-3651; e-mail: catherine.rimmer@nist.gov.

3. Reporting

- a. **Reporting Requirements.** The following reporting requirements described in Sections A.01 Performance (Technical) Reports and B.02 Financial Reports of the Department of Commerce Financial Assistance Standard Terms and Conditions dated December 26, 2014, <http://go.usa.gov/hKbj>, apply to awards in this program (see Section VI.2.b. of this NOFO):

(1) Financial Report. Each award recipient will be required to submit an SF-425, Federal Financial Report, within 30 days after the award expiration date to the NIST Grants Officer and Grants Specialist named in the award documents.

(2) Performance (Technical) Report. Each award recipient shall require the teacher(s) accepted into the NIST RET Program to submit a final technical report to the NIST Grants Officer and the NIST Federal Program Officer on the last day of the teacher's participation in the NIST RET Program or within 90 days after the expiration date of the award. The technical report shall conform to the requirements in 2 C.F.R. § 200.328 (<http://go.usa.gov/xkVgP>) and Department of

Commerce Standard Terms and Conditions, Section A.01
(<http://go.usa.gov/hKbj>).

(3) Program Evaluation Data Collection – Outcome Survey. Each award recipient shall agree upon execution of the cooperative agreement to allow the teacher(s) accepted into the NIST RET Program to participate on a voluntary basis in program evaluation activities (to include a survey, focus group, phone interview, and/or a classroom observation). Agreement does not guarantee that the assessment activities will occur for all teacher participants. Any assessment activities will be carried out maintaining anonymity of the participants.

(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 NOFO, 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. 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 Department of Commerce 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	Catherine Rimmer Phone: (301) 975-3651 Fax: (301) 977-0685 E-mail: catherine.rimmer@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	Scott McNichol Phone: 303-497-3444 Fax: (303) 497-5470 E-mail: scott.mcnichol@nist.gov

VIII. Other Information

- Protected and Proprietary Information.** The applicant acknowledges and understands that information and data contained in applications for financial assistance, as well as information and data contained in financial, performance and other reports submitted by applicants, may be used by the Department of Commerce in conducting reviews and evaluations of its financial assistance programs. For this purpose, applicant information and data may be accessed, reviewed and evaluated by Department of Commerce employees, other Federal employees, Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate conflicts of interest and nondisclosure agreements covering the use of such information. As may be provided in the terms and conditions of a specific financial assistance award, applicants are expected to support program reviews and evaluations by submitting required financial and performance information and data in an accurate and timely manner, and by cooperating with Department of Commerce and external program evaluators. In accordance with 2 C.F.R. § 200.303(e), applicants are reminded that they must take reasonable measures to safeguard protected personally identifiable information and other confidential or sensitive

personal or business information created or obtained in connection with a Department of Commerce financial assistance award.

In addition, Department of Commerce regulations implementing the Freedom of Information Act (FOIA), 5 U.S.C. Sec. 552, are found at 15 C.F.R. Part 4, Public Information. These regulations set forth rules for the Department regarding making requested materials, information, and records publicly available under the FOIA. Applications submitted in response to this Federal Funding Opportunity may be subject to requests for release under the Act. In the event that an application contains information or data that the applicant deems to be confidential commercial information that should be exempt from disclosure under FOIA, that information should be identified, bracketed, and marked as Privileged, Confidential, Commercial or Financial Information. In accordance with 15 CFR § 4.9, the Department of Commerce will protect from disclosure confidential business information contained in financial assistance applications and other documentation provided by applicants to the extent permitted by law.

- 2. Related NOFO.** The NIST Summer Institute for Middle School Science Teachers (NIST Summer Institute) Program (Funding Opportunity Number 2017-NIST-SUMMER-INSTITUTE-01) is a program related to the NIST RET Program.