

Science, Technology, Engineering and Mathematics (STEM) Education Individual Postdoctoral Research Fellowships (STEMEdIPRF)

PROGRAM SOLICITATION NSF 23-544

REPLACES DOCUMENT(S): NSF 22-531



National Science Foundation

Directorate for STEM Education
Division of Graduate Education
Division of Equity for Excellence in STEM
Research on Learning in Formal and Informal Settings
Division of Undergraduate Education

Full Proposal Deadline(s) (due by 5 p.m. submitter's local time):

April 11, 2023

December 05, 2023

First Tuesday in December, Annually Thereafter

IMPORTANT INFORMATION AND REVISION NOTES

Update: This solicitation has been revised to change the deadline for proposals to the first Tuesday in December.

Revision Notes

This solicitation replaces solicitation [NSF 22-531](#) that supported individual fellowship awards, single institutional projects, and collaborative institutional projects. Beginning in fiscal year 2023, the STEM Ed PRF Program will conduct two competitions using separate solicitations. This solicitation applies to Individual Fellowship proposals only.

This program solicitation has been updated to require that all proposals should include 1) an individual development plan (IDP) that aligns with the research plan, mentoring plan, and long-term career goals identified in the proposal and 2) a mentoring plan from the sponsoring researcher as a separate document.

Important Information

Proposals submitted in response to this program solicitation must be prepared and submitted via [Research.gov](#) or via [Grants.gov](#). **Proposal preparation and submission through [Research.gov](#) is strongly encouraged because these Fellowships contain unique requirements.**

Any proposal submitted in response to this solicitation should be submitted in accordance with the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) that is in effect for the relevant due date to which the proposal is being submitted. The NSF PAPPG is regularly revised and it is the responsibility of the proposer to ensure that the proposal meets the requirements specified in this solicitation and the applicable version of the PAPPG. Submitting a proposal prior to a specified deadline does not negate this requirement.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Science, Technology, Engineering and Mathematics (STEM) Education Individual Postdoctoral Research Fellowships (STEM Ed IPRF)

Synopsis of Program:

The Directorate for STEM Education (EDU) STEM Education Postdoctoral Research Fellowships (STEM Ed PRF) Program funds postdoctoral fellowship projects designed to enhance the research knowledge, skills, and practices of STEM Education research by recent doctoral graduates in STEM, STEM Education, Education, and related disciplines. This solicitation supports individual postdoctoral fellowship awards; a companion solicitation (STEM Ed OPRF) supports organizational postdoctoral fellowship programs. The STEM Ed PRF Program as a whole seeks to broaden the pool of researchers who can advance knowledge regarding STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development. The Program is designed to support postdoctoral fellows engaged in experiences that will advance their career goals by developing their expertise, skills, and competencies to conduct fundamental STEM

education research. Principal Investigators who are women, veterans, persons with disabilities, and from groups underrepresented in STEM, or who have attended community colleges and minority-serving institutions (e.g., Historically Black Colleges and Universities, Tribal Colleges and Universities, Hispanic Serving Institutions, Alaska Native Serving Institutions, and Hawaiian Native and Pacific Islander Serving Institutions) are especially encouraged to apply.

STEM Ed IPRF awards provide direct support to Fellows to enable them to engage in ongoing research, to develop independent research, and to implement an independent professional development plan under the guidance of a sponsoring researcher. Fellows must affiliate with an appropriate host organization and are expected to devote themselves full time to the fellowship activities for the duration of the fellowship.

Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact.

- STEM Education PRF, email: STEMEdPRF@nsf.gov

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):

- 47.076 --- STEM Education

Award Information

Anticipated Type of Award: Standard Grant

Estimated Number of Awards: 8 to 10

Pending availability of funds, NSF anticipates approximately \$2,500,000 will be available for the FY 2023 competition.

Anticipated Funding Amount: \$2,500,000

Subject to availability of funds and the quality of proposals received.

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Fellowship proposals must be submitted directly by the fellowship candidate to NSF. Each fellowship proposer must identify a sponsoring researcher(s) and must affiliate with a U.S. host organization. Appropriate primary host organizations include:
 - **Institutions of Higher Education (IHEs)** Two- and four-year IHEs (including community colleges) accredited in, and having a campus located in the U.S., acting on behalf of their faculty members.
 - **Non-profit, Non-Academic Organizations** Independent museums, observatories, research laboratories, professional societies and similar organizations located in the U.S. that are directly associated with educational research activities.

Who May Serve as PI:

To be eligible to submit a proposal to the STEM Ed IPRF Program, an individual must, as of the full proposal deadline date, meet the following criteria:

- Be a U.S. citizen, national, or permanent resident at the time the proposal is submitted;
- Have earned a doctoral degree, or expect to have earned the doctoral degree in a field of Science, Technology, Engineering, or Mathematics (STEM), STEM Education, Education, or a related discipline earned no more than 24 months before the proposal deadline or will earn such a degree within 10 months after the proposal deadline;
- Must not hold a tenure-track position;
- Present a project plan that falls within the purview of Directorate for STEM Education (EDU); and
- Not have submitted concurrently the same project to another program.

Individual fellowship candidates are encouraged to propose host organizations that differ from the organization that awarded their doctorate. However, PIs who choose to carry out the postdoctoral fellowship at the organization where they received their PhD or their current organization at the time of submission must present a strong justification and clearly explain the benefits of this choice to their research and educational goals.

Proposals that fail to meet the above eligibility requirements will be returned without review.

By signing and submitting the proposal, the fellowship candidate is certifying that the candidate meets the eligibility criteria specified in this program solicitation. Willful provision of false information in this request and its supporting documents or in reports required under an ensuing award is a criminal offense (U.S. Code, Title 18, Section 1001).

Limit on Number of Proposals per Organization:

Only individuals may submit proposals. There is no limit on the number of Individual Postdoctoral Fellowship proposers that an organization may host.

Limit on Number of Proposals per PI or co-PI: 1

Individuals may submit only one proposal per year.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Not required
- **Preliminary Proposal Submission:** Not required
- **Full Proposals:**
 - Full Proposals submitted via Research.gov: *NSF Proposal and Award Policies and Procedures Guide* (PAPPG) guidelines apply. The complete text of the PAPPG is available electronically on the NSF website at: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.
 - Full Proposals submitted via Grants.gov: *NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov* guidelines apply (Note: The *NSF Grants.gov Application Guide* is available on the Grants.gov website and on the NSF website at: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=grantsgovguide).

B. Budgetary Information

- **Cost Sharing Requirements:**

Inclusion of voluntary committed cost sharing is prohibited.
- **Indirect Cost (F&A) Limitations:**

Not Applicable
- **Other Budgetary Limitations:**

Not Applicable

C. Due Dates

- **Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time):

April 11, 2023

December 05, 2023

First Tuesday in December, Annually Thereafter

Proposal Review Information Criteria

Merit Review Criteria:

National Science Board approved criteria. Additional merit review criteria apply. Please see the full text of this solicitation for further information.

Award Administration Information

Award Conditions:

Additional award conditions apply. Please see the full text of this solicitation for further information.

Reporting Requirements:

Standard NSF reporting requirements apply.

TABLE OF CONTENTS

Summary of Program Requirements

- I. **Introduction**
- II. **Program Description**
- III. **Award Information**
- IV. **Eligibility Information**
- V. **Proposal Preparation and Submission Instructions**
 - A. Proposal Preparation Instructions
 - B. Budgetary Information
 - C. Due Dates
 - D. Research.gov/Grants.gov Requirements
- VI. **NSF Proposal Processing and Review Procedures**
 - A. Merit Review Principles and Criteria

- B. Review and Selection Process
- VII. **Award Administration Information**
 - A. Notification of the Award
 - B. Award Conditions
 - C. Reporting Requirements
- VIII. **Agency Contacts**
- IX. **Other Information**

I. INTRODUCTION

The STEM Ed PRF Program contributes to a larger effort to build our Nation's capacity to conduct STEM education research by funding early-career scholars who can contribute to the STEM education enterprise. Projects should be designed to produce insights that inform the development or application of theories and/or examine phenomena of importance to the mission of NSF's Directorate for STEM Education (EDU) including STEM learning and learning environments, broadening participation in STEM fields, and STEM workforce development.

These programmatic and Directorate goals align and contribute to the National Science Foundation's goals of promoting discovery, learning, research infrastructure and stewardship. NSF supports projects judged as promising to "(1) advance the frontiers of knowledge; cultivate a world-class, broadly inclusive science and engineering workforce; and expand the scientific literacy of all citizens; (2) build the nation's research capability through investments in advanced instrumentation and facilities; and (3) support excellence in science and engineering research and education through a capable and responsive organization" (<https://www.nsf.gov/about/glance.jsp>). They align with the Foundation's 2022-2026 [Strategic Goals](#) to empower STEM talent to fully participate in science and engineering; create new knowledge about our universe, the world, and ourselves; and benefit society by translating knowledge into solutions.

Working towards the objectives of furthering the Nation's ability to develop an effective STEM workforce and scientifically literate citizenry requires responsive STEM education informed by robust STEM education research. Examples of research projects that connect to these goals include but are not limited to research employing or developing theories to explain factors that impede or promote individuals' learning in various contexts; factors that influence the recruitment, persistence, and progression of underrepresented populations in STEM courses of study and careers; and the skills, experiences, and affective characteristics that prepare individuals for the current and emerging STEM professional workforce.

The STEM Ed PRF Program aims also to foster new and more effective interventions and innovations in STEM education, broadening participation, and workforce development. STEM education research generates the knowledge, theories, and understandings on which viable strategies for enhancing performance or addressing gaps in STEM learning, broadening participation in STEM fields, and STEM professional workforce development are based.

II. PROGRAM DESCRIPTION

The STEM Ed PRF Program supports professional development activities of postdoctoral fellows in settings that will position them for careers as STEM education research scholars. Fellowship awards will facilitate the acquisition of expertise in STEM education research design and methods and the implementation of an individual development plan under the direction of a sponsoring researcher from a host organization.

The STEM Ed PRF Program encourages proposals that support postdoctoral experiences for those holding doctorates in STEM Education (e.g., Mathematics Education, Science Education), STEM, Education, and related disciplines who have career interests in STEM education research.

Examples of Professional Development Activities

To successfully conceptualize, design, and execute studies capable of making contributions to knowledge in STEM teaching and learning, broadening participation, and workforce development, investigators and their teams typically require a wide range of knowledge, skills, expertise, and experiences. Examples of relevant activities include but are not limited to:

- Connecting with new or broadening existing professional networks
- Gaining teaching experience or experience with grant writing
- Deepening knowledge of subject-matter literature
- Examining interdisciplinary perspectives
- Operationalizing new research questions and articulating relevant theories of change
- Developing additional expertise in study design, research methods, and data analysis techniques
- Augmenting expertise aligned with changing educational practices
- Synthesizing existing research findings
- Collecting, managing, documenting, and archiving data to facilitate replication and reproducibility studies and secondary analyses

Examples of Research Topics

The STEM Ed PRF Program invites proposals with a wide range of disciplinary perspectives and welcomes fundamental research proposals across the three research areas: STEM learning and learning environments, broadening participation in STEM, and STEM workforce development. The following list of research topic clusters is neither exhaustive nor mutually exclusive, and the program is open to other topic clusters that advance fundamental knowledge across the three research areas.

- Diversity, equity, and inclusion in STEM
- Factors at the neural, cognitive, institutional, structural, organizational, societal, and systemic levels that affect STEM education and/or the STEM workforce
- STEM teaching and learning in preK-12, undergraduate, graduate, workplace, and/or informal contexts
- Research on technology-enabled learning
- STEM education policy research and
- Research that builds on and expands the foundations for evaluating STEM education and/or STEM workforce development initiatives

Individual Postdoctoral Fellowship Proposals

STEM Ed IPRF proposals must include a fundamental STEM education research project that is appropriately scoped, related to STEM education, and can be completed within the project period. Proposers should identify a theoretically derived and framed issue that, if addressed, could contribute to understanding in STEM education. Proposals must also include an individual professional development plan that builds competencies in STEM education research and supports the Fellow's career trajectory.

Fellowship awards provide funds to support an individual working full-time as a postdoctoral fellow at a host organization for up to 24 months. The proposer must identify a sponsoring researcher who will supervise the implementation of the proposed professional development plan and a host organization (with whom the sponsoring researcher is affiliated) at the time of proposal submission. The candidate is responsible for obtaining prior commitments from the sponsoring researcher and host organization to support the proposed project.

The fellowship proposal must include a mentoring plan from the sponsoring researcher and statement that describes the setting and environment that will support the fellowship activities. The history, resources, and expertise of the sponsoring researcher and host organization for supporting the development of STEM education researchers will be considered in judging the merits of the proposal. To broaden their professional experiences and networks, proposers are encouraged to identify host organizations that differ from their doctoral degree granting organization. However, PIs who choose to carry out the postdoctoral fellowship at the organization where they received their PhD or their current organization at the time of submission must present a strong justification for this decision and clearly explain the benefits of this choice to their research and career goals. *If awarded a fellowship, the Fellow is expected to remain affiliated with the host organization and sponsoring researcher for the entire tenure of their fellowship.*

Documentation required from host organizations is described in **Section V PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS**. PIs must submit a letter from the host organization specifically acknowledging that the organization will accept responsibility for administering the award and that the Fellow will be named as the PI on the award and receive salary and benefits as an employee.

III. AWARD INFORMATION

Pending availability of funds, NSF anticipates approximately \$2,500,000 will be available for the FY 2023 competition.

Duration: Up to 24 full-time-equivalent months of support may be requested.

Budget: The annual fellowship amount of \$85,000 in both Year 1 and Year 2 consists of two types of direct costs:

- A \$70,000 salary in each year; and
- Up to \$15,000 in each year to cover expenses directly related to the conduct of the proposed research and professional development goals, including but not limited to, materials and supplies, equipment, computing resources, access to databases, domestic and international travel, publication charges, and subscription fees.

Within the fellowship period, one month per year of fellowship duration may be used for paid leave, including parental or family leave. The paid leave cannot be used to increase the level of NSF support beyond the duration of the fellowship. NSF enables career-life balance through a variety of mechanisms. For more information, see <https://www.nsf.gov/career-life-balance/>.

Fellowship budgets can be increased to include a Facilitation Award for Scientists and Engineers with Disabilities (FASSED). When requesting FASSED funding, PIs should contact a program officer through STEMEdPRF@nsf.gov prior to applying.

Fellowships are not renewable and are subject to the availability of funds.

During the period of the fellowship, no additional appointment or fellowship may be held without prior permission of the cognizant NSF program officer. Fellows are expected to retain the title of postdoctoral fellow for the duration of the fellowship award. If a Fellow chooses to accept a tenure-track position or other employment during the first year of the Fellowship, the fellowship award will be terminated upon the start of the new position. In such cases, the host organization is responsible for initiating termination procedures by mutual agreement in accordance with Chapter XII of the NSF PAPPG. Fellows are encouraged to consult the cognizant program officer if they choose to accept a tenure-track position or other employment during the second year of the Fellowship.

PIs selected to receive fellowship awards will be contacted by the NSF and asked to provide additional information required for a pre-award transfer to the host organization. Successful PIs who have not completed the PhD at the time of proposal submission must provide certification of the completion of PhD degree requirements before the start date of the award. Normally fellowships will be held at the primary host organization specified in the proposal, but under certain unusual circumstances (e.g., the departure of the sponsoring researcher) and with suitable justification, fellows may transfer the award during the tenure of the fellowship to a new organization upon approval by NSF.

Pre-Award Transfer Process:

The STEM Ed PRF Program will review proposals as submitted by individuals, but all awards will be made to the primary host organization, using the Pre-award Transfer Process, after the merit review is complete. Budgets and award documents will be adjusted to include organizational fringe benefits and overhead costs as part of the Pre-award Transfer Process described below. The Fellow must be listed as the project PI.

To process the Pre-award Proposal Transfer, the Fellow, acting as the original proposing organization's Authorized Organizational Representative (AOR), must submit to the cognizant STEM Ed PRF Program Officer (PO) an e-mail concurring with the transfer of the proposal to the primary host organization. This documentation will be added to the relevant file by the PO as correspondence associated with the proposal. The cognizant PO then will request that the host organization's Sponsored Projects Office submit to NSF a revised:

- Cover Sheet (with the Fellow named as the PI) and Certification pages signed by the AOR; and
- Budget and Budget Justification. The Fellow must be named as the PI and receive a monthly or bi-weekly salary equal to \$70,000 in each year plus organizational employee benefits. The primary host organization's budget is expected to include fringe benefit costs for the Fellow. In the final budget, the \$15,000 per year for research costs may be distributed in the budget to cover other direct research costs, including but not limited to, materials and supplies, equipment, computing resources, access to databases, domestic and international travel, publication charges, and subscription fees. The

applicable U.S. Federally negotiated institutional indirect cost rate(s) must be used in computing indirect costs (F&A). Organizations that do not have a current negotiated rate agreement with a cognizant Federal agency may request indirect cost recovery up to the de minimis rate of 10% of modified total direct costs.

The Program Director will update the NSF's systems with the new organizational and budget data.

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Fellowship proposals must be submitted directly by the fellowship candidate to NSF. Each fellowship proposer must identify a sponsoring researcher(s) and must affiliate with a U.S. host organization. Appropriate primary host organizations include:
 - **Institutions of Higher Education (IHEs)** Two- and four-year IHEs (including community colleges) accredited in, and having a campus located in the U.S., acting on behalf of their faculty members.
 - **Non-profit, Non-Academic Organizations** Independent museums, observatories, research laboratories, professional societies and similar organizations located in the U.S. that are directly associated with educational research activities.

Who May Serve as PI:

To be eligible to submit a proposal to the STEM Ed IPRF Program, an individual must, as of the full proposal deadline date, meet the following criteria:

- Be a U.S. citizen, national, or permanent resident at the time the proposal is submitted;
- Have earned a doctoral degree, or expect to have earned the doctoral degree in a field of Science, Technology, Engineering, or Mathematics (STEM), STEM Education, Education, or a related discipline earned no more than 24 months before the proposal deadline or will earn such a degree within 10 months after the proposal deadline;
- Must not hold a tenure-track position;
- Present a project plan that falls within the purview of Directorate for STEM Education (EDU); and
- Not have submitted concurrently the same project to another program.

Individual fellowship candidates are encouraged to propose host organizations that differ from the organization that awarded their doctorate. However, PIs who choose to carry out the postdoctoral fellowship at the organization where they received their PhD or their current organization at the time of submission must present a strong justification and clearly explain the benefits of this choice to their research and educational goals.

Proposals that fail to meet the above eligibility requirements will be returned without review.

By signing and submitting the proposal, the fellowship candidate is certifying that the candidate meets the eligibility criteria specified in this program solicitation. Willful provision of false information in this request and its supporting documents or in reports required under an ensuing award is a criminal offense (U.S. Code, Title 18, Section 1001).

Limit on Number of Proposals per Organization:

Only individuals may submit proposals. There is no limit on the number of Individual Postdoctoral Fellowship proposers that an organization may host.

Limit on Number of Proposals per PI or co-PI: 1

Individuals may submit only one proposal per year.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal Preparation Instructions: Proposers may opt to submit proposals in response to this Program Solicitation via Research.gov or Grants.gov.

- Full Proposals submitted via Research.gov: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the *NSF Proposal and Award Policies and Procedures Guide* (PAPPG). The complete text of the PAPPG is available electronically on the NSF website at: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg. Paper copies of the PAPPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-8134 or by e-mail from nsfpubs@nsf.gov. The Prepare New Proposal setup will prompt you for the program solicitation number.
- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the *NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov*. The complete text of the *NSF Grants.gov Application Guide* is available on the Grants.gov website and on the NSF website at: (https://www.nsf.gov/publications/pub_summ.jsp?ods_key=grantsgovguide). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper

copies of the Grants.gov Application Guide also may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-8134 or by e-mail from nsfpubs@nsf.gov.

See PAPPG Chapter II.D.2 for guidance on the required sections of a full research proposal submitted to NSF. Please note that the proposal preparation instructions provided in this program solicitation may deviate from the PAPPG instructions.

Proposals submitted to the STEM Education Postdoctoral Research Fellowships program must be submitted electronically through either Research.gov or Grants.gov. As noted above, the use of Research.gov is strongly encouraged. Only one proposal is permitted per individual per year. A full proposal consists of many parts and requires input from the fellowship candidate, the proposed sponsoring researcher and the proposed host organization(s). Proposers are advised to begin the proposal well in advance of the submission deadline and to submit as early as possible. Partially completed proposals may be saved for future completion and submission. The submission of incomplete or late proposals is not permitted.

Proposal preparation and submission through Research.gov is strongly encouraged because these Fellowships contain unique requirements. If the proposer elects to submit through Grants.gov, confirmation that ALL required documents have been successfully uploaded into NSF systems by the deadline date is recommended. Otherwise, the proposal will be considered incomplete or late and will be returned without review.

Before starting proposal preparation, the proposer must be registered as an individual. To register as a new individual in Research.gov, access the [Research.gov New Account Management System](#). To register as a new individual in Grants.gov, access [Grants.gov Applicant Registration](#). Please note that if submitting via Grants.gov, you must also obtain an NSF ID in Research.gov.

Fellowship proposals must be submitted by the individual PI, not by the PI's current or proposed organizational Sponsored Projects Office (SPO). The fellowship proposer serves as his/her own SPO and Authorized Organizational Representative (AOR) for the purposes of any research administration functions in Research.gov or Grants.gov.

Proposals must include all of the required sections of a full research proposal submitted to NSF as specified in Chapter II.D.2 of the PAPPG. *In cases where requirements given in this document supplement or deviate from the instructions provided in the PAPPG or the NSF Grants.gov Application Guide, this solicitation takes precedence.* All page limitations include pictures, figures, tables, graphics, etc. Proposers are urged to take special care to strictly adhere to page limitations. Proposals that do not conform to the requirements will not be accepted or will be returned without review.

Proposal Set-Up: Select "Prepare New Full Proposal" in Research.gov. The Postdoctoral Scholar/PI must select the "I am a Postdoctoral Scholar (Postdoctoral Fellowship Proposals)" option to initiate a postdoctoral fellowship proposal.

Search for and select this solicitation title in Step 1 of the Full Proposal wizard. The information in Steps 2 and 3 is pre-populated by the system. In Step 4, add a descriptive title of the research following the prepended text "Postdoctoral Fellowship: STEM Ed IPRF".

Personnel Documents: The Postdoctoral Fellow is automatically designated as the PI in Research.gov. Co-PIs are not permitted. When preparing the Current and Pending Support section, please include current support for research and training. Under pending support, include this proposal, as well as pending and planned applications to other fellowship or research programs. The project submitted to this solicitation should not be concurrently under review by another program.

The sponsoring researcher must be identified in the proposal. If using Research.gov, this is done by going to the **Personnel Documents** section, clicking on the "Add Mentor/Advisor" tab and entering the individual's NSF ID or Email or Personnel name and Organization. Please submit a Biographical Sketch and Collaborators and Other Affiliations (COA) Information for the sponsoring researcher. Current & Pending Support documents are not required for the sponsoring researcher. Research.gov contains sections to upload the Biographical Sketch and COA for the sponsoring researcher. For Grants.gov, the sponsoring researcher's Biographical Sketch should be uploaded as a Supplementary Document and the COA should be included as a Single Copy Document.

The following instructions supplement or deviate from the guidance in the NSF PAPPG or the *NSF Grants.gov Application Guide*:

Cover Sheet: A requested start date must be entered. The proposed duration for a postdoctoral fellowship proposal is pre-populated, read-only (i.e., not editable), and aligns with the program solicitation selected when initiating the proposal in Research.gov. In the Primary Place of Performance section enter host organization information. Complete any other sections as appropriate/applicable.

Grants.gov Users: The program solicitation number will be pre-populated by Grants.gov on the NSF Grant Proposer Cover Sheet. The title must start with "Postdoctoral Fellowship: STEM Ed IPRF:" followed by the descriptive title of the research.

Project Summary: The Project Summary must not exceed one page that includes three separate sections: Overview, Intellectual Merit, and Broader Impacts. The Overview section should contain an overview of the proposed research project, individual development plan, and career development goals. The summary should clearly address with separate headings the intellectual merit and broader impacts of the proposed fellowship. The Project Summary must conclude by listing the sponsoring researcher's name and title, and the name of the proposed host organization.

Project Description: The Project Description must not exceed 12 single-spaced pages (including any figures, pictures and tables), which must include the following:

- **Research Plan:** The *research plan* should include an introduction or background section; an explanation of the research significance and its implications; a brief review of the relevant literature and theoretical framework and their relation to the proposed research; a statement of research objectives and/or research questions; a description of the research design and methods; and description of how the proposed research aligns with the Fellow's career trajectory and future research directions. The research plan should also include a timetable with goals and benchmarks for the major research activities.

Institutional Review Board (IRB) approval from the host organization will be required when research projects involve human subjects, vertebrate animals, endangered species, hazardous materials, collecting in foreign countries, or other elements. The research plan should provide general information on these matters and address feasibility. **If selected, candidates must submit required documentation of organizational IRB approval to the NSF program officer before an award can be made.**

- **Individual Development Plan:** The individual development plan should include the professional development goals, research and career preparation activities, and timeline for achieving them. The professional development activities might, for example, include formal coursework, workshops, and scholarly community activities such as conference presentations or colloquia participation. Teaching activity (no more than one course per year) should be incorporated into the individual development plan if such teaching experience is deemed valuable for the Fellow's career development. The individual development plan should also include a timetable with annual goals along with benchmarks for major anticipated outcomes. Finally, the plan should include a description of the Fellow's career goals and explanation of how the activities proposed would contribute to career development and

future research directions.

- **Broader Impacts Statement:** Per the PAPPG, the Project Description must contain, as a separate section within the narrative, a section labeled "Broader Impacts". Refer to **Section VI. NSF PROPOSAL PROCESSING, AND REVIEW PROCEDURES** for a detailed explanation of this merit review criterion.
- **Rationale for Choice of Host Organization:** A detailed rationale for the choice of the host organization that identifies the sponsoring researcher, describes the organization's available facilities and resources, relates the proposed project to current research and educational efforts at the host organization, and otherwise justifies the suitability of the host organization. PIs who choose to carry out the postdoctoral fellowship at the organization where they received their PhD or their current organization at the time of submission must present a strong justification and clearly explain the benefits of this choice to their research and educational goals.

Budget and Budget Justification: The budget for fellowship proposals will include two items: \$70,000 salary and \$15,000 fellowship allowance for professional development annually. PIs must provide a justification for the allowance that aligns with the project tasks.

In **Research.gov**, the budget section includes the pre-populated stipend and fellowship allowance based on the requirements of this solicitation. The budget section does not display on the proposal main page after the proposal has been created but can be viewed by clicking Print Proposal. When the PI submits the proposal, the budget will display as read-only and will be accessible from the proposal main page. The budget section is editable during a proposal file update/budget revision.

In **Grants.gov**, the salary and fellowship allowance should be entered in Participant Support Costs (enter the \$70,000 for Year 1 and Year 2 as stipend on line E.2 and the \$15,000/year fellowship allowance on line E.5). Enter (1) as the total number of participants. No other budget lines should be used for fellowship proposals. An annual budget must be submitted for each of the two years of the fellowship support.

In both **Research.gov** and **Grants.gov**, include a budget justification of no more than two pages must list and justify estimated expenditures under the annual fellowship allowance.

Facilities, Equipment and Other Resources, as applicable. Insert text or upload a document that states: "See Host Institution Letter."

Data Management Plan: The data management plan may not exceed two pages and must describe plans for data management and sharing of the products of research or asserts the absence of the need for such plans. See EDU guidelines at <https://www.nsf.gov/bfa/dias/policy/dmpdocs/ehr.pdf>. Proposals should identify the type of data that is expected to be produced in the project. The host institution will submit a Data Management Plan during the Pre-Award Transfer process that describes the institution's protocols for compliance with agency policy.

Supplementary Documentation MUST include the following:

- **Sponsoring Researcher Statement:** A signed letter, not to exceed two pages from the proposed sponsoring researcher certifying that the fellowship proposal has been read and approved and describing the specific role of the sponsoring researcher in guiding the research and professional development of the Fellow. The statement should describe the sponsoring researcher's past experience in mentoring postdocs, especially in mentoring underrepresented minorities (if applicable), the expected availability of the sponsoring researcher for consultation during the award period, the environment in which the Fellow will be trained and mentored, and resources that are available to support the proposed fellowship activities. Sponsoring researchers are not expected to provide the mentoring solely but may leverage resources of the host organization or other organizations. The statement also should include the name, title, department, email address, and telephone number of the sponsoring researcher, as well as the address and phone number of the sponsoring researcher's department at the host organization. The sponsoring researcher should sign the statement before sending it to the Fellow.
- **Confirmation of Degree Completion:** For individuals who have not completed their doctorate at the time of proposal submission, a signed letter from the graduate advisor or Dean confirming the expectation that the candidate will receive the degree before the requested start date of the fellowship.

Other Required Sections:

The following documents indicated as "MAY BE REQUIRED" in Research.gov are required components of a STEM Ed IPRF proposal: PhD Abstract and Host Institution Letter.

- **PhD Abstract:** The abstract, not to exceed one page, must describe the PI's dissertation research and list the dissertation advisor's name and institutional affiliation.
- **Host Institution Letter:** Letter from the prospective host organization, signed by the department chair (or equivalent) and the Sponsored Research Office, certifying that adequate facilities and support will be provided for the Fellow to accommodate the proposed activities and certifying plans to appoint the Fellow as project PI if an award is recommended. The host organization's letter must specifically acknowledge that 1) the organization is aware that award recommendations will require a pre-award transfer of the proposal to the primary host organization, 2) the organization will submit all documents required for a pre-award transfer, including a new cover page that lists the Fellow as the PI and a budget that adds funding for fringe benefits and indirect costs, and 3) the organization will administer the award to provide the Fellow's salary, benefits and proposed research activities. Awards cannot be transferred to foreign organizations or government agencies. If the host organization has not received prior NSF funding, the organization will need to submit "New Awardee" documentation, which will be subject to NSF's evaluation before an award can be made or transferred.

Letters of recommendation will not be considered. Letters from the proposed host organization, sponsoring researcher, or the candidate's current graduate advisor should not make subjective statements regarding either the candidate or their proposed activities.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

C. Due Dates

- **Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time):

April 11, 2023

December 05, 2023

First Tuesday in December, Annually Thereafter

D. Research.gov/Grants.gov Requirements

For Proposals Submitted Via Research.gov:

Before starting proposal preparation, the proposer must be registered as an individual. To register as a new individual in Research.gov, access the [Research.gov New Account Management System](https://www.research.gov/new-account-management-system). To prepare and submit a proposal via Research.gov, see detailed technical instructions available at: https://www.research.gov/research-portal/appmanager/base/desktop?_nfpb=true&_pageLabel=research_node_display&_nodePath=/researchGov/Service/Desktop/ProposalPreparationandSubmission.html. For Research.gov user support, call the Research.gov Help Desk at 1-800-673-6188 or e-mail rgov@nsf.gov. The Research.gov Help Desk answers general technical questions related to the use of the Research.gov system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

Submitting the Proposal: Fellowship proposals must be submitted by the Fellowship candidate, not by the Fellowship candidate's current or proposed organizational Sponsored Projects Office (SPO). The Fellowship candidate serves as his/her own SPO and Authorized Organizational Representative (AOR) for the purposes of any research administration functions in Research.gov. As such, the Fellowship candidate, serving as the SPO/AOR must electronically sign and submit the proposal using the Sign and Submit button in Research.gov. The Fellowship candidate is signing on his/her own behalf and by signing the proposal NSF is in no way inferring that the proposer has assumed organizational status. Further instructions regarding this process are available on the Research.gov website: <https://www.research.gov/research-web/>.

For Proposals Submitted Via Grants.gov:

Before starting proposal preparation, the proposer must register as a new individual in Research.gov and Grants.gov. To register as a new individual in Research.gov go to: <https://www.research.gov/accountmgmt/assets/welcomeunaffiliated.html> and to register in Grants.gov go to: <https://www.grants.gov/web/grants/applicants/registration.html>. Once registered, the proposer can then apply for grant opportunities which indicate "Individual" eligibility on the Grants.gov website. Comprehensive information about using Grants.gov is available on the Grants.gov Applicant Resources webpage: <https://www.grants.gov/web/grants/applicants.html>. In addition, the NSF Grants.gov Application Guide provides additional technical guidance regarding preparation of proposals via Grants.gov. For Grants.gov user support, contact the Grants.gov Contact Center at 1-800-518-4726 or by email: support@grants.gov. The Grants.gov Contact Center answers general technical questions related to the use of Grants.gov. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this solicitation.

Submitting the Proposal: Fellowship proposals must be submitted by the Fellowship applicant, not by the applicant's current or proposed organizational Sponsored Projects Office (SPO). Once all documents have been completed, the applicant must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The applicant must then sign and submit the application to Grants.gov. The completed application will be transferred to Research.gov or further processing.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program for acknowledgement and, if they meet NSF requirements, for review. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program Officer, and usually by three to ten other persons outside NSF either as *ad hoc* reviewers, panelists, or both, who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal. In addition, Program Officers may obtain comments from site visits before recommending final action on proposals. Senior NSF staff further review recommendations for awards. A flowchart that depicts the entire NSF proposal and award process (and associated timeline) is included in PAPPG Exhibit III-1.

A comprehensive description of the Foundation's merit review process is available on the NSF website at: https://www.nsf.gov/bfa/dias/policy/merit_review/.

Proposers should also be aware of core strategies that are essential to the fulfillment of NSF's mission, as articulated in *Leading the World in Discovery and Innovation, STEM Talent Development and the Delivery of Benefits from Research - NSF Strategic Plan for Fiscal Years (FY) 2022 - 2026*. These strategies are integrated in the program planning and implementation process, of which proposal review is one part. NSF's mission is particularly well-implemented through the integration of research and education and broadening participation in NSF programs, projects, and activities.

One of the strategic objectives in support of NSF's mission is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions must recruit, train, and prepare a diverse STEM workforce to advance the frontiers of science and participate in the U.S. technology-based economy. NSF's contribution to the national innovation ecosystem is to provide cutting-edge research under the guidance of the Nation's most creative scientists and engineers. NSF also supports development of a strong science, technology, engineering, and mathematics (STEM) workforce by investing in building the knowledge that informs improvements in STEM teaching and learning.

NSF's mission calls for the broadening of opportunities and expanding participation of groups, institutions, and geographic regions that are underrepresented in STEM disciplines, which is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

A. Merit Review Principles and Criteria

The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.

1. Merit Review Principles

These principles are to be given due diligence by PIs and organizations when preparing proposals and managing projects, by reviewers when reading and evaluating proposals, and by NSF program staff when determining whether or not to recommend proposals for funding and while overseeing awards. Given that NSF is the primary federal agency charged with nurturing and supporting excellence in basic research and education, the following three principles apply:

- All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals. These "Broader Impacts" may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified.
- Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects. If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these activities may best be done at a higher, more aggregated, level than the individual project.

With respect to the third principle, even if assessment of Broader Impacts outcomes for particular projects is done at an aggregated level, PIs are expected to be accountable for carrying out the activities described in the funded project. Thus, individual projects should include clearly stated goals, specific descriptions of the activities that the PI intends to do, and a plan in place to document the outputs of those activities.

These three merit review principles provide the basis for the merit review criteria, as well as a context within which the users of the criteria can better understand their intent.

2. Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two merit review criteria are listed below. **Both** criteria are to be given **full consideration** during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria. (PAPPG Chapter II.D.2.d(i). contains additional information for use by proposers in development of the Project Description section of the proposal). Reviewers are strongly encouraged to review the criteria, including PAPPG Chapter II.D.2.d(i), prior to the review of a proposal.

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to
 - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to achievement of societally relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and other underrepresented groups in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the United States; and enhanced infrastructure for research and education.

Proposers are reminded that reviewers will also be asked to review the Data Management Plan and the Postdoctoral Researcher Mentoring Plan, as appropriate.

Additional Solicitation Specific Review Criteria

Proposals will be reviewed by a panel of disciplinary and interdisciplinary experts spanning STEM education disciplinary areas. Ad hoc reviews may also be sought if deemed necessary. In addition to the regular NSF review criteria, reviewers/panelists will also consider the following criteria for fellowship proposals:

- Does the research plan provide meaningful opportunities to engage the Fellow in ongoing and independent research projects that promote development of the Fellow beyond doctoral dissertation work and advancement as self-directed scholars?
- How effectively would the individual development plan enable the development of expertise, skills, and competencies appropriate for STEM education researchers?
- Would the career development activities described position the postdoctoral researcher to meet their stated career objectives?

B. Review and Selection Process

Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review and/or Panel Review.

Reviewers will be asked to evaluate proposals using two National Science Board approved merit review criteria and, if applicable, additional program specific criteria. A summary rating and accompanying narrative will generally be completed and submitted by each reviewer and/or panel. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for award. NSF strives to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. Large or particularly complex proposals or proposals from new awardees may require additional review and processing time. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director acts upon the Program Officer's recommendation.

After programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements or the Division of Acquisition and Cooperative Support for review of business, financial, and policy implications. After an administrative review has occurred, Grants and Agreements Officers perform the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

Once an award or declination decision has been made, Principal Investigators are provided feedback about their proposals. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers or any reviewer-identifying information, are sent to the Principal Investigator/Project Director by the Program Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

VII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made to *the submitting organization* by an NSF Grants and Agreements Officer. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See Section VI.B. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award notice, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award notice; (4) the applicable award conditions, such as Grant General Conditions (GC-1)*; or Research Terms and Conditions* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award notice. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the individual via e-mail.

*These documents may be accessed electronically on NSF's Website at https://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-8134 or by e-mail from nsfpubs@nsf.gov.

More comprehensive information on NSF Award Conditions and other important information on the administration of NSF awards is contained in the NSF *Proposal & Award Policies & Procedures Guide* (PAPPG) Chapter VII, available electronically on the NSF Website at https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

Administrative and National Policy Requirements

Build America, Buy America

As expressed in Executive Order 14005, *Ensuring the Future is Made in All of America by All of America's Workers* (86 FR 7475), it is the policy of the executive branch to use terms and conditions of Federal financial assistance awards to maximize, consistent with law, the use of goods, products, and materials produced in, and services offered in, the United States.

Consistent with the requirements of the Build America, Buy America Act (Pub. L. 117-58, Division G, Title IX, Subtitle A, November 15, 2021), no funding made available through this funding opportunity may be obligated for an award unless all iron, steel, manufactured products, and construction materials used in the project are produced in the United States. For additional information, visit NSF's [Build America, Buy America](#) webpage.

Special Award Conditions:

Co-PIs and other senior personnel are not allowed.

Normally fellowships will be held at the primary host organization specified in the proposal, but under certain unusual circumstances (e.g., the departure of the sponsoring researcher) and with suitable justification, a fellow may transfer the award during the tenure of the fellowship to a new eligible host organization upon approval by the NSF. The primary host organization will facilitate the transfer of the award using NSF's standard PI Transfer process. Before such a transfer will be approved by NSF, the Fellow's new organization must supply to the cognizant NSF Program Officer documentation required of a primary host organization that is detailed in Section V of this solicitation. Transfer of an award issued under this solicitation to a substitute PI is not permissible, and the awardee cannot terminate the award without NSF's concurrence.

If a Fellow chooses to accept employment (i.e., a tenure-track position) during the first year of the fellowship, the fellowship award will be terminated upon the start of the new position. In such cases, the primary host organization is responsible for initiating procedures for a termination by mutual agreement in accordance with Chapter XII of the NSF PAPPG. Fellows who wish to accept a new position during Year 2 of the award should contact the cognizant STEM Ed PRF Program Officer to discuss disposition of any remaining funds in the PRF grant.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer no later than 90 days prior to the end of the current budget period. (Some programs or awards require submission of more frequent project reports). No later than 120 days following expiration of a grant, the PI also is required to submit a final project report, and a project outcomes report for the general public.

Failure to provide the required annual or final project reports, or the project outcomes report, will delay NSF review and processing of any future funding increments as well as any pending proposals for all identified PIs and co-PIs on a given award. PIs should examine the formats of the required reports in advance to assure availability of required data.

PIs are required to use NSF's electronic project-reporting system, available through Research.gov, for preparation and submission of annual and final project reports. Such reports provide information on accomplishments, project participants (individual and organizational), publications, and other specific products and impacts of the project. Submission of the report via Research.gov constitutes certification by the PI that the contents of the report are accurate and complete. The project outcomes report also must be prepared and submitted using Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted by the PI.

More comprehensive information on NSF Reporting Requirements and other important information on the administration of NSF awards is contained in the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)* Chapter VII, available electronically on the NSF Website at https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

VIII. AGENCY CONTACTS

Please note that the program contact information is current at the time of publishing. See program website for any updates to the points of contact.

General inquiries regarding this program should be made to:

- STEM Education PRF, email: STEMEdPRF@nsf.gov

For questions related to the use of NSF systems contact:

- NSF Help Desk: 1-800-673-6188
- Research.gov Help Desk e-mail: rgov@nsf.gov

For questions relating to Grants.gov contact:

- Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; e-mail: support@grants.gov.

IX. OTHER INFORMATION

The NSF website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this website by potential proposers is strongly encouraged. In addition, "NSF Update" is an information-delivery system designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF [Grants Conferences](#). Subscribers are informed through e-mail or the user's Web browser each time new publications are issued that match their identified interests. "NSF Update" also is available on [NSF's website](#).

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this mechanism. Further information on Grants.gov may be obtained at <https://www.grants.gov>.

ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research.

NSF receives approximately 55,000 proposals each year for research, education and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives several thousand applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels and Arctic and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

Facilitation Awards for Scientists and Engineers with Disabilities (FASSED) provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See the *NSF Proposal & Award Policies & Procedures Guide* Chapter II.F.7 for instructions regarding preparation of these types of proposals.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090 and (800) 281-8749, FIRS at (800) 877-8339.

The National Science Foundation Information Center may be reached at (703) 292-5111.

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at <https://www.nsf.gov>

- **Location:** 2415 Eisenhower Avenue, Alexandria, VA 22314
- **For General Information** (NSF Information Center): (703) 292-5111
- **TDD (for the hearing-impaired):** (703) 292-5090
- **To Order Publications or Forms:**
 - Send an e-mail to: nsfpubs@nsf.gov
 - or telephone: (703) 292-8134
- **To Locate NSF Employees:** (703) 292-5111

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding applicants or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See [System of Record Notices](#), [NSF-50](#), "Principal Investigator/Proposal File and Associated Records," and [NSF-51](#), "Reviewer/Proposal File and Associated Records." Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding the burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to:

Suzanne H. Plimpton
Reports Clearance Officer
Policy Office, Division of Institution and Award Support
Office of Budget, Finance, and Award Management
National Science Foundation
Alexandria, VA 22314

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