

Scholarships in STEM Network (S-STEM-Net)

S-STEM Resource and Evaluation Center and S-STEM Research Hubs

PROGRAM SOLICITATION

NSF 22-544

REPLACES DOCUMENT(S):

NSF 21-569



National Science Foundation

Directorate for Education and Human Resources
Division of Undergraduate Education

Letter of Intent Due Date(s) (required) (due by 5 p.m. submitter's local time):

February 02, 2022

Letter of Intent for Resource and Evaluation Center

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

March 22, 2022

Full Proposal Deadline for both S-STEM Resource and Evaluation Center and S-STEM Research Hub proposals.

IMPORTANT INFORMATION AND REVISION NOTES

Changes affecting S-STEM Resource and Evaluation Center (S-STEM-REC) proposals only:

All S-STEM-REC proposals must include a timeline and a management plan detailing roles, responsibilities, and time commitments of the management team members, including a clear description of substantive time commitments of the REC's Lead PI.

All S-STEM-REC proposals must also budget for a Center Coordinator (100% /1 FTE) to coordinate the day-to-day operations of the center.

To accommodate the level of staff commitment, the maximum budget has increased to up to \$3.4 million dollars per year for a maximum total budget of \$17 million over 5 years.

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 22-1), which is effective for proposals submitted, or due, on or after October 4, 2021.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Scholarships in STEM Network (S-STEM-Net)
S-STEM Resource and Evaluation Center and S-STEM Research Hubs

Synopsis of Program:

Through this solicitation, NSF seeks to foster a network of S-STEM stakeholders and further develop the infrastructure needed to generate and disseminate new knowledge, successful practices and effective design principles arising from NSF S-STEM projects nationwide. The ultimate vision of the legislation governing the S-STEM parent program^[1] (and of the current S-STEM-Net solicitation) is that all Americans, regardless of economic status, should be able to contribute to the American innovation economy if they so desire.

To support collaboration within the S-STEM network, NSF will fund two types of investments: An S-STEM Resource and Evaluation Center (S-STEM-REC) and several S-STEM Research Hubs (S-STEM-Hub). The S-STEM Network (S-STEM-Net) will collaborate to create synergies and sustain a robust national ecosystem consisting of multi-sector partners supporting domestic low-income STEM students in achieving their career goals, while also ensuring access, inclusion, and adaptability to changing learning needs. The infrastructure formed by the Hubs and the REC will also synthesize current achievements and investigate evolving barriers to the success of this student population. It will also disseminate the context and circumstances by which interventions and practices that support graduation of domestic low-income students pursuing careers in STEM are successful.

The target audience for this dissemination effort is the community of higher education institutions, faculty, scholars, researchers and

evaluators, local and regional organizations, industry, and other nonprofit, federal, state, and local agencies concerned with the success of domestic low-income STEM students in the United States.

[1] https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf22527

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.

- Alexandra Medina-Borja, Lead, telephone: (703) 292-7557, email: amedinab@nsf.gov
- Thomas D. Kim, Co-Lead, telephone: (703) 292-4458, email: tkim@nsf.gov
- Michael J. Ferrara, Co-Lead, telephone: (703) 292-2635, email: mferrara@nsf.gov

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

- 47.076 --- Education and Human Resources

Award Information

Anticipated Type of Award: Standard Grant or Cooperative Agreement

Estimated Number of Awards: 1 to 11

S-STEM-REC - one award, as a cooperative agreement.

S-STEM-Hub - up to 10 awards, as standard grants.

Anticipated Funding Amount: \$45,000,000

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Institutions of Higher Education (IHEs) - Two- and four-year IHEs (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Special Instructions for International Branch Campuses of US IHEs: If the proposal includes funding to be provided to an international branch campus of a US institution of higher education (including through use of subawards and consultant arrangements), the proposer must explain the benefit(s) to the project of performance at the international branch campus, and justify why the project activities cannot be performed at the US campus.
- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

An organization may submit one S-STEM-REC proposal (as a single institution, a subawardee, or a member of a collaborative research project), and

An organization may submit at most one S-STEM-Hub proposal (as a single institution, a subawardee, or a member of a collaborative research project).

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

An individual may only serve as PI or Co-PI of one S-STEM-REC proposal or one S-STEM-Hub proposal.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Submission of Letters of Intent is required. Please see the full text of this solicitation for further information.
- **Preliminary Proposal Submission:** Not required
- **Full Proposals:**
 - Full Proposals submitted via FastLane: *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:**

Other budgetary limitations apply. Please see the full text of this solicitation for further information.

C. Due Dates

- **Letter of Intent Due Date(s) (required)** (due by 5 p.m. submitter's local time):

February 02, 2022

Letter of Intent for Resource and Evaluation Center

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

March 22, 2022

Full Proposal Deadline for both S-STEM Resource and Evaluation Center and S-STEM Research Hub proposals.

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:

Additional reporting requirements apply. Please see the full text of this solicitation for further information.

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I. INTRODUCTION

Through this solicitation, NSF seeks to foster a community for S-STEM stakeholders and further develop the infrastructure needed to generate and disseminate new knowledge, successful practices and effective design principles arising from NSF S-STEM projects nationwide. To support collaboration within the S-STEM network, NSF will fund two types of investments: An S-STEM Resource and Evaluation Center (S-STEM-REC) and several S-STEM Research Hubs (S-STEM-Hub).

The S-STEM Network (S-STEM-Net) will collaborate to create synergies and sustain a robust national ecosystem consisting of multi-sector partners supporting domestic low-income STEM students in achieving their career goals, while also ensuring access, inclusion, and adaptability to changing learning needs. The infrastructure formed by the Hubs and the REC will also synthesize current achievements and investigate evolving barriers to the success of this student population. It will also disseminate the context and circumstances by which interventions and practices that support graduation of domestic low-income students

pursuing careers in STEM are successful.

The target audience for this dissemination effort is the community of higher education institutions, faculty, scholars, researchers and evaluators, local and regional organizations, industry, and nonprofit, federal, state, and local agencies concerned with the success of domestic low-income STEM students in the United States.

II. PROGRAM DESCRIPTION

S-STEM-Net investments:

This solicitation supports two types of investments with distinct objectives and goals.

- S-STEM Resource & Evaluation Center (S-STEM-REC): A maximum of \$17 million (up to \$3,400,000 per year for a maximum of 5 years) will be awarded to support one (1) S-STEM-REC.
- S-STEM Research Hubs (S-STEM-Hubs): A maximum of \$3 million (up to \$3 million over a period of up to five years per S-STEM-Hub) will be awarded to support up to ten (10) S-STEM-Hubs for a total investment of \$30 million.

Letters of intent will:

- be required from proposers intending to submit a proposal for the S-STEM-REC competition only;
- not be required from proposers of S-STEM-Hubs.

Requirements for both the S-STEM REC and S-STEM Hubs:

Lead Organization: The lead organization must demonstrate significant experience with the S-STEM program, support of domestic low-income students in STEM, and/or management of services similar to those proposed.

Evaluation: Proposals must include formative and summative assessments of the quality and success of the S-STEM-REC or S-STEM-Hub activities as appropriate. This evaluation must be conducted by an independent experienced evaluator who is external to the project and to the institution.

Letters of Collaboration: All institutional collaborations must be ratified by a corresponding letter of collaboration signed by an administrator (dean or above) following the PAPPG requirements for these letters, confirming that the institution is aware of the proposed work and willing to support the project in full if awarded.

Participation in S-STEM PI meeting: PI and Co-PIs should plan to participate in the S-STEM PI meeting that occurs every other year in Washington D.C. Budgets should include travel for the leadership team for the 3-day event in years 1, 3 and 5 of the execution.

a. S-STEM Resource and Evaluation Center (S-STEM-REC)

Number, Funding Level and Goal

S-STEM seeks proposals that will result in a single award for the development and implementation of an S-STEM Resource and Evaluation Center to serve the S-STEM Network.

The primary goal of the S-STEM-REC is to serve as a resource center for S-STEM stakeholders, strengthening the impact of S-STEM investments by disseminating successful practices and the outcomes and achievements of S-STEM program investments as a whole. It will do so by:

- (1) building, supporting, and expanding the national S-STEM community of stakeholders and,
- (2) synthesizing and disseminating evidence of S-STEM program outcomes and achievements (including S-STEM core scholarship sites and S-STEM-Hubs).

S-STEM stakeholders may be institutions with S-STEM awards, their administrators, faculty, and officers engaged in S-STEM activities (financial aid officers; student services; residential services, etc.), professional societies, S-STEM scholars, government (local, state and/or federal) agencies, nonprofit organizations, private sector businesses, and other scientists, as appropriate. The S-STEM-REC should plan a mechanism to collect annual feedback on how well it is meeting S-STEM stakeholders' needs and expectations.

Critical S-STEM-REC Activities: Two types of activities are required:

1. *Building, Supporting, and Expanding the S-STEM Community.* S-STEM-REC will create a network of S-STEM awardees and prospective awardees and other stakeholders through meetings, communications, and other methods that encourage sharing of knowledge, deliverables, practices, and findings across projects. The network will be fostered by nurturing S-STEM communities (including PIs, faculty, evaluators, financial aid officers, administrators, and undergraduate and graduate students) and encouraging broader participation by all types of institutions.

S-STEM-REC proposals must describe plans to:

- Provide webinars, resource materials, newsletters, workshops, and other engagement opportunities for S-STEM community members to collaboratively discuss and explore:
 - interventions to foster the success of low-income STEM students;
 - research directions and methods that might be particularly important to expand the literature relating to the goals of the S-STEM program;
 - issues related to evaluation of S-STEM projects.
- Search for, validate, update, and broadly distribute exemplary materials, evidence-based interventions, and pedagogical practices adapted or designed by S-STEM projects and other appropriate sources;
- Partner with industry and professional societies to identify and broadcast areas of opportunity that might be targeted by S-STEM projects, such as computational skills, professional development opportunities, internships, and other structured career pathways and competencies that demonstrate potential to prepare scholars for jobs in areas of national need upon graduation;
- Support coordination of S-STEM projects with industry, government and nonprofit organizations that might support both internships and entry-level jobs for undergraduate and graduate S-STEM scholars;
- Support coordination of opportunities across S-STEM institutions, such as post-baccalaureate programs ("post-baccs") in those disciplines when this is appropriate, and other bridge programs to graduate studies, summer research, and additional professional development activities that may not be available in all campuses;

- Provide technical assistance on the design of project evaluation plans to current and prospective awardees;
- Organize an annual S-STEM Scholar meeting, providing funding for student participation, offering professional development opportunities such as workshops, information on internship programs, mentoring opportunities, and job fairs and related interactions with employers seeking STEM-capable employees. Training and mentoring to apply to graduate school as well as sessions to share resources and advice about research opportunities, graduate internships, "post-bacs," and future graduate study must also be included. The S-STEM Scholar meeting should also be used as an opportunity to listen to and record the experiences of actual scholars, providing a venue for the S-STEM-REC to gather primary data and communicate successes, experiences, and concerns of the direct beneficiaries of the program;
- Develop an online communications platform, or portal, to link the S-STEM-REC with the external community and disseminate information to the public. Although this portal is essential, it is not sufficient to fully meet the dissemination requirements for the S-STEM-REC. The portal should convey information regarding:
 - The network of S-STEM projects (including S-STEM-Hubs);
 - The outcomes and achievements of the S-STEM program;
 - Conferences, seminars, mailing lists and other networking opportunities for researchers, faculty, institutions, administrators, and other interested stakeholders;
 - Resources and professional development opportunities for scholars;
 - Other relevant information.
- An external evaluation of all the REC's activities should be performed every year by an experienced and independent evaluator.

2. *Synthesizing evidence of S-STEM Program outcomes and impacts.* The S-STEM-REC is also required to conduct activities that will assist the S-STEM program and NSF's Division of Undergraduate Education in synthesizing evidence of outcomes and impacts across the entire S-STEM portfolio, which currently includes over 500 projects in the United States and territories.

Proposals must:

- Specify how the S-STEM-REC will conceptualize, develop, and implement an appropriate and proven analytical framework to synthesize evidence of S-STEM program outcomes and impacts across the national network;
- Include a timeline specifying the stages needed to implement this analytical framework, obtain data, and generate a high-quality S-STEM Impact Report directed to the public. The first S-STEM Impact Report should be published between the end of the second and the end of the third year of the award; the second Impact Report should be published two years after the first (i.e., twice during the life of the award). It is expected that proposers will engage appropriate professional teams with experience developing data collection strategies, synthesizing information at a large scale, managing databases, developing professional graphic designs, and possessing other expertise, as appropriate. The impact report should make use of professional editing services to maximize readability and ensure its accessibility to a broader nonscientific audience.

At a minimum, the S-STEM Impact Report should meaningfully discuss national outcomes at 4 levels: career outcomes of S-STEM scholars, institutional outcomes, faculty outcomes, and impact of the research findings generated by S-STEM PIs. The S-STEM Impact Report should be of high quality in terms of content and graphical design.

S-STEM-REC proposers should not assume that the data collected regularly from S-STEM awardees through the S-STEM Monitoring System, S-STEM.ORG, will be available to them. Nor should proposers plan to access project reports submitted to NSF unless S-STEM PIs opt to share the reports voluntarily with the REC. Instead, proposers should plan to develop independent data collection strategies aligned with their proposed framework to synthesize outcomes and impact of the program. Surveys, interviews, case studies, and other means for data collection should anticipate missing data and the treatment of non-responses. Proposers should also consider proven methodological approaches to synthesize information about how interventions implemented in different educational contexts to diverse populations in terms of student demographics, disciplines of study, degrees, types of institutions, etc. achieve different or comparable results. Longitudinal case studies that report on the career pathways of S-STEM scholars are welcome.

Organization and Management

S-STEM-REC proposals must include a management plan and a timeline. The management plan should describe who will perform outlined tasks during the project life and define the role of each partner organization, if applicable.

The Lead PI must serve as the REC Director. The REC-Director must possess the scientific, teaching, and mentoring expertise and the project management experience necessary to provide direction, lead and administer the REC. The REC-Director must 1) articulate a vision for the REC that is shared with the REC's faculty, researchers and staff and also with S-STEM stakeholders and NSF; 2) support advancements for the S-STEM program and the S-STEM network; 3) identify S-STEM stakeholder needs and develop solutions; and 4) lead and delegate to the S-STEM-REC partners and collaborators, as appropriate. The PI must dedicate substantial time year-round to perform director's duties (see section V.B -Budget Preparation Instructions for additional details).

It is also expected that S-STEM-REC proposals will budget for a Center Coordinator committed full time to the Center (i.e., 1 FTE) to coordinate the day-to-day operations of the REC. Working closely with the REC Director, make sure staff, collaborators and consultants meet their objectives on a weekly basis. The Center Coordinator acts as guardian of rules, regulations, and policies; serves as resource for all members of the center; and is the center's financial and personnel manager.

b. S-STEM Research Hubs

Number, Funding Level and Goal

The primary goal of each S-STEM Research Hub is to support and carry out high-quality, innovative research on the factors, structures or interventions involved in supporting and promoting the success of domestic low-income undergraduate and graduate STEM students, regardless of other demographic factors. Proposers who wish to focus on specific underrepresented demographic groups regardless of income status might consider applying for an NSF INCLUDES Alliance, or other NSF funding opportunities. Collaborations between S-STEM-Hubs and other NSF-funded initiatives, such as NSF INCLUDES, could be appropriate as long as the S-STEM Research Hub focuses their research activities on the success of low-income students. In addition, proposals aiming to investigate other STEM-related questions or issues but not focused on low-income student success, including those focused on the development of new STEM curriculum or academic programs, or specific research opportunities for undergraduates in some STEM-related topic, are not appropriate for the S-STEM-Hub funding opportunity and will be returned without review.

S-STEM Research Hubs are primarily formed to organize groups of researchers to conduct and disseminate rigorous qualitative and quantitative research on topics related to the S-STEM program and low-income student success. Each Research Hub should have a central focus that intersects a clear group of current and prospective S-STEM institutions. For example, a Research Hub might be organized around research on specific interventions (e.g., impact of math Summer bridge programs) or desirable outcomes (e.g., development of STEM identity) for S-STEM scholars. Other thematic topics that Research Hubs might focus on include research on issues affecting a specific discipline or academic context (e.g., low-income undergraduates in computer science; access to graduate programs for domestic low-income students in strategic disciplines such as quantum science, robotics, or AI; first-generation S-STEM scholars at two-year colleges; low-income veterans pursuing STEM careers). Any other common interests that exist among active S-STEM projects might also be appropriate for development of a Research Hub, including geographic regions with common cultural and other socio-economic factors affecting scholars (e.g., S-STEM Research Hub of the Midwest) or type of institution (e.g., S-STEM Hub for Rural-serving Institutions).

Research Hubs coordinate groups of researchers engaged with S-STEM projects to explore methodologies, data streams, and opportunities for new research directions. Consequently, the Research Hub must conduct activities that will foster new and innovative collaborative research activities involving researchers from beyond the host institution. It is anticipated that the activities in which the hub engages may evolve. Thus, it is important that a Research Hub leverages its inter-institutional nature and builds a flexible structure that could facilitate such changes over its lifespan.

Activities required of all S-STEM-Hub projects:

Regardless of focus, all Research Hubs must propose and budget for activities to:

- identify, develop, and support promising innovative research ideas that generate valuable new knowledge on the US higher education enterprise in general and the S-STEM community in particular;
- gather, analyze, and utilize the data and insights resulting from the experiences of those participating in S-STEM projects to share information about what works and what does not under given circumstances, regarding low-income STEM student achievement;
- share and leverage effective practices on a national scale to improve the achievement and success of domestic low-income students pursuing careers in STEM (including veterans if appropriate);
- provide intellectual infrastructure for collaborations with potential to expand the knowledge base about support for domestic low-income, high-achieving STEM students;
- develop mechanisms for dissemination of successful practices, the context in which they work and research results; and,
- ensure that the Research Hub's activities are inclusive of the broad collection of institutions with S-STEM projects in the research focus of interest including, but not limited to, 2-year colleges, PUIs, minority-serving institutions, and/or research-intensive universities, as appropriate.

Regardless of the focus, all proposals for a Research Hub must describe a plan to include and leverage the diversity of constituents, approaches, disciplines, and ideas that may exist within a thematic topic, and a strategy to explore new knowledge and generate best practices that will be transferable to other locations.

While the exact structure of a Research Hub may take many different forms, a successful S-STEM-Hub proposal must:

- present the rationale for the creation of a Research Hub as opposed to a regular research grant. Research questions grounded in the literature that constitute the starting point for the Hub should also be included;
- justify the research work that otherwise could not be advanced without the funded collaboration (why a large award with multiple PIs is needed);
- identify the relevant stakeholders for the proposed Research Hub focus;
- involve multiple S-STEM constituencies and institutions and present a clear plan to recruit researchers and solicit perspectives and expertise from institutions including, but not limited to, 2-year colleges, PUIs, minority-serving institutions, and/or research-intensive universities, as appropriate;
- demonstrate that the proposed S-STEM-Hub's leadership and advisory structures are reflective of the institution types that most significantly intersect their focus area;
- describe how the S-STEM-Hub will leverage diverse institutional data streams and/or tackle challenges that cannot be accomplished by a single institution or a team of PIs; and
- describe a project management plan and a mechanism to encourage and enable interaction between S-STEM-Hub stakeholders.
- present an external evaluation plan for the Hub's activities.

III. AWARD INFORMATION

Anticipated Type of Award: Cooperative Agreement or Standard Grant

Estimated Number of Awards: 1 to 11

S-STEM-REC - one award, as a cooperative agreement.

S-STEM-Hub - up to 10 awards, as standard grants.

Anticipated Funding Amount: \$45,000,000

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Institutions of Higher Education (IHEs) - Two- and four-year IHEs (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Special Instructions for International Branch Campuses of US IHEs: If the proposal includes funding to be provided to an international branch campus of a US institution of higher education (including through use of subawards and consultant arrangements), the proposer must explain the benefit(s) to the project of performance at the international branch campus, and justify why the project activities cannot be performed at the US campus.
- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

An organization may submit one S-STEM-REC proposal (as a single institution, a subawardee, or a member of a collaborative research project), and

An organization may submit at most one S-STEM-Hub proposal (as a single institution, a subawardee, or a member of a collaborative research project).

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

An individual may only serve as PI or Co-PI of one S-STEM-REC proposal or one S-STEM-Hub proposal.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Letters of Intent (required):

For S-STEM-REC proposals only, proposers must complete a letter of intent (LOI). The content of LOIs is not evaluated and is used for NSF merit review planning purposes only. Submitting an LOI is required prior to full S-STEM-REC proposal submission. LOIs must include the following information:

1. Lead organization, and potential sub-awardees.
2. Lead PI, Co-PIs, and Senior Personnel: LOIs allow for a maximum of 4 additional Co-PIs/Senior Personnel. In accordance with the guidance in the PAPPG, the full proposal may identify one PI and up to four Co-PIs. All other Senior Personnel should be identified as additional Senior Personnel.
3. A description of the initial S-STEM-REC general concept to be proposed and the experience the Lead PI and proposing institution have that provide evidence of the ability to manage a center of this size and scope.
4. Email and phone number of lead PI

Letter of Intent Preparation Instructions:

When submitting a Letter of Intent through FastLane in response to this Program Solicitation please note the conditions outlined below:

- Submission by an Authorized Organizational Representative (AOR) is required when submitting Letters of Intent.
- A Minimum of 1 and Maximum of 4 Other Senior Project Personnel are permitted
- A Minimum of 1 and Maximum of 4 Other Participating Organizations are permitted
- Lead PI name, email, and phone number is required when submitting Letters of Intent
- Initial S-STEM-REC Concept is required when submitting Letters of Intent
- List of Sub-Awardees is required when submitting Letters of Intent
- Submission of multiple Letters of Intent is permitted

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

- Full proposals submitted via FastLane: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the *NSF Proposal & Award Policies & 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. Proposers are reminded to identify this program solicitation number in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.
- 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.

In determining which method to utilize in the electronic preparation and submission of the proposal, please note the following:

Collaborative Proposals. All collaborative proposals submitted as separate submissions from multiple organizations must be submitted via FastLane. PAPPG Chapter II.D.3 provides additional information on collaborative proposals.

See PAPPG Chapter II.C.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.

Please see Section II of this solicitation for details on all the expected critical activities of S-STEM-Hub or S-STEM-REC and the corresponding requirements for proposals.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

Other Budgetary Limitations:

For S-STEM-REC proposals, limit of \$3.4 million per year for a maximum of 5 years. See budget preparations requirements section for other details.

For S-STEM-Hub proposals, limit of \$3 million total over a maximum of 5 years.

Budget Preparation Instructions:

For S-STEM-REC proposals only:

- The budget should reflect the lead PI's time commitment at the appropriate level of responsibility. Proposal budgets are encouraged to include funds for either: (a) significant academic year release time and summer support for the Lead PI holding 9-month positions; or (b) significant calendar year effort for PIs holding 12-month appointments or soft money positions. This solicitation allows institutions to charge the salary of the lead PI to the REC's budget even beyond the 2-month limit stipulated in the PAPPG. The PI's effort should be reimbursed consistent with the institution's policies and summarized in the Budget Justification.
- Organization costs for the S-STEM Annual Scholar Meeting and associated events should also be included. A timeline in tabular form detailing the activities leading to the annual event with their associated costs should be included in the budget justification.
- Proposers must include travel support for active S-STEM scholars to participate in the S-STEM Scholar Annual Meeting. There are approximately 500 active S-STEM projects supporting a range from 5-100 unique students per year each. Proposers should include travel and lodging expenses for at least 1000 scholars per year in their annual budgets and record these expenses as participant support. Virtual participation of additional scholars could be considered, if needed.
- Costs associated with developing and implementing the synthesis framework and the biennial S-STEM Impact Report should consider the report lifecycle every two years, including development, data collection, analysis, editing, publication, and dissemination of the report.
- Costs associated with the development and implementation of all the required activities are allowed and should be justified in detail in the budget justification, including time commitment of all the REC's staff, Center Coordinator, consultants, etc.

Both, S-STEM-REC and S-STEM-Hub proposers should budget for an external evaluator to evaluate the project and provide reports of at least 2 formative evaluation exercises during the life of the award and one summative evaluation report at the end of the award.

All proposers should also include their travel funds for the entire leadership team to attend the 3-day S-STEM PI Meeting in Washington D.C. every other year.

C. Due Dates

- **Letter of Intent Due Date(s) (required)** (due by 5 p.m. submitter's local time):

February 02, 2022

Letter of Intent for Resource and Evaluation Center

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

March 22, 2022

Full Proposal Deadline for both S-STEM Resource and Evaluation Center and S-STEM Research Hub proposals.

D. FastLane/Grants.gov Requirements

For Proposals Submitted Via FastLane:

To prepare and submit a proposal via FastLane, see detailed technical instructions available at: <https://www.fastlane.nsf.gov/a1/newstan.htm>. For FastLane user support, call the NSF Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov. The NSF Help Desk answers general technical questions related to the use of the FastLane and Research.gov systems. 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.

For Proposals Submitted Via Grants.gov:

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for any federal grant 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 (see link in Section V.A) provides instructions regarding the technical 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: Once all documents have been completed, the Authorized Organizational Representative (AOR) must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The AOR must then sign and submit the application to Grants.gov. The completed application will be transferred to the NSF FastLane system for further processing.

Proposers that submitted via FastLane may use Research.gov to verify the status of their submission to NSF. For proposers that submitted via Grants.gov, until an application has been received and validated by NSF, the Authorized Organizational Representative may check the status of an application on Grants.gov. After proposers have received an e-mail notification from NSF, Research.gov should be used to check the status of an application.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program for acknowledgment 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 *Building the Future: Investing in Discovery and Innovation - NSF Strategic Plan for Fiscal Years (FY) 2018 – 2022*. 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.C.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.C.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

In addition to the Intellectual Merit and Broader Impact criteria, for S-STEM-REC proposals only, reviewers will be asked to consider the evidence of the following central aspects:

- The extent to which the proposed work meets the expectations and requirements for the S-STEM-REC discussed in *Section II. Program Description*;
- The evidence that the institution(s) and PI team have successfully managed projects or initiatives with comparable scope to the S-STEM-REC and at a similar scale in terms of breath of activity and budget;
- The quality of the framework proposed for synthesis of S-STEM outcomes and impacts and the likelihood that the proposed synthesis will be accomplished on time for publication of the report as per the timeline outlined in the solicitation;
- The commitment of all institutions involved to the success of the S-STEM-REC and the institutional and PI team experience with either the S-STEM Program or with research on low-income student academic and career success in STEM.

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 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 a Grants Officer in the Division of Grants and Agreements. 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. Cooperative agreements also are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization 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.

Special Award Conditions:

Standard NSF award conditions apply for S-STEM-Hub.

The S-STEM-REC award will be made in the form of Cooperative Agreement. The Cooperative Agreement will have an extensive section of Special Conditions relating to the period of performance, detailed work description, awardee responsibilities, NSF responsibilities, joint NSF- awardee responsibilities, funding and funding schedule, reporting and evaluation requirements, key personnel, and other conditions. NSF will provide general oversight and monitoring of the S-STEM-REC to help assure effective performance and administration, as well as facilitating any coordination necessary to further the objectives of the S-STEM-REC and the S-STEM program as a whole.

Within the first 90 days of the award, the lead organization of the S-STEM-REC should submit to NSF an integrated and coordinated strategic plan for addressing the goals and objectives delineated in this solicitation and addressed in the proposal including a virtual infrastructure to facilitate collaborative activities and the accomplishment and implementation of a set of specified activities and targeted outcomes.

As part of the NSF Management/Oversight of the **S-STEM-REC**, the NSF Managing Program Director and an ad-hoc NSF Site Visit Team will schedule an annual site visit to interact with the S-STEM-REC and give feedback to the S-STEM-REC leadership.

Any cooperative agreement awarded in response to this solicitation will contain the following term and condition:

Ensuring Adequate COVID-19 Safety Protocols

(a) This clause implements Section 3(b) of Executive Order 14042, Ensuring Adequate COVID Safety Protocols for Federal Contractors, dated September 9, 2021 (published in the Federal Register on September 14, 2021, 86 FR 50985). Note that the Department of Labor has included "cooperative agreements" within the definition of "contract-like instrument" in its rule referenced at Section 2(e) of this Executive Order, which provides:

For purposes of this order, the term "contract or contract-like instrument" shall have the meaning set forth in the Department of Labor's proposed rule, "Increasing the Minimum Wage for Federal Contractors," 86 Fed. Reg. 38816, 38887 (July 22, 2021). If the Department of Labor issues a final rule relating to that proposed rule, that term shall have the meaning set forth in that final rule.

(b) The awardee must comply with all guidance, including guidance conveyed through Frequently Asked Questions, as amended during the performance of this award, for awardee workplace locations published by the Safer Federal Workforce Task Force (Task Force Guidance) at <https://www.saferfederalworkforce.gov/contractors/>.

(c) *Subawards*. The awardee must include the substance of this clause, including this paragraph (c), in subawards at any tier that exceed the simplified acquisition threshold, as defined in Federal Acquisition Regulation 2.101 on the date of subaward, and are for services, including construction, performed in whole or in part within the United States or its outlying areas. That threshold is presently \$250,000.

(d) *Definition*. As used in this clause, *United States or its outlying areas* means:

- (1) The fifty States;
- (2) The District of Columbia;
- (3) The commonwealths of Puerto Rico and the Northern Mariana Islands;
- (4) The territories of American Samoa, Guam, and the United States Virgin Islands; and
- (5) The minor outlying islands of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Palmyra Atoll, and Wake Atoll.

(e) The Foundation will take no action to enforce this article, where the place of performance identified in the award is in a U.S. state or outlying area subject to a court order prohibiting the application of requirements pursuant to the Executive Order (hereinafter, "Excluded State or Outlying Area"). A current list of such Excluded States and Outlying Areas is maintained at <https://www.saferfederalworkforce.gov/contractors/>.

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.

Additional Reporting Requirements

S-STEM-REC awardees should plan for annual site visit by NSF staff.

As part of their regular management, the S-STEM-REC should plan to collect stakeholder satisfaction data at least once annually and include the results of this community feedback during their interactions with the NSF Site Visit Team. In addition to regular annual reporting, NSF S-STEM-REC awardees will generate and publish a Biennial S-STEM Impact Report. The generation of the Biennial Impact Report includes a synthesis of the impact of the S-STEM program across the Nation for which the S-STEM-REC needs to collect pertinent data and becomes part of the reporting requirements in addition to the regular NSF annual and final reporting requirements for all awardees.

As a cooperative agreement, NSF staff will coordinate regular check ins with the S-STEM-REC leadership, at least once every quarter or more frequently as needed.

S-STEM-Hub awardees should plan for a reverse site visit every other year. Reverse site visits will generally occur at the beginning of years 3 and 5 of the award during the PI meeting in Washington D.C. These reviews will focus on accomplishments, challenges, changes in the project, and lessons learned. PIs will be provided with expectations and requirements at least 3 months in advance of the review.

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:

- Alexandra Medina-Borja, Lead, telephone: (703) 292-7557, email: amedinab@nsf.gov
- Thomas D. Kim, Co-Lead, telephone: (703) 292-4458, email: tkim@nsf.gov
- Michael J. Ferrara, Co-Lead, telephone: (703) 292-2635, email: mferrara@nsf.gov

For questions related to the use of FastLane or Research.gov, contact:

- FastLane and Research.gov Help Desk: 1-800-673-6188
- FastLane Help Desk e-mail: fastlane@nsf.gov
- 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.E.6 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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