Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)

NSF INCLUDES Alliances

PROGRAM SOLICITATION
NSF 20-569

REPLACES DOCUMENT(S):
NSF 18-529

National Science Foundation

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

October 05, 2020

October 04, 2021

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

January 26, 2021

January 25, 2022

IMPORTANT INFORMATION AND REVISION NOTES

- A Letter of Intent is required for all proposal submissions and must be submitted via FastLane by the due dates listed above.
- Prior NSF INCLUDES funding is not required to be eligible to submit an Alliance proposal.
- An NSF INCLUDES Planning Grant is not a prerequisite to submit an Alliance proposal.
- The inclusion of an NSF INCLUDES Design and Development Launch Pilot Project Principal Investigator and/or Co-Principal Investigator is encouraged but not required.
- There are limits on the number of proposals that may be submitted per organization and per PI or Co-PI.

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 20-1), which is effective for proposals submitted, or due, on or after June 1, 2020.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)
NSF INCLUDES Alliances

Synopsis of Program:

In 2016, the National Science Foundation (NSF) unveiled a set of “Big Ideas,” 10 bold, long-term research and process ideas that identify areas for future investment at the frontiers of science and engineering (see https://www.nsf.gov/news/special_reports/big_ideas/index.jsp). The Big Ideas represent unique opportunities to position our Nation at the cutting edge of global science and engineering leadership by bringing together diverse disciplinary perspectives to support convergence research. As such, when responding to this solicitation, even though proposals must be submitted to the Education and Human Resources (EHR) Directorate/Division of Human Resource Development (HRD), once received, the proposals will be managed

by a cross-disciplinary team of NSF Program Directors.

The NSF INCLUDES Big Idea is a comprehensive national initiative to enhance U.S. leadership in science, technology, engineering, and mathematics (STEM) discoveries and innovations focused on NSF's commitment to diversity, inclusion, and broadening participation in these fields. The vision of NSF INCLUDES is to catalyze the STEM enterprise to work collaboratively for inclusive change, resulting in a STEM workforce that reflects the population of the Nation. More specifically, NSF INCLUDES seeks to improve collaborative efforts aimed at enhancing the preparation, increasing the participation, and ensuring the contributions of individuals from groups that have been historically underrepresented and underserved in the STEM enterprise such as African Americans, Alaska Natives, Hispanics, Native Americans, Native Hawaiians, Native Pacific Islanders, persons with disabilities, persons from economically disadvantaged backgrounds, and women and girls. Significant advancement in the inclusion of underrepresented groups in STEM will result in a new generation of STEM talent and leadership to secure our nation's future and long-term economic competitiveness.

The NSF INCLUDES National Network is composed of:

- Alliances,
- Design and Development Launch Pilots,
- Coordination Hub,
- Other NSF funded projects,
- Federal Coordination in STEM (FC-STEM) agencies,
- Scholars engaged in broadening participation research, and
- Organizations that support the development of talent from all sectors of society to build an inclusive STEM workforce.

A hallmark of NSF INCLUDES is the focus on the five design elements of collaborative infrastructure to achieve systemic change. Collaborative infrastructure refers to the process by which partnering organizations come together to map out mutually reinforcing activities through: (1) shared vision, (2) partnerships, (3) goals and metrics, (4) leadership and communication, and (5) expansion, sustainability and scale. Through these five design elements of collaborative infrastructure, the successful implementation of NSF INCLUDES will result in substantial advances toward a diverse, innovative, and well-prepared STEM workforce to support our Nation's economy and continued U.S. leadership in the global STEM enterprise. It is anticipated that NSF's investment will contribute to new and improved STEM career pathways, policies, opportunities to learn, and practices for equity and inclusion. The initiative is supported by the NSF INCLUDES Coordination Hub (www.includesnetwork.org) that provides a framework for communication and networking, network assistance and reinforcement, and visibility and expansion for the NSF INCLUDES National Network as a whole.

Through this solicitation, NSF INCLUDES will support the establishment and growth of new Alliances that employ a collaborative infrastructure approach to address a critical broadening participation challenge in STEM at scale.

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.

- General inquiries may be addressed to:, telephone: (703) 292-2315, email: nsfincludes@nsf.gov

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

- 47.041 --- Engineering
- 47.049 --- Mathematical and Physical Sciences
- 47.050 --- Geosciences
- 47.070 --- Computer and Information Science and Engineering
- 47.074 --- Biological Sciences
- 47.075 --- Social Behavioral and Economic Sciences
- 47.076 --- Education and Human Resources
- 47.079 --- Office of International Science and Engineering
- 47.083 --- Office of Integrative Activities (OIA)

Award Information

Anticipated Type of Award: Cooperative Agreement

Estimated Number of Awards: 1 to 3

NSF INCLUDES anticipates funding up to three Alliances with a duration of five years, contingent upon the availability of funds and receipt of competitive proposals. Awards will range from $1,000,000 - $2,000,000 per year.

Anticipated Funding Amount: $2,000,000 to $3,000,000

In FY 2021, approximately $3,000,000 is available to fund the first year of Alliance cooperative agreements. NSF INCLUDES expects to provide up to $10 million in support for each Alliance over a five-year period of performance, contingent upon the availability of funds.

Eligibility Information

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Chapter I.E. Unaffiliated individuals are not eligible to submit proposals in response to this solicitation.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

An organization may serve as a lead organization on only one proposal. Proposals that exceed the organizational limit (beyond the first submission based on timestamp) will be returned without review. **No exceptions will be made.**

Full proposals involving multiple organizations may be submitted two ways:

- a single submission from a lead organization, with other collaborating organizations included as subawardees, OR
- separate submissions from a lead organization and ONE collaborating organization, with any additional collaborating organizations included as subawardees.

See PAPPG Chapter II.D.3 for additional information on collaborative proposals.

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

An individual may serve as a PI or Co-PI on only one NSF INCLUDES Alliance proposal. Proposals that exceed the PI or Co-PI limit (beyond the first submission based on timestamp) will be returned without review. **No exceptions will be made.**

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:**

  Not Applicable

C. Due Dates

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

  October 05, 2020

  October 04, 2021

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

  January 26, 2021

  January 25, 2022

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

The vision of the NSF INCLUDES Big Idea is to catalyze the STEM enterprise to work collaboratively for inclusive change, resulting in a STEM workforce that reflects the population of the Nation. More specifically, NSF INCLUDES seeks to broaden participation in STEM fields through a National Network that will inspire collaborative efforts aimed at increasing the active participation of those who have been historically underrepresented and underserved in STEM.

The NSF INCLUDES National Network is composed of NSF INCLUDES Alliances, Design and Development Launch Pilots, Coordination Hub, NSF funded projects (such as centers, facilities and networks, and other projects with broadening participation components), scholars engaged in broadening participation research, Federal Coordination in STEM (FC-STEM) agencies, and organizations that support the goals of NSF INCLUDES.

NSF INCLUDES is distinguished by its focus on new networks, systems, and partnerships; its approach to using data for change; and its focus on communicating impacts and results at scale. The initiative is fostering the creation of exemplars for designing, implementing, studying, and refining collaborative change models that are based on collective impact-style approaches, and networks that support adoption and adaptation at scale.

With this solicitation, NSF is continuing to offer opportunities to propose an NSF INCLUDES Alliance that has the potential to substantially broaden the participation of individuals from underrepresented and underserved groups in STEM, especially in STEM fields that lack diversity. Alliances use lessons learned, promising practices, evidence-based mechanisms, the science of broadening participation, and the research and evaluations from past and present efforts related to broadening participation in STEM. Alliances bring together programs, people, organizations, technologies, and institutions to achieve results at scale, provide new research, and leverage NSF's broadening participation investments. Each Alliance is committed to collectively achieving common goals through a well-defined set of common objectives.

The NSF INCLUDES approach requires that each Alliance focus not only on its own vision and goals, but also work with other organizations within the NSF INCLUDES National Network (includesnetwork.org). This is a shift from current practice, which often involves highly successful but locally concentrated efforts. The NSF INCLUDES Big Idea aims to systematically build a network that is mobilizing communities with evidence-based strategies for broadening participation in STEM, bringing renewed emphasis and resources to increase diversity across and within STEM fields at scale.

Inclusion of talent from all sectors of American society is necessary for the health and vitality of science and engineering and its societal relevance. This solicitation seeks to support diverse perspectives and new networks, systems, partnerships, and approaches. While the inclusion of previously supported NSF INCLUDES Design and Development Launch Pilots is encouraged, it is not required. **This solicitation is open to organizations and established networks across the educational continuum (e.g., preK-12, higher education, general public) and contexts (e.g., formal, informal) with the expertise, partnerships, and capacity to address a critical broadening participation challenge in STEM at scale through an NSF INCLUDES Alliance.** Researchers and practitioners at minority serving institutions are strongly encouraged to consider this opportunity given their experience and expertise in broadening participation contexts.

II. PROGRAM DESCRIPTION

The NSF INCLUDES Big Idea is a strategic addition to the NSF portfolio that provides a distinctive approach to addressing broadening participation

challenges faced by underrepresented and underserved groups in STEM through collaborative networks and partnerships. NSF INCLUDES builds on and amplifies other investments that NSF has made in broadening participation over many decades. Aligned with the White House five-year strategic plan for STEM education, Charting a Course for Success: America's Strategy for STEM Education, projects funded by this Big Idea help to increase diversity, equity, and inclusion in STEM through strategic partnerships and convergent approaches. The Alliances are integral to NSF INCLUDES and bring together new partners from many academic and professional disciplines and leverage the five design elements of collaborative infrastructure to address a broadening participation challenge at scale. In FY 2018 and FY 2019, NSF INCLUDES funded a total of eight Alliances. For more information on funded NSF INCLUDES Alliances, visit includesnetwork.org.

With this solicitation, NSF continues to invest in the important work of the NSF INCLUDES Big Idea and invites proposals for NSF INCLUDES Alliances.

NSF INCLUDES Alliances build the infrastructure necessary to foster collaboration and broaden participation in STEM by emphasizing the following five design elements of collaborative infrastructure: (1) Shared Vision, (2) Partnerships, (3) Goals and Metrics, (4) Leadership and Communication, and (5) the Potential for Expansion, Sustainability and Scale. The five design elements of collaborative infrastructure are critical for each NSF INCLUDES Alliance and require Alliances to:

- Develop a shared vision and strategy (e.g., problem statement and theory of change) for broadening the participation of the target population(s) in STEM along with relevant metrics of success and key milestones/goals to be achieved during the project's lifecycle;
- Develop multi-stakeholder partnerships and build infrastructure among them to decrease social distance and achieve progress on common goals targeted by the Alliance;
- Contribute to the knowledge base on broadening participation in STEM through broadening participation and implementation research, sharing project evaluations, data, new scientific findings/discoveries, and promising practices;
- Establish a "backbone" or support organization that provides a framework for communication and networking, network assistance and reinforcement, visibility and expansion of the Alliance and its partners, that will collaborate with the NSF INCLUDES Coordination Hub;
- Advance a logic model or other heuristic that identifies Alliance outcomes that reflect implementation of change at scale and progress toward developing an inclusive STEM enterprise.

Collectively, NSF INCLUDES Alliances:

- Participate in a network of peer alliances to achieve long-term goals of the NSF INCLUDES Big Idea;
- Collaborate with the NSF INCLUDES Coordination Hub to build critical knowledge that shows measurable progress toward short-term and long-term goals; and
- Work to build connections to other organizations and broadening participation stakeholders to join in and expand the NSF National Network.

In addition to addressing the five design elements of collaborative infrastructure, Alliances connect and contribute to the **NSF INCLUDES National Network** through the Alliance backbone support organization, the NSF INCLUDES Coordination Hub, current and potential partnerships, capacity building, resource sharing and/or other mechanisms.

Proposals are especially encouraged that address broadening participation challenges not yet represented in the NSF INCLUDES portfolio of Alliances. For more information on funded NSF INCLUDES projects, see: https://www.nsf.gov/awardsearch/simpleSearchResult?queryText=nsf+includes.

NSF INCLUDES is one of the NSF 10 Big Ideas for future investment. Broadening participation challenges that connect to the other NSF 10 Big Ideas might also be considered. The other Big Ideas include: Future of Work at the Human-Technology Frontier, Growing Convergence Research, Harnessing the Data Revolution, Mid-scale Research Infrastructure, Navigating the New Arctic, NSF 2026, Quantum Leap, Understanding the Rules of Life, and Windows on the Universe. For more information regarding the NSF 10 Big Ideas, see: https://www.nsf.gov/news/special_reports/big_ideas/.

III. AWARD INFORMATION

NSF anticipates making up to three Alliance awards with a duration of five years, contingent on availability of funds and receipt of competitive proposals. Awards will range from $1.0 to $2.0 million per year for five years depending on the goals, objectives, and the size of the communities involved. Awards will be made as Cooperative Agreements, with ongoing support contingent upon satisfactory performance as assessed through reviews of annual progress reports, biennial site (or reverse site) visits, annual reviews of the NSF INCLUDES Alliances' strategic plans, and the availability of funds. The total amount of NSF's investment in any one NSF INCLUDES Alliance will depend upon the needs, plans, and opportunities offered by the Alliance.

In reviewing an NSF INCLUDES Alliance's progress and assessing future plans, NSF will emphasize the NSF INCLUDES Alliance's performance in the following areas: (1) establishing an Alliance-wide shared broadening participation agenda and coordinating the Alliance's collaborative change activities and infrastructure, including the establishment of a "backbone" or support organization; (2) facilitating the Alliance's ability to work collectively (3) effectively managing the Alliance's shared goals and metrics, including providing evidence that the activities of the Alliance have increased participation in STEM for the target population(s); (4) demonstrating leadership across all Alliance partners and collaborating with the NSF INCLUDES Coordination Hub to engage with the broader NSF INCLUDES National Network; and (5) enhancing the potential for the Alliance to expand and sustain activities over time, and have an impact on a broad scale. Oversight for NSF INCLUDES Alliances is the responsibility of all NSF Directorates and Offices supporting NSF INCLUDES.

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:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Chapter I.E. Unaffiliated individuals are not eligible to submit proposals in response to this solicitation.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

An organization may serve as a lead organization on only one proposal. Proposals that exceed the organizational limit (beyond the first submission based on timestamp) will be returned without review. **No exceptions will be made.**

Full proposals involving multiple organizations may be submitted two ways:

- a single submission from a lead organization, with other collaborating organizations included as subawardees, OR
- separate submissions from a lead organization and ONE collaborating organization, with any additional collaborating organizations included as subawardees.

See PAPPG Chapter II.D.3 for additional information on collaborative proposals.

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

An individual may serve as a PI or Co-PI on only one NSF INCLUDES Alliance proposal. Proposals that exceed the PI or Co-PI limit (beyond the first submission based on timestamp) will be returned without review. **No exceptions will be made.**

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Letters of Intent *(required)*:

Letters of Intent must be submitted through FastLane by an Authorized Organizational Representative (AOR) and the project title must begin with "NSF INCLUDES Alliance LOI:". **Any full proposals received that did not submit a Letter of Intent by the required deadline will be returned without review**. The Letter of Intent should identify the name and organizations of the PI, Co-PIs and other key personnel who will be involved with the project. The lead organization should be explicitly identified.

The Letter of Intent should include a brief synopsis (**less than 2,500 characters**) of:

- the target population(s) and critical broadening participation in STEM challenge to be addressed through the Alliance,
- the proposed collaborative infrastructure theory of action (e.g., collective impact, networked improvement community),
- the Alliance design and activities to be undertaken, and
- a list of potential partners.

Letters of Intent are required but not binding. They will be used by NSF program staff to gauge the number of proposals likely to be submitted and to identify the types of reviewer expertise that will be required.

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.
- Submission of multiple Letters of Intent is not 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.

Special instructions for submitting to this Big Idea solicitation

- **FastLane Users:** Proposers are reminded to identify the program solicitation number (located on the first page of this document) in the first block on the NSF Cover Sheet. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Please note that even though proposals must be submitted to the **Directorate for Education and Human Resources/Division of Human Resource Development,** once received the proposals will be managed by a cross-disciplinary team of NSF Program Directors.
- **Grants.gov Users:** The program solicitation number will be pre-populated by Grants.gov on the NSF Grant Application Cover Page, however you will need to locate the Division Code, Program Code, Division Name, and Program Name for the specific solicitation you are applying to by visiting https://www.fastlane.nsf.gov/pgmannounce.jsp. As stated previously, even though proposals must be submitted to the **Directorate for Education and Human Resources/Division of Human Resource Development**, once received the proposals will be managed by a cross-disciplinary team of NSF.

Cover Sheet: Entries on the Cover Sheet are described in the PAPPG and NSF Grants.gov Application Guide. For planning purposes, July 1, 2021 or July 1, 2022, should be shown as the start date. Projects are limited to one Principal Investigator and a maximum of four co-Principal Investigators.

Title of Proposed Project: The title of the proposed project should begin with the term: "NSF INCLUDES Alliance:"

Project Summary (1 page): Provide an overview of the proposed NSF INCLUDES Alliance and separately address the Intellectual Merit and Broader Impacts. The summary should be written in the third person, informative to those working in the same or related field(s), and insofar as possible, understandable to a broad audience within the scientific domain. Provide a clear and concise description of the NSF INCLUDES Alliance's target population(s), vision and its plans for partnerships; shared goals and metrics; leadership and communication; and expansion, sustainability, and scale.

Project Description. The project description should provide a clear statement of the work to be undertaken and must include the objectives for the period of the proposed work and expected significance. Each proposal must explain how they will build the infrastructure to foster collaboration and achieve impact by emphasizing the following five design elements of collaborative infrastructure: (1) Shared Vision, (2) Partnerships, (3) Goals and Metrics, (4) Leadership and Communication, and (5) the Potential for Expansion, Sustainability, and Scale. Within the context of the five design elements of collaborative infrastructure, proposals should discuss (a) objectives and significance of the proposed activity; (b) the suitability of the methods to be used; (c) the qualifications of the investigators and the participating organizations; and (d) the effect of the effort on collaborative infrastructure for broadening the participation of the target population(s) in STEM.

Project descriptions are a maximum of 20 pages and must contain separate section within the narrative labeled "Broader Impacts." Results of prior NSF support must be discussed if applicable (see PAPPG for guidelines). This solicitation also has additional review criteria outlined in Section VI below.

The most competitive proposals will address the questions and considerations below regarding the five design elements of collaborative infrastructure:

1. **Shared Vision**:
    - What broadening participation challenge(s) will be addressed and what is the broader vision of the Alliance for effecting change?
    - What innovative strategies will be used by the Alliance partnership to address the identified broadening participation challenge(s) for the target population(s)?
    - What is the Alliance's plan to incorporate rigorous and innovative research into Alliance activities and contribute to the knowledge base about broadening participation in STEM? This research may be based in methods and theories from the science of broadening participation and include the social, behavioral, learning, economic, or data sciences.
    - What strategies will build upon the previous expertise and efforts of the Alliance partners?
    - How will the Alliance "backbone" or support organization provide support for the broadening participation challenge(s) that will be addressed by the Alliance?
2. **Partnerships**:
    - What organizations are the proposed partners in the NSF INCLUDES Alliance and why are they important to address the broadening participation challenge(s)?
    - What is the structure of the Alliance's partnerships (i.e. local, regional, national, by disciplinary focus, or by another multisector category)?
    - What mechanism(s) will be used to structure partnerships and clearly communicate the role of each partnering organization?
    - Why is this set of partners the right set to undertake the collaborative activities and effect the identified shared vision?
    - What is the evidence that the partnership will be able to use a collaborative change framework (such as collective impact or networked improvement communities) to achieve the broadening participation goals of the Alliance?
    - What will be each Alliance partner's role and what is the justification for that role, based on expertise?
    - What will be the Alliance's management plan and what will be the role of the Alliance "backbone" or support organization?
3. **Goals and Metrics**:
    - What is the plan for accomplishing the work of the NSF INCLUDES Alliance to address the identified broadening participation challenge(s), including the Alliance target population(s), goals, mutually reinforcing activities, measurable objectives and outcomes, and progress indicators?
    - How will progress be documented for the diverse groups of activities and partners described above?
    - What types of data will be collected and how will data be used?
    - How will successfully addressing these objectives position the NSF INCLUDES Alliance for expansion, sustainability, and scale?
    - What role will the Alliance "backbone" or support organization play in collecting, coordinating, analyzing, and sharing data from multiple sites and multiple projects? Proposals should address the complex data collection, data management, and data sharing necessary to build and expand the NSF INCLUDES Alliance, including plans for coordinating metrics and feedback measures with the ongoing work of the NSF INCLUDES Coordination Hub, as it manages the NSF INCLUDES National Network.
    - Who will be the external evaluator for the Alliance and what is the evaluation plan?
4. **Leadership and Communication**:
    - What organizations and individuals will lead the Alliance and how have they demonstrated capacity and vision to develop, manage, and lead?
    - How will the Alliance build capacity for leadership and conflict resolution within and among all partnering organizations?
    - How will the Alliance provide for collective leadership among the partnering organizations?
    - How will project activities, progress, and achievements be broadly shared in new and creative ways with the target population(s) and other communities of interest? The plan should include sharing Alliance research, evaluation, and knowledge synthesis with the NSF INCLUDES National Network, the NSF INCLUDES Coordination Hub, and other interested stakeholders.

- How will the Alliance "backbone" or support organization leverage technology to facilitate connectivity among the partners?

5. **Potential for Expansion, Sustainability, and Scale**:
   - How will the Alliance's activities contribute to next steps for a research agenda and development plan to expand the Alliance's network of organizations and activities?
   - What strategies will be used to advance the expansion, sustainability, and scale of the Alliance by connecting expertise from multiple sectors and other private and public funders? Include mechanisms for other organizations to "join" or connect to the Alliance.
   - How will Alliance activities build and manage an ecosystem for sustainable change across the Alliance, including communicating the discoveries of and generating enthusiasm for the broadening participation challenge?
   - What will be the overall contribution to broadening the participation of the target population(s) in the nation's scientific workforce?
   - How will the Alliance "backbone" or support organization facilitate these efforts and how will sustainability include long-term engagement of the Alliance "backbone" or support organization?
   - What is the shared vision for flexibility across the Alliance and Alliance "backbone" or support organization to respond to changes over time as the program evolves and new partners join with different levels of experience in collaborative change strategies and broadening participation in STEM?

NSF INCLUDES National Network: In addition to addressing the five design elements of collaborative infrastructure, Alliance proposals should present a reasonable and appropriate plan to connect and contribute to the NSF INCLUDES National Network through the NSF INCLUDES Coordination Hub in the project description. The NSF INCLUDES Coordination Hub works collaboratively with Alliances to promote success and elevate expertise through shared models, measurement practices, tools and resources that support learning, action, and sustainability. It communicates the discoveries of Alliances and other National Network members, builds capacity, and advances expansion and scale by connecting expertise from multiple sectors. The proposal should address how the Alliance will engage with the Coordination Hub using these and other mechanisms to advance the National Network. Potential benefits to the Alliance by participating in the National Network should also be described.

Supplementary Documents: Supplementary documents listed in the PAPPG or NSF Grants.gov Application Guide as required should be appended in the Supplementary Document section.

In addition, please provide the following:

- A list of all project personnel who have a role in the Alliance including their first and last names and their organizational affiliations along with a one-sentence description of their expected role.
- A separate list of all organizations that will participate as partners in the Alliance. Outline the roles and functions each organization will perform in the Alliance.
- Letters of Support from the leadership of the major partners and/or collaborating organizations in the Alliance indicating awareness of and high-level support for and commitment to the NSF INCLUDES Alliance's efforts. Major collaborating organizations include those organizations that will be contributing project personnel and will receive significant budgetary resources from the Alliance award. **This is a deviation from the PAPPG.** Letters of Collaboration are not allowed under this solicitation.

Additional Guidance - Proposers are reminded to consult the PAPPG for guidance on additional information and documentation (e.g., biographical sketches, budget, data management plan, etc.) that must be included with the proposal submission.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

C. Due Dates

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

  October 05, 2020

  October 04, 2021

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

  January 26, 2021

  January 25, 2022

D. FastLane/Research.gov/Grants.gov Requirements

For Proposals Submitted Via FastLane or Research.gov:

To prepare and submit a proposal via FastLane, see detailed technical instructions available at: https://www.fastlane.nsf.gov/a1/newstan.htm. 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 FastLane or Research.gov user support, call the FastLane and Research.gov Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov or rgov@nsf.gov. The FastLane and Research.gov 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 or Research.gov 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 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 *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 underrepresented minorities 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 NSF Merit Review Criteria, reviewers will be asked to consider the ability of the proposed NSF INCLUDES Alliance to provide the collaborative infrastructure necessary to support the Alliance's partners and activities within the context of the five design elements of collaborative infrastructure and the NSF INCLUDES National Network. Questions to be considered include:

- **Shared Vision**: Is the shared vision for the NSF INCLUDES Alliance sufficiently compelling, ambitious and comprehensive to justify the resources requested?
- **Partnerships**: Is the team of partners and personnel proposed for the NSF INCLUDES Alliance appropriate? Does the partnership have the capacity to act as both a fiscal agent and a team to accomplish the proposed work? Do the partners have the expertise necessary both in broadening participation in STEM and collaborative change strategies? Are all members of the organizational and personnel team meaningfully integrated into an NSF INCLUDES Alliance that is more than just the sum of its parts? Does the Alliance have a viable plan to create and incorporate a "backbone" or support organization into the Alliance?
- **Goals and Metrics**: Is the plan for shaping a common agenda and shared measurement systems appropriate and convincing? Is there a plan for providing evidence that the activities of the Alliance have increased participation in STEM for the target population(s)? Does the proposal include a robust evaluation plan appropriate for informing program management and establishing the NSF INCLUDES Alliance's outcomes and/or impacts? Will the Alliance effectively use a "backbone" or support organization to coordinate shared goals and metrics? Does the Alliance have a plan for integrating data with the NSF INCLUDES National Network through the NSF INCLUDES Coordination Hub?
- **Leadership and Communication**: Does the proposal include a promising plan to promote the development of leadership for the Alliance and within each Alliance partner? Does it incorporate rigorous and innovative research studies into Alliance activities that contribute to the knowledge base about broadening participation in STEM? Is there a credible communication strategy to share knowledge and promising practices both across the Alliance and with the NSF INCLUDES National Network and Coordination Hub? Does the leadership and communication plan effectively use the "backbone" or support organization?
- **Potential for Expansion, Sustainability and Scale**: Does the proposal have a promising plan to support the expansion of the Alliance, provide for long-term sustainability and impact, and manage Alliance scaling? Does the sustainability plan include provisions to maintain the "backbone" or support organization over time?
- **NSF INCLUDES National Network**: Does the proposal have a reasonable and appropriate plan to connect and contribute to the NSF INCLUDES National Network through current and potential partnerships, capacity building, resource sharing and or other mechanisms?

B. Review and Selection Process

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

Letters of Intent

Letters of Intent submitted in response to the NSF INCLUDES Alliance program solicitation will be reviewed and used internally by NSF program staff to gauge the number of proposals likely to be submitted and to identify the types of reviewer expertise that will be required.

Full Proposals

Full proposals may be reviewed in two phases including: (1) review of proposals by ad hoc review or panel, and (2) potentially a reverse site visit with an expert review panel comprised of internal or external reviewers.

The Program Officer and NSF INCLUDES Team will consider the pool of recommendations and using several factors will either make a funding decision or invite proposers for proposals under consideration to NSF to participate in a reverse site visit before a final funding decision is made. Proposing teams invited for a reverse site visit may be asked to further articulate the Alliance's vision and plans, provide additional clarity, address concerns, and or respond to specific inquiries posed by NSF and or an internal or external expert panel. The feedback from the panel, strength of the proposal, and potential for success will be considered.

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:

NSF INCLUDES Alliance awards will be made in the form of Cooperative Agreements. 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 NSF INCLUDES Alliances and external evaluation of the NSF INCLUDES program and National Network, to help assure effective performance and administration, as well as facilitating any coordination necessary to further the objectives of the NSF INCLUDES initiative.

Within the first 90 days of the award, the lead organization of the Alliance should submit to NSF an integrated and coordinated strategic plan for addressing the identified broadening participation challenge(s), including a virtual infrastructure to facilitate collaborative activities and the accomplishment and implementation of a set of specified activities and targeted outcomes.

Grantees will be required to include appropriate acknowledgment of NSF support under the NSF INCLUDES Big Idea in any publication (including World Wide Web pages) of any material based on or developed under the project, in the following terms:

“This material is based upon work supported by the National Science Foundation **NSF INCLUDES** Big Idea under Grant No. (Grantee enters NSF grant number.)”

Grantees also will be required to orally acknowledge NSF support using the language specified above during all news media interviews, including popular media such as radio, television and news magazines.

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.

The NSF INCLUDES Alliance will be required to submit annual and evaluation reports on progress and plans, which will be used as a basis for performance review and determining the obligation of continuing grant increments. Biennial reviews of progress will also take the form of site visit(s) or reverse site visit(s). The NSF INCLUDES Alliance will also be required to develop a set of management and performance indicators for submission annually to NSF. Part of this reporting will include adding to a database that will be kept by the NSF INCLUDES Coordination Hub, for the purpose of developing shared measures for the National Network, and by an NSF INCLUDES evaluator for performance monitoring and evaluation. These data will capture the information required to demonstrate progress towards achieving the goals of the NSF INCLUDES National Network.

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:

- General inquiries may be addressed to:, telephone: (703) 292-2315, email: nsfincludes@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 (FASED) 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) 292-7827
- **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
Office of the General Counsel
National Science Foundation
Alexandria, VA 22314