This solicitation has been archived and replaced by NSF 17-533.

Innovation Corps - National Innovation Network Nodes Program (I-Corps Nodes)

PROGRAM SOLICITATION
NSF 16-539

REPLACES DOCUMENT(S):
NSF 12-586

National Science Foundation

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Education & Human Resources

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

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

March 10, 2016

Second Thursday in March, Annually Thereafter

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

May 10, 2016

Second Tuesday in May, Annually Thereafter

MPORTANT INFORMATION AND REVISION NOTES

Please Note: The solicitation has been modified to now include two tracks:

- **Track 1: *I-Corps Node Development*** - new I-Corps Node applicants, and
- **Track 2**: ***I-Corps Node Renewal*** - previously funded I-Corps Nodes.

Award amounts have changed, and are no longer dependent upon the number of institutions participating in the Node.

A Letter of Intent (LOI) MUST be submitted by the Authorized Organizational Representative (AOR) for either a Track 1 or Track 2 proposal in order to be considered for funding. Full proposals that are submitted without a LOI (that had been received by the appropriate deadline) will be returned without review (RWR).

I-Corps Node awards made under this solicitation will be awarded as cooperative agreements.

Plan for Sustainment - Proposers are **required** to include a plan and timeline for sustainment that details how the Node will work with its related state governments and other partners -- to help support and scale its efforts.

Plan for Coordination with I-Corps Sites - Proposers are **required** to include a strategic plan that details how the Node will collaborate/coordinate with I-Corps Sites that are proximal to their region(s). Nodes are required to coordinate with I-Corps Sites to deliver regional training to a minimum of 5 I-Corps Site teams per year. The strategic plan should describe how the Node will work with I-Corps Sites to annually double the number of teams receiving regional training.

Logic Model - Proposers are **required** to include a logic model that describes the aspects of the Node efforts and the associated data that will be used to measure any commensurate change/success/achievement.

Proposals submitted without a Plan for Sustainment, Plan for Coordination with I-Corps Sites or a Logic Model will be returned without review (RWR).

Informational Webinar: The NSF I-Corps team plans to offer a webinar within approximately 30 days of the release of the solicitation, which will discuss key aspects and expectations of the I-Corps Nodes Program. At NSF's discretion, a recorded version of the webinar may be posted afterward. Questions should be submitted in advance of the webinar to the cognizant Program Officer(s).

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 16-1), which is effective for proposals submitted, or due, on or after January 25, 2016.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Innovation Corps - Nodes Program (I-Corps Nodes)

Synopsis of Program:

The National Science Foundation (NSF) seeks to further develop and nurture a national innovation ecosystem that builds upon fundamental research to guide the output of scientific discoveries closer to the development of technologies, products, processes and services that benefit society. The goal of the program is to dramatically reduce the period of time necessary to bring a promising idea from its inception to widespread implementation.

Through this solicitation, NSF plans to build upon the established National Innovation Network (consisting of I-Corps Nodes and Sites) to further support the needs for innovation research, education and training. NSF is seeking to expand and sustain the network of I-Corps Nodes that work cooperatively to support the development of innovations that will benefit society. The interconnected nodes of the network are expected to be diverse in research areas, resources, tools, programs, capabilities, and geographic locations - providing the network with the flexibility to grow or reconfigure as needs arise.

I-Corps Nodes will foster understanding on how to: 1) identify, develop and support promising ideas that can generate value, 2) create and implement tools, resources and training activities that enhance our nation's innovation capacity, 3) gather, analyze, evaluate and utilize the data and insight resulting from the experiences of those participating in regional programs and 4) share and leverage effective innovation practices on a national scale - to improve the quality of life for the U.S. citizenry. In addition, Nodes must identify and are expected to implement plans for sustainable scaling of their efforts beyond the duration of NSF support.

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.

- Rathindra DasGupta, telephone: (703) 292-8353, email: rdasgupt@nsf.gov
- Lydia McClure, telephone: (703) 292-8798, email: lmcclure@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

Award Information

Anticipated Type of Award: Cooperative Agreement

Estimated Number of Awards: 4 to 7

Anticipated Funding Amount: $6,000,000 to $8,500,000

Track 1: *I-Corps Node Development* - new I-Corps Node awardees - to be supported at a level of up to:

- $1,200,000 (years 1 and 2)
- $900,000 (year 3)
- $600,000 (year 4)
- $300,000 (year 5)

Track 2: *I-Corps Node Renewal* - previously funded I-Corps Nodes - to be supported at a level of up to:

- $900,000 (years 1 and 2)
- $750,000 (year 3)
- $600,000 (year 4)
- $300,000 (year 5)

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:

- Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in, the US acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.
- 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:

The PI must be an academic Administrative Lead at the level of Dean or higher, preferably at the level of a provost or vice-president.

Limit on Number of Proposals per Organization: 1

Organizations may only be a participant in one proposal per deadline. In addition, organizations may only be associated with one I-Corps Node that is receiving funding from NSF at a given time.

PLEASE NOTE: Institutions that are the Lead organization for an existing Node may only participate in a Track 2 proposal submission.

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

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, Part I: Grant Proposal Guide (GPG) Guidelines apply. The complete text of the GPG is available electronically on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg.
  - 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: http://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. proposer's local time):

  March 10, 2016

  Second Thursday in March, Annually Thereafter

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

  May 10, 2016

  Second Tuesday in May, Annually Thereafter

Proposal Review Information Criteria

Merit Review Criteria:

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

Award Administration Information

Award Conditions:

Standard NSF award conditions apply.

Reporting Requirements:

Standard NSF reporting requirements apply.

TABLE OF CONTENTS

I. INTRODUCTION

America's prosperity has originated in part from the ability to capitalize on ground-breaking discoveries from science and engineering research. Simultaneously, a knowledgeable, creative workforce has maintained the country's global leadership in critical areas of technology. These important discoveries and capable workforce resulted from substantial, sustained investment in science and engineering. A strong capacity for translating fundamental scientific discoveries into powerful engines of innovation is essential to maintain our nation's competitive edge in the future.

The National Science Foundation (NSF) supports fundamental research and education in science and engineering. NSF's dual role, unique among government agencies, results in new knowledge and tools as well as a capable, innovative workforce. These complementary building blocks of innovation have led to revolutionary technological advances and wholly new industries.

Through the I-Corps Programs, NSF seeks to nurture and sustain a national innovation ecosystem that builds upon fundamental research to guide the output of discoveries closer to the development of technologies, products, services and processes that benefit society.

II. PROGRAM DESCRIPTION

I-Corps Nodes (from both Tracks 1 and 2) must contribute to the National Innovation Network in the following three ways:

Level 1 Contribution - *I-Corps Node Training*:

I-Corps Nodes will demonstrate the capacity to deliver an innovation-enhancing training program based on the hypothesis/validation "Customer Discovery" curriculum used to support NSF I-Corps teams (see www.nsf.gov/i-corps). I-Corps Nodes will nurture and support teams that are transitioning their ideas, devices, processes or other intellectual activities into the marketplace.

The regional training will be offered at least quarterly to the I-Corps Node institutions' research/academic community across disciplines. The selection and makeup of the participating teams will be coordinated by the I-Corps Node and may include students, faculty, researchers and other local and regional stakeholders. The Nodes must coordinate with I-Corps Sites to deliver regional training to a minimum of 5 I-Corps Site teams per year. The Nodes are required to submit a plan to annually double the number of I-Corps Site teams receiving training. With the acceptance of the I-Corps Node's administration and NSF I-Corps program staff, regional teams that have undergone training at an I-Corps Node will be allowed to submit applications to NSF's I-Corps Teams Program.

The instructor team must consist of at least three trainers. In addition to the instructors, at least three members from the local investment community must be identified as potential volunteers for participation in the teams' training. When a new Track 1 I-Corps Node award is made, the instructor-team will be required to participate in at least one NSF I-Corps cohort, delivered at an existing I-Corps Node, prior to delivering the training at their own site.

It is expected that assessment and evaluation data, resulting from the I-Corps regional training activities, will be openly shared among other NSF-awarded I-Corps Nodes.

NOTE: NSF may call upon each I-Corps Node up to three times a year to host approximately 21-24 NSF-supported I-Corps teams in the delivery of the NSF-selected I-Corps curriculum. If NSF requests a Node to deliver the standard I-Corps curriculum, the I-Corps Node will collaborate with NSF or an NSF designee to provide the I-Corps training. The budget for delivering the I-Corps curriculum to a NSF-supported cohort will be negotiated at the time that such a request is made and should not be included as part

of the response to the current solicitation.

Level 2 Contribution - *I-Corps Node Infrastructure*:

Proposers are expected to identify models, to be leveraged for broad dissemination and implementation, of effective innovation content, curricula, and teaching/learning practices - detailing the specific activities, goals and measureable outcomes that will be associated with the proposed efforts. Proposers should consider how such activities will benefit the innovation network and how other nodes would be able to utilize/leverage their prospective Level 2 contributions.

Level 2 efforts should also address the issues associated with accelerating the diffusion/adaption/adoption of effective innovation practices in the national ecosystem, while further building entrepreneurial capacity in the node environments. Specific geographic locations may not have all that is necessary to create successful outcomes in a particular technology area. The National Innovation Network, along with its Nodes/Sites and effective linkages, can help foster connections to such an area and, ultimately, help produce success at scale.

Level 3 Contribution - *I-Corps Node Research*:

I-Corps Nodes will identify and pursue longer-term (3+ year) research and development projects that meet the goals of the I-Corps program. Proposers will identify teams or individuals for these projects that are **inclusive of faculty and researchers from the node institution(s).** These teams or individuals can work independently or in collaboration with I-Corps instructors or I-Corps staff. At least one of the projects must be led by faculty or researchers who are not I-Corps instructors or I-Corps staff personnel.

I-Corps Nodes will be expected to leverage and analyze data from Level 1 and Level 2 contributions. Key activities will focus on: 1) developing an understanding of how institutions can improve support for innovation ecosystems; 2) sharing and developing methods for successfully scaling effective practices and models that foster innovation; 3) exploring how the National Innovation Network can enable new collaborations among geographic regions to support commercialization--independent of geographic locations; 4) examining and tracking the I-Corps teams' dynamics, activities and outcomes; and 5) identifying and proposing improvements to the I-Corps curriculum materials, training practices, and National Innovation Network utilization.

Considerations for Network Nodes

Proposers (submitting to either Track 1 or 2) are ***required to develop and submit/utilize a logic model*** that describes the aspects of the Node efforts (e.g., inputs, activities, outputs and outcomes) and the associated data that will be used to measure any commensurate change/success/achievement. The Nodes in the National Innovation Network will have considerable autonomy in their operation, management, and oversight as part of the overall network. Each institution must commit to providing the necessary infrastructure, including appropriate personnel, equipment and facilities, in support of a networked community. Nodes must embrace a culture of open access to programs, data, educators, researchers and mechanisms for encouraging non-traditional participants from diverse disciplines. In addition, proposers must ***provide a plan for sustainment*** that includes a description of how the Node will work with its related state governments and other partners -- to help support and scale its efforts.

Coordinating Features of the Nodes

Nodes are required to coordinate with I-Corps Sites to deliver regional training to a minimum of 5 I-Corps Site teams per year. Proposers are required to include a strategic plan that details how the Node will collaborate/coordinate with I-Corps Sites that are proximal to their region(s). The strategic plan should describe how the Node will work with I-Corps Sites to annually double the number of teams receiving regional training.

Nodes should have the following features:

- Coordination of innovation research, education, outreach and commercial development programs across the network;
- Appropriate mixture of geographically distributed personnel and institutions that provide diverse and complementary capabilities to support current and anticipated needs for fostering innovation across a broad spectrum of science and engineering domains;
- Effective management structure to ensure close linkage and cooperation among the nodes such that they operate as a cohesive national network;
- Seamless methods of network operation that support projects across the network, through development and utilization of compatible internet-based networking/collaboration tools;
- Dissemination of shared knowledge to research and development communities;
- Promotion of diversity among students, faculty, staff, management, and outreach activities;
- Methods for assessment and metrics of node/network performance and impact;
- Planning processes to accommodate emerging areas and future growth of external/internal node participants, (e.g., adding/removing participants to/from the network); and
- Fostering of additional support from non-NSF sources, including other Federal agencies, State governments, and the private sector.

Proposals must clearly demonstrate an ability and willingness to enable these features.

III. AWARD INFORMATION

Anticipated Type of Award: Cooperative Agreement

Estimated Number of Awards: 4 to 7

Anticipated Funding Amount: $6,000,000 to $8,500,000

Track 1: *I-Corps Node Development* - new I-Corps Node awardees - to be supported at a level of up to:

- $1,200,000 (years 1 and 2)
- $900,000 (year 3)
- $600,000 (year 4)
- $300,000 (year 5)

Track 2: *I-Corps Node renewal* - previously funded I-Corps Nodes - to be supported at a level of up to:

- $900,000 (years 1 and 2)
- $750,000 (year 3)
- $600,000 (year 4)
- $300,000 (year 5)

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:

- Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in, the US acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.
- 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:

The PI must be an academic Administrative Lead at the level of Dean or higher, preferably at the level of a provost or vice-president.

Limit on Number of Proposals per Organization: 1

Organizations may only be a participant in one proposal per deadline. In addition, organizations may only be associated with one I-Corps Node that is receiving funding from NSF at a given time.

PLEASE NOTE: Institutions that are the Lead organization for an existing Node may only participate in a Track 2 proposal submission.

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

Additional Eligibility Info:

A competitive proposal for an I-Corps Node will be led by an institution having an existing unit whose goal is to assist faculty, students and other academic personnel to engage in entrepreneurial activities and transition scientific and technological innovations. Such units are typically called: innovation centers, entrepreneurial centers, technology incubators, etc. Their mission is to provide resources to individuals and teams in the form of entrepreneurial mentoring, curriculum, space, seed funding, or other assets needed to transition technology into the marketplace and sustainably scale innovations.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Letters of Intent *(required)*:

A Letter of Intent (LOI) MUST be submitted by an Authorized Organizational Representative (AOR) for either a Track 1 or Track 2 proposal in order to be considered for funding. Proposals that are submitted without a LOI (that had been received by the appropriate deadline) will be returned without review (RWR). If submitting a multi-institution Node proposal, the LOI must clearly identify all of the partnering institutions in the proposed Node and the representative PI (at the level of a Dean or higher) from each of the identified partnering institutions.

IMPORTANT: Multi-institution Node proposals must be submitted by a single Lead institution, with collaborating partners listed as sub-awardees. Separately submitted collaborative proposals will NOT be accepted in response to this solicitation.

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 allowed

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

- 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 Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 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: (http://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) 292-7827 or by e-mail from nsfpubs@nsf.gov.

See Chapter II.C.2 of the GPG 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 GPG instructions.

Proposals submitted to the I-Corps Nodes Program deviate from the traditional format of a research proposal as described in NSF's GPG.

PLEASE NOTE: Node proposals must be submitted by a single Lead institution, with collaborating partners listed as sub-awardees in the budget. ***Separately submitted collaborative proposals will NOT be accepted in response to this solicitation***.

An I-Corps Node proposal consists of the following parts:

Cover Sheet:

The cover sheet is automatically generated by FastLane or Grants.gov based on information entered into the "Cover Sheet." The title should include, as a prefix, the name "**I-Corps Node**:", for example: *"I-Corps Node: Smytheson Center for Innovation"*

Project Summary:

The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity. The proposal must contain a summary of the proposed activity suitable for publication, not more than one page in length. It should not be an abstract of the proposal, but rather a self-contained description of the activity that would result if the proposal were funded. The summary should be written in the third person and include a statement of objectives and methods to be employed. It should be informative to other persons working in the same or related fields and, insofar as possible, understandable to a scientifically or technically literate lay reader.

Table of Contents:

The table of contents is automatically generated by FastLane or Grants.gov.

Project Description:

An I-Corps Node proposal should include information organized in the most effective way to present a compelling story about why the proposed Node should be funded and why it will be effective at all three levels described below. Track 2 proposals **MUST** include a concise description of the prior activities and associated outcomes (at all levels of contribution for which they were funded) that were produced from prior support. The Project Description is limited to 15 pages and should address the following topics.

Level 1 Contribution - *I-Corps Node Training*

Please describe:

- How your current entrepreneur/innovation center is managed and functions, including lead personnel;
- The physical facilities, available resources and staffing;
- How you recruit individuals or teams to receive support from your center, how they are vetted, the number of individuals or teams assisted each year;
- The role of your institution's faculty and in-residence personnel;
- The role of venture capitalists and mentors and how you recruit members from the local investment community to participate in your Node's activities;
- Your capacity to deliver an innovation-enhancing training program (in terms of instruction and curriculum);
- How your center's teaching faculty are recruited and evaluated;
- The technology innovation practices, resources provided, entrepreneurial training, mentoring, commercialization launches, coaching, and curriculum used in your center;
- How processes and practices would change or be augmented to support the activity of an NSF I-Corps Node;
- Noteworthy start-up success stories, competitions that were held, and publicity your center or projects have received;
- The assessment/evaluation data you collect and the follow-up you do with respect to projects that have been supported and/or launched by your center;
- A plan for the promotion of diversity among students, faculty, staff and management.

Level 2 Contribution - *I-Corps Node Infrastructure*

Please describe:

- Coordination of innovation research, education, outreach and commercial development programs across the network;
- A proposed strategy for how the Node will collaborate/coordinate with I-Corps Sites that are proximal to their region(s);
- Mixture of geographically-distributed personnel and institutions that provide diverse and complementary capabilities to support current and anticipated needs for fostering innovation across a broad spectrum of science and engineering domains;
- Management structure to ensure close linkage and cooperation among the nodes such that they operate as a cohesive national network;
- If the node team consists of multiple institutions, describe how the team plans to manage across administrative boundaries;
- A plan for fostering additional support from non-NSF sources, including other Federal agencies, state governments, and the private sector;
- A plan for seamless methods of network operation that support projects across the network, through development and utilization of compatible internet-based networking/collaboration tools;
- Models of effective innovation content, curricula, and teaching/learning practices that will be implemented and disseminated;
- Approaches to accelerating the diffusion/adaption/adoption of effective innovation practices in the national ecosystem;
- Specific activities, goals, and measureable outcomes that will be associated with the proposed efforts;

Data that will be used to measure any commensurate change/success/achievement;
- Methods for assessment and metrics of node/network performance and impact;
- Planning processes to accommodate emerging areas and future growth of external/internal node participants, including adding new participants to or dropping existing participants from the network;
- Other near-term contributions.

Level 3 Contribution - *I-Corps Node Research*

Please describe plans to conduct I-Corps Node Research to include any of these areas:

- Research on implementing a national innovation network:
  - Planning process to accommodate emerging areas and future growth of external/internal participants, including adding new Nodes/Sites to, or dropping existing Nodes/Sites from, the network;
  - How the network can enable new collaborations among geographic regions to support commercialization opportunity development;
  - Methods for developing, sharing, and successfully scaling effective practices and models that foster innovation;
  - Planning for wide-spread sharing of ideas and connections, by an annual or semi-annual event, and digital portal
- Research on I-Corps outcomes:
  - How the I-Corps teams' dynamics, activities and outcomes could be examined and tracked;
  - How to measure and communicate the change in entrepreneurial mindset and activity of academic institutions, including within the university administration, licensing office, and university departments
- Research on improving entrepreneurial education programming and implementation:
  - How the materials, training practices, and other aspects of I-Corps curriculum will be assessed and disseminated;
  - Methods for how to maintain engagement, attract high-quality individuals, and retain I-Corps instructors;
  - How to implement national I-Corps cohorts irrespective of geographic location;
  - Methods for how teams could be triaged, vetted and selected for participation in national I-Corps programs;
  - How teams with non-traditional composition and later stages of idea development could enter into I-Corps, engage with instructors and participants, and perform in the program;
  - How tools utilized by I-Corps administrators, instructors, and teams are tolerated, maximized, and modified;
- General:
  - Long-term research and development projects that meet the goals of the I-Corps program;
  - Other areas of activity focused on long-term deliverables.

Sustainment and Coordination Plans are required for both Track 1 and Track 2 proposals.

Plan for Sustainment - Proposers are **REQUIRED** to include within the Project Description a plan and timeline for sustainment that details how the Node will work with its related state governments and other partners -- to help support and scale its efforts.

Plan for Coordination with I-Corps Sites - Proposers are **REQUIRED** to include within the Project Description a strategic plan that details how the Node will collaborate/coordinate with I-Corps Sites that are proximal to their region(s). Nodes are required to coordinate with I-Corps Sites to deliver regional training to a minimum of 5 I-Corps Site teams per year. The strategic plan should describe how the Node will work with I-Corps Sites to annually double the number of teams receiving regional training.

Please note that per guidance in the GPG, the Project Description must contain, as a separate section within the narrative, a discussion of the broader impacts of the proposed activities. You can decide where to include this section within the Project Description.

References Cited:

Provide a comprehensive listing of relevant reference sources.

Biographical sketches:

A biographical sketch for each team member (two pages maximum per team member) must be provided, highlighting technical expertise and track records in successful technology and business development and be prepared in accordance with the requirements specified in the GPG. Exhaustive academic resumes are not appropriate.

Biographical sketches must also be included for non-compensated resources who will provide oversight for Level II and Level III activity and may contribute to the training effort of Level I activity.

Proposal Budget and Budget Justification:

Funding for the Innovation Corps Node Program is limited to the following:

Track 1: **I-Corps Node Development** - new I-Corps Node applicants - to be supported at a level up to:

- $1,200,000 (years 1 and 2)
- $900,000 (year 3)
- $600,000 (year 4)
- $300,000 (year 5).

Track 2:**I-Corps Node Renewal** - previously funded I-Corps Node - to be supported at a level up to:

- $900,000 (years 1 and 2)
- $750,000 (year 3)
- $600,000 (year 4)
- $300,000 (year 5).

The budget should include funds for the Principal Investigators (PIs) to attend a National Innovation Network meeting (that will be held in the DC area) each year.

The I-Corps Node Program will NOT fund legal expenses for commercialization.

Current and Pending Support:

The proposal should provide information regarding all research to which the PI and Co-PIs have committed time or have planned to commit time. If none, state NONE. **Current and Pending Support must be uploaded for each of the team member.** Note that the proposal submitted in response to this solicitation is considered "pending" and therefore MUST appear on each Current and Pending Support submission.

Facilities, Equipment, and Other Resources:

Discuss requirements for and the availability of equipment, instrumentation, and facilities required for the proposed project. The description should be narrative in nature and must not include any quantifiable financial information.

Supplementary Documents:

Logic Model - Proposers are **REQUIRED** to include a logic model that describes the aspects of the Node efforts and the associated data that will be used to measure any commensurate change/success/achievement. This should be submitted as a Supplementary Document.

Letters of commitments from all partnering institutions (at the level of a Dean or higher), local and regional stakeholders must be provided as Supplementary Documents, which ONLY attest to commitments. Do not include letters of endorsement.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

Other Budgetary Limitations:

Node proposals are to be submitted by a single Lead institution, with collaborating partners listed as sub-awardees in the budget. Collaborative proposals will NOT be accepted in response to this solicitation.

C. Due Dates

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

  March 10, 2016

  Second Thursday in March, Annually Thereafter

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

  May 10, 2016

  Second Tuesday in May, Annually Thereafter

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 FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov. The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

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: http://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 are strongly encouraged to use FastLane 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 the GPG as Exhibit III-1.

A comprehensive description of the Foundation's merit review process is available on the NSF website at: http://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 *Investing in Science, Engineering, and Education for the Nation's Future: NSF Strategic Plan for 2014-2018*. 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. (GPG 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 GPG 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 standard review criteria, a demonstrated command of the currently-deployed I-Corps curriculum will be part of the consideration process. Because I-Corps Nodes will support cross-disciplinary teams, a demonstration of support from institution leadership will be an important consideration in the review of I-Corps Node proposals.

Coordinating Features of the I-Corps Nodes are also important aspects. Consequently, proposals must clearly demonstrate an ability and willingness to enable these:

- Coordination of innovation research, education, outreach and commercial development programs across the network;
- Appropriate mixture of geographically distributed personnel and institutions that provide diverse and complementary capabilities to support current and anticipated needs for fostering innovation across a broad spectrum of science and engineering domains;
- Effective management structure to ensure close linkage and cooperation among the nodes such that they operate as a cohesive national network;
- Seamless methods of network operation that support projects across the network, through development and utilization of compatible internet-based networking/collaboration tools;
- Dissemination of shared knowledge to research and development communities;
- Promotion of diversity among students, faculty, staff, management, and outreach activities;
- Methods for assessment and metrics of node/network performance and impact;
- Planning processes to accommodate emerging areas and future growth of external/internal node participants, (e.g., adding/removing participants to/from the network);
- Fostering of additional support from non-NSF sources, including other Federal agencies, State governments, and the private sector; and
- Collaboration strategy for I-Corps Sites in the region.

B. Review and Selection Process

Proposals submitted in response to this program solicitation will be reviewed by 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 http://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 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 *Award & Administration Guide* (AAG) Chapter II, available electronically on the NSF Website at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=aag.

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 *Award & Administration Guide* (AAG) Chapter II, available electronically on the NSF Website at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=aag.

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:

- Rathindra DasGupta, telephone: (703) 292-8353, email: rdasgupt@nsf.gov
- Lydia McClure, telephone: (703) 292-8798, email: lmcclure@nsf.gov

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@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 http://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 provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See Grant Proposal Guide Chapter II, Section D.2 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 http://www.nsf.gov

- **Location:** 4201 Wilson Blvd. Arlington, VA 22230
- **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 Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004). 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
Arlington, VA 22230