NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)

PROGRAM SOLICITATION
NSF 12-529

REPLACES DOCUMENT(S):
NSF 09-567

National Science Foundation

Directorate for Education & Human Resources
  Division of Undergraduate Education

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

August 14, 2012

August 13, 2013

August 12, 2014

IMPORTANT INFORMATION AND REVISION NOTES

Letters of Intent are no longer requested.

Indirect Costs: Please note an important change to the treatment of indirect costs that has been incorporated into the NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program solicitation. To ensure consistency with NSF-wide policies, proposals submitted to this program solicitation are subject to the awardee's current Federally negotiated indirect cost agreement.

Please note that indirect costs are in addition to the maximum direct cost request of $600,000.

Important Reminders

PAPPG Changes: A revised version of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), NSF 11-1, was issued on October 1, 2010 and is effective for proposals submitted, or due, on or after January 18, 2011. Please be advised that the guidelines contained in NSF 11-1 apply to proposals submitted in response to this funding opportunity.

Cost Sharing: The PAPPG has been revised to implement the National Science Board's recommendations regarding cost sharing. Inclusion of voluntary committed cost sharing is prohibited. In order to assess the scope of the project, all organizational resources necessary for the project must be described in the Facilities, Equipment and Other Resources section of the proposal. The description should be narrative in nature and must not include any quantifiable financial information. Mandatory cost sharing will only be required when explicitly authorized by the NSF Director. See the PAPP Guide Part I: *Grant Proposal Guide (GPG)* Chapter II.C.2.g(xi) for further information about the implementation of these recommendations.

Data Management Plan: The PAPPG contains a clarification of NSF's long standing data policy. All proposals must describe plans for data management and sharing of the products of research, or assert the absence of the need for such plans. FastLane will not permit submission of a proposal that is missing a Data Management Plan. The Data Management Plan will be reviewed as part of the intellectual merit or broader impacts of the proposal, or both, as appropriate. Links to data management requirements and plans relevant to specific Directorates, Offices, Divisions, Programs, or other NSF units are available on the NSF website at: http://www.nsf.gov/bfa/dias/policy/dmp.jsp. See Chapter II.C.2.j of the GPG for further information about the implementation of this requirement. Guidelines for data management in EHR projects can be found at: http://www.nsf.gov/bfa/dias/policy/dmpdocs/ehr.pdf.

Postdoctoral Researcher Mentoring Plan: As a reminder, each proposal that requests funding to support postdoctoral researchers must include, as a supplementary document, a description of the mentoring activities that will be provided for such individuals. Please be advised that if required, FastLane will not permit submission of a proposal that is missing a Postdoctoral Researcher Mentoring Plan. See Chapter II.C.2.j of the GPG for further information about the implementation of this requirement.

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 15-1), which is effective for proposals submitted, or due, on or after December 26, 2014. The PAPPG is consistent with, and, implements the new Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) (2 CFR § 200).

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)

Synopsis of Program:

This program makes grants to institutions of higher education to support scholarships for academically talented students demonstrating financial need, enabling them to enter the STEM workforce or STEM graduate school following completion of an associate, baccalaureate, or graduate-level degree in science, technology, engineering or mathematics disciplines. Grantee institutions are responsible for selecting scholarship recipients, reporting demographic information about student scholars, and managing the S-STEM project at the institution.

The program does not make scholarship awards directly to students; students should contact their institution's Office of Financial Aid for this and other scholarship opportunities.

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.

- Connie K. Della-Piana, Lead Program Director, telephone: (703) 292-5309, email: cdellapi@nsf.gov

- John Krupczak, Alternate Lead Program Director, 855, telephone: (703) 292-4647, email: JKRUPCZA@nsf.gov

- Paul Tymann, Alternate Lead Program Director, 835, telephone: (703) 292-2260, email: PTYMANN@nsf.gov

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

- 47.076 --- Education and Human Resources

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 80 to 100

Anticipated Funding Amount: $50,000,000 to $70,000,000 annually, for new and continuing activities, pending availability of funds. Awards are not expected to exceed $600,000 in direct costs. Annual budgets are limited to $225,000 in direct costs.

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Institutions of higher education (as defined in section 101 (a) of the Higher Education Act of 1965) in the United States and its territories that grant associate, baccalaureate, or graduate degrees in the disciplines listed in section IV.C. are invited to submit proposals.

Who May Serve as PI:

The Principal Investigator must be a faculty member currently teaching in one of the S-STEM disciplines who can provide the leadership required to ensure the success of the project. Projects involving more than one department within an institution are eligible, but a single Principal Investigator must accept overall management responsibility. Other members of the S-STEM project management team may be listed as Co-Principal Investigators.

Limit on Number of Proposals per Organization:

An Institution may submit one proposal from each constituent school or college that awards degrees in an eligible field. See Section IV.A. for details.

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

There are no restrictions or limits.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Not required

- **Preliminary Proposal Submission:** Not required

- **Full Proposals:**
  - Full Proposals submitted via 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

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

    August 14, 2012

    August 13, 2013

    August 12, 2014

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

TABLE OF CONTENTS

I. INTRODUCTION

The NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) program provides institutions with funds for student scholarships to encourage and enable academically talented students demonstrating financial need to enter the STEM workforce or STEM graduate school following completion of an associate, baccalaureate, or graduate degree in fields of science, technology, engineering, or mathematics. The program was established by the National Science Foundation (NSF) in accordance with the American Competitiveness and Workforce Improvement Act of 1998 (P.L. 105-277) as modified by P.L. 106-313 and P.L.108-447 in 2004. The Act reflects the national need to increase substantially the number of American scientists and engineers.

II. PROGRAM DESCRIPTION

A. The S-STEM program emphasizes the importance of recruiting students to STEM disciplines, mentoring and supporting students through degree completion, and partnering with employers to facilitate student career placement in the STEM workforce. Participating institutions are expected to support the goals of the S-STEM program including the following:

- Improved educational opportunities for students;
- Increased retention of students to degree achievement;
- Improved student support programs at institutions of higher education; and
- Increased numbers of well-educated and skilled employees in technical areas of national need.

Students to be awarded scholarships must demonstrate academic talent and financial need. In addition, they must be US citizens, permanent residents, nationals, or refugees. Refer to Section IV.C. (Scholarship Recipients) in this Solicitation for details.

It is expected that scholarship recipients will achieve at least one of the following by the end of the scholarship award period:

- Receive an associate, baccalaureate, or graduate degree in one of the S-STEM disciplines;
- Transfer from an associate degree program to a baccalaureate degree program or from an undergraduate program to a graduate program in one of the S-STEM disciplines;
- Successfully pass one or more of an institution's self-identified attrition points.

S-STEM grants may be made for up to five years and provide individual scholarships of up to $10,000 per year, depending on financial need.

Please refer to Section V.A.5., Project Description, for details about specific S-STEM project requirements.

B. The following sources may be of interest to proposers in thinking about an S-STEM project. They represent some of the literature about effective scholarship programs. The list is not meant to be a complete bibliography.

(2005). AMS Members and Industry/Government Sponsors Help AMS Launch a New Scholarship Program. *Bulletin of the American Meteorological Society, 86*(12), 1821-1822.

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Arum, R., & Roksa, J. (2011). *Academically Adrift: Limited Learning on College Campuses.* Chicago: The University of Chicago Press.

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Chesler, N. C., & Chesler, M. A. (2002). Gender-Informed Mentoring Strategies for Women Engineering Scholars: On Establishing a Caring Community. *Journal of Engineering Education*, *91*(1), 49-55.

Dee, T. S., & Jackson, L. A. (1999). Who Loses HOPE? Attrition from Georgia's College Scholarship Program. *Southern Economic Journal*, *66*(2), 379-390.

Dong, L., & Chapman, D. W. (2008). The Chinese Government Scholarship Program: An Effective Form of Foreign Assistance? *International Review of Education, 54*(2), 155-173.

Lumina Foundation. (2011). *Four Steps to Finishing First in Higher Education*. Indianapolis, IN. Available at http://www.luminafoundation.org/publications/Four_Steps_to_Finishing_First_in_Higher_Education.pdf.

National Science Foundation, Division of Science Resources Statistics. (2011). *Women, Minorities, and Persons with Disabilities in Science and Engineering: 2011* (NSF 11-309). Arlington, VA. Available at http://www.nsf.gov/statistics/wmpd.

OECD. (2011). *Against the Odds: Disadvantaged Students who Succeed in School*, PISA, OECD Publishing. Doi: http://www.oecd-ilibrary.org/education/against-the-odds_9789264090873-en.

Olds, B. M., Moskal, B. M., & Miller, R. L. (2005). Assessment in Engineering Education: Evolution, Approaches and Future Collaborations. *Journal of Engineering Education*, *94*(1), 13-25.

U.S. Department of Education, Institute of Education Services, National Center for Education Evaluation and Regional Assistance. (2010). *Evaluation of the DC Opportunity Scholarship Program: Final Report* (NCEE 2010-4018). Washington, D.C. Available at http://ies.ed.gov/ncee/pubs/20104018/pdf/20104018.pdf.

U.S. Department of Education, National Center for Education Statistics. (2011). *The Condition of Education 2011* (NCES 2011033). Washington, D.C. Available at http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2011033.

Seymour, E., & Hewitt, N. M. (2000). *Talking About Leaving: Why Undergraduates Leave the Sciences.* Boulder: Westview Press.

Shapiro, N. S., & Levine, J. H. (1999). *Creating Learning Communities: A Practical Guide to Winning Support, Organizing for Change, and Implementing Programs.* San Francisco: Jossey-Bass.

Stewart, G. L., Russell, R. B., & Wright, D. B. (1997). The Comprehensive Role of Student Affairs in African-American Student Retention. *Journal of College Admission*, *154*, 6-11.

Stewart, T., Wolf, P., & Cornman, S. Q. (2007). Parent and Student Voices on the First Year of the DC Opportunity Scholarship Program. *Peabody Journal of Education, 82*(2-3), 311-386.

Weidner, V. R., & Herrington, C. D. (2006). Are Parents Informed Consumers: Evidence From the Florida McKay Scholarship Program. *Peabody Journal of Education, 81*(1), 27-56.

Whalen, D. F., & Shelley, M. C. II. (2010). Academic Success for STEM and Non-STEM Majors. *Journal of STEM Education 11*(1): 45-60.

Zemsky, R. (2009). *Making Reform Work: The Case for Transforming American Higher Education.* New Brunswick: Rutgers University Press.

III. AWARD INFORMATION

The number and size of awards will vary depending upon the scope of projects and availability of funds. Approximately $50-$70 million is expected to be available annually, for new and continuing activities to support approximately 80-100 new S-STEM awards.

Awards are normally not expected to exceed $600,000 in direct costs. Annual budgets are limited to $225,000 in direct costs. The award duration may be up to five years within the annual and overall budget limits. The limits include the funds for administrative and support functions as well as the scholarship funds. (See section V.A.8. below for details on the budget).

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Institutions of higher education (as defined in section 101 (a) of the Higher Education Act of 1965) in the United States and its territories that grant associate, baccalaureate, or graduate degrees in the disciplines listed in section IV.C. are invited to submit proposals.

Who May Serve as PI:

The Principal Investigator must be a faculty member currently teaching in one of the S-STEM disciplines who can provide the leadership required to ensure the success of the project. Projects involving more than one department within an institution are eligible, but a single Principal Investigator must accept overall management responsibility. Other members of the S-STEM project management team may be listed as Co-Principal Investigators.

Limit on Number of Proposals per Organization:

An Institution may submit one proposal from each constituent school or college that awards degrees in an eligible field. See Section IV.A. for details.

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

There are no restrictions or limits.

Additional Eligibility Info:

A. Institutions

1. An institution may submit one proposal from each constituent college or school that awards eligible degrees. (For example, a university with a College of Engineering, a School of Life Sciences, and a College of Arts and Sciences could submit one proposal from each for a total of three. However, within a College of Engineering, if the Department of Electrical Engineering were submitting a proposal, a proposal from the Department of Mechanical Engineering could be submitted only in a subsequent year. The two departments could also submit a proposal jointly.)
2. An institution without constituent schools (for example, a 4-year college or a community college) may submit one proposal each year.
3. An institution that is part of a larger system is considered separate for this purpose if it is geographically separate and has its own chief academic officer.

B. Principal Investigator

The Principal Investigator must be a faculty member currently teaching in one of the S-STEM disciplines who can provide the leadership required to ensure the success of the project. Projects involving more than one department within an institution are eligible, but a single Principal Investigator must accept overall management responsibility. Other members of the S-STEM project management team may be listed as Co-Principal investigators.

C. Scholarship Recipients

S-STEM scholarship recipients will be selected by the awardee institution, but must

- be citizens of the United States, nationals of the United States (as defined in section 101(a) of the Immigration and Nationality Act), aliens admitted as refugees under section 207 of the Immigration and Nationality Act, or aliens lawfully admitted to the United States for permanent residence;
- be enrolled full time in a program leading to an associate, baccalaureate, or graduate degree in one of the following disciplines for each term for which a student receives a scholarship.

  - biological sciences (except medicine and other clinical fields);
  - physical sciences, including physics, chemistry, astronomy, and materials science;
  - mathematical sciences;
  - computer and information sciences;
  - geosciences;
  - engineering;
  - technology areas associated with the preceding fields (for example, biotechnology, chemical technology, engineering technology, information technology, etc.)

- demonstrate academic ability or potential;
- demonstrate financial need, defined for undergraduate students by the US Department of Education rules for need-based Federal financial aid Free Application for Federal Student Aid (FAFSA), or, for graduate students, defined as financial eligibility for Graduate Assistance in Areas of National Need (GAANN).

These rules define financial need for undergraduates as the Cost of Attendance (COA) for an institution minus the Estimated Family Contribution (EFC) for the student (see https://studentaid.ed.gov/fafsa/next-steps/how-calculated). The COA, determined by each educational institution, is the total amount it will cost a student to go to school, including tuition and fees; on-campus room and board (or a housing and food allowance for off-campus students); allowances for books, supplies, transportation, loan fees, dependent care, and costs related to a disability; and miscellaneous expenses. The EFC is determined by the FAFSA form and represents the expected family contribution toward the COA (http://www.fafsa.ed.gov). It is recommended that the PI consult the campus financial aid office for more information regarding the institutional COA and the calculation of student financial need.

- be part of a natural student cohort that is likely to associate during the scholarship period. Students may be from a single major, or from a group that will take several classes together, or from some other group that the proposal describes. See section V.A.5.k, Special Program Features, below, for more discussion of the rationale for a cohort.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal Instructions: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the guidelines specified 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-PUBS (7827) or by e-mail from nsfpubs@nsf.gov.

Full Proposal Content

1. **Cover Sheet.** While filling out the cover sheet in FastLane, it is important to choose the program solicitation number indicated on the cover of this document ("NSF Scholarships in Science, Technology, Engineering, and Mathematics") from the list of programs in the "NSF Unit Consideration" section. This choice must be specified in order to have FastLane access the DUE Project Data Form, which is required for S-STEM proposals.

   An informative title for the proposed S-STEM project must be provided on the appropriate line. Please use the full project title and refrain from using the S-STEM name or acronym, NSF, or your institution's name in the project title.

2. **Project Data Form.**
   A DUE Project Data Form (NSF Form 1295: Project Data Form) must be completed for all proposals. The information on this form is used to direct proposals to appropriate reviewers and to determine the characteristics of projects supported by DUE. In FastLane, this form will appear in the list of forms for the proposal only after you have selected the appropriate Program Solicitation number (indicated on the cover of this document) on the proposal cover sheet and have saved the cover sheet.

3. **Project Summary.**
   Provide a brief one page description of the S-STEM project including the number of scholarships to be provided, the discipline areas to be served by the scholarship funds, the objectives of the project, and basic information about the student recruitment, selection, support, and career placement services to be provided as part of this S-STEM project.

   The project summary MUST explicitly address both Intellectual Merit and Broader Impacts in separate statements. See Section VI. A., Proposal Review Process, for a description of the two criteria. NSF will return without review proposals that do not address both criteria in the Project Summary.

4. **Table of Contents.**
   The Table of Contents is system-generated and cannot be edited.

5. **Project Description.**
   The Project Description must conform to GPG formatting requirements and must not exceed 15 single-spaced pages. For legibility, 12-point type and page numbers are preferred. Proposals that exceed the page limit will be returned without review. The Project Description should contain the following information:
   a. **Results from Prior NSF Support.**
      Report on the results from related prior NSF support. In addition, if there have been any existing or prior S-STEM (formerly CSEMS) projects at the institution, provide quantitative and qualitative information about them and describe the relationship of this proposed project to the other S-STEM or CSEMS project. See Section V.A.5.k for more details about information to include about any prior S-STEM awards.
   b. **Project Objectives and Plans.**
      The project should have specific objectives that reflect the goals of the S-STEM program and local needs, as well as specific plans to select students, encourage them to achieve their best academic performance, and enable them to enter the workforce or continue studies in their fields.
   c. **Significance of Project and Rationale.**
      The proposal should address how the goals of the S-STEM program (see Program Description, Section II) will be met. In addition, it should include information on the demographics of the departments or programs affected by the scholarships, including number of majors and number of graduates per year, as well as information on overall enrollment and retention within the institution and programs involved. A rationale for the number of scholarships and the scholarship amount requested should also be provided.
   d. **Activities on Which the Current Project Builds.**
      S-STEM projects should build on existing student support structures and program elements. Proposals should discuss such services that are relevant to the S-STEM project and describe ways in which the S-STEM project will use or enhance the structures. Proposals should describe new support structures set up for S-STEM students.
   e. **S-STEM Project Management Plan.**
      S-STEM projects should be guided by a management plan in which the key personnel and project logistics are defined. The roles and responsibilities of the personnel involved should be clear. The Principal Investigator (PI) must be a faculty member in one of the S-STEM disciplines who can provide the leadership needed in order to ensure the success of the project. The project must involve faculty in addition to the PI and may involve staff from offices of student support, financial aid, and admissions. These additional personnel may be included as Co-PIs,

depending on institutional policy. In any case, the proposal must describe specific roles of each person in the project. The PI will have overall responsibility for administering the project and for interacting with NSF.

Plans should be described for activities such as recruitment and selection of students, maintenance of S-STEM records, reporting responsibilities, oversight for student support services, and implementing a process by which students who lose S-STEM eligibility will be replaced by new students.

Proposing institutions may request additional funds of up to 5% of the total scholarship amount for expenses related to program administration. Note that these funds are included in the maximum direct cost amount of $600,000 for each award. See Section V.A.8, Proposal Preparation Instructions, for a discussion of budget details.

f. **Student Selection Process and Criteria.**
The program requires that the students meet the requirements for citizenship, major, academic potential, and need that are outlined in Section IV.C, Additional Eligibility Information, Scholarship Recipients. Projects should have additional selection criteria that reflect the local program. S-STEM scholars must be able to demonstrate their eligibility in each semester or quarter of S-STEM support.

The selection process for scholarship recipients should include indicators of academic merit and other indicators of likely professional success. Multiple indicators may be appropriate in gauging both academic merit (e.g., grade point average, placement test results) and professionalism (e.g., motivation, ability to manage time and resources, communication skills). Selection criteria should be flexible enough to accommodate applicants who come from diverse backgrounds and with diverse career goals. The program encourages but does not require efforts to increase the number of members of underrepresented groups (e.g., gender, ethnicity, disability, geographic, first-generation, etc.) in STEM fields; its broad aim is to assist any student who meets eligibility requirements.

The proposal should indicate how students' eligibility will be determined, the mechanisms by which scholarships for students will be provided, and how scholarship program outcomes will be evaluated and disseminated. It should also identify criteria for retention of students' scholarships from one year to the next.

g. **S-STEM Student Support Services and Programs.**
It is expected that awardee institutions will have or develop support programs and services designed to enhance student learning, confidence, academic performance, retention to graduation, and career or higher education placement. Examples of student support include:
- Recruitment of students to higher education programs and careers in the S-STEM disciplines;
- Support and mentoring of students by faculty and other professionals;
- Academic support services such as tutoring, study-groups, or supplemental instruction programs;
- Industry experiences, internship opportunities, and research opportunities.
- Community building and support among S-STEM scholars within the institution;
- Participation in local or regional professional, industrial or scientific meetings and conferences; and
- Career counseling and job placement services for S-STEM scholars.

For support services and programs that already exist, describe how they will be adapted to meet the specific objectives of the S-STEM project.

Proposing institutions may request additional funds of up to 10% of the total scholarship amount for student support services. Note that these funds are included in the maximum of $600,000 in direct costs for each award. See section V.A.8, Proposal Preparation Instructions, for a discussion of budget detail.

h. **Quality Educational Programs.**
Institutions should provide evidence of the quality of their educational programs, particularly those in the targeted disciplines. Where appropriate, cite external accreditations in the S-STEM disciplines (for example, ABET for engineering).

i. **Assessment and Evaluation.**
S-STEM projects must have clear and specific plans for assessment and evaluation. This includes not only assessment of student progress but overall evaluation of the S-STEM project. The evaluator must be external to the project, but not necessarily to the institution. S-STEM projects are required to participate in regular NSF-led data collection activities to track the students. Beyond the impact on students, S-STEM projects should have impact on the departments, disciplines involved, and the institution. These goals must be clearly articulated in the S-STEM proposal. The S-STEM proposal should identify appropriate assessment and evaluation plans as well as plans for programmatic evaluation at the end of the project. Each S-STEM proposal will describe evaluation plans that are clearly matched to the stated goals of the project. These should reflect the scope of the project and include formative and summative components.

j. **Dissemination.** The results of successful projects will be of potential interest to other faculty, staff, students, and the community of which the institution is a part, as well as to student aid professionals and others who operate scholarship programs. The proposal should include a plan to report on the project to appropriate audiences.

k. **Advice to Proposers.**
There are several considerations related to special features of the S-STEM program that deserve more detailed description. These include:

The S-STEM solicitation specifies that a faculty member currently teaching in an S-STEM discipline must serve as the principal investigator for the project. The purpose of this requirement is to ensure that the faculty of the disciplines involved have a commitment to active involvement with the S-STEM scholars. Other faculty must be involved, and their roles described, as appropriate. In addition to the faculty involvement, it is often helpful if a team of individuals, including financial aid and student support specialists, is developed for the S-STEM project.

Experience indicates that the most successful S-STEM scholarship projects involve a group of students who in some way naturally associate, whether as majors in the same department, or sharing classes, or participating together in activities of common interest. Since students in many disciplines are potentially eligible for S-STEM scholarships, the project design should include plans to attract and maintain a cohort of students who hold scholarships. This may be done by limiting the project to students in one major, or in closely related majors, but other means may be proposed.

S-STEM projects should provide student support structures that help the scholarship recipients succeed as students and, later, as working professionals. Ideally, S-STEM scholars are part of a cohort that is managed and supported as part of an active learning community. This can involve existing support structures or new support mechanisms to be developed by the S-STEM project. S-STEM proposals should describe these support structures and explain, particularly in the case of existing support structures, how the S-STEM students will be involved with the support structure or activity.

S-STEM projects often include enhancements such as seminars, field trips, social activities, student-faculty interaction outside classes, and other enrichment activities. These are valuable parts of programs. Such activities may be required as part of the scholarship program, but the requirements should be structured so that students who have other responsibilities can reasonably participate, and the requirements should be flexible enough to allow reasonable absences.

In addition, some projects may offer research opportunities, tutoring, and internships for scholarship recipients. While these activities can enhance the student experience, they must be included as optional components of the S-STEM project. S-STEM scholarships may not be, nor appear to be, payment for services. Since the scholarship often provides funds that allow a student to concentrate on full-time studies rather than full-time work, opportunities of this kind are valuable components of S-STEM projects as long as they are clearly optional for the student. This limitation on required research does NOT apply for graduate students doing research as part of their thesis or dissertation.

Students who receive S-STEM scholarships must be enrolled full-time in a program leading to a degree in one of the S-STEM disciplines. Often there are programs at an institution that do not have exactly the same title as an S-STEM discipline, but might be related to or part of the S-STEM discipline. In cases where students are in programs that are not included in the list of specific S-STEM disciplines, the proposal must clearly document and justify the inclusion of the program in the S-STEM scholarship group. If necessary, S-STEM proposals should address this issue in enough detail so that expert reviewers can see the connection and relevance of the project to the S-STEM disciplines.

Many students may not be eligible for the maximum scholarship of $10,000 per year, depending on the student's expected family contribution and the amount of the institution's cost of attendance. The proposal budget requires an estimate of both the number of scholarships to be awarded and the total amount of funds that would be required. The proposal should include an explanation of how these estimates were determined. The proposal should include the potential number of students in the proposed cohort (for example, a disciplinary major) and an estimate of the number of these students who might have financial need. It may be helpful to consult with the financial aid office at the institution to determine typical financial need for the proposed cohort of students (or for some larger group of students if information on the smaller cohort is not easily available). While there is flexibility within a project budget after a grant is made, the size of the budget request must be closely related in the proposal to a realistic estimate of student need.

S-STEM scholarships involve full-time students who are financially needy as well as academically talented. NSF has adopted the standard U.S. Department of Education guidelines for determining financial need as well as allowable educational expenses. NSF, however, cannot prescribe the way in which local financial aid offices or departments develop policies or manage their students. Thus, rather than defining a specific number of hours for full-time classification, S-STEM provides that students are full-time if classified as full-time by their local institution. Similarly, NSF cannot dictate financial aid policy to institutions. While we hope that our broad interpretation of allowable educational expenses will be used to calculate need and funding potential, NSF must rely on local financial aid office policies about management of student aid and scholarship funds. Likewise, each institution determines measures of academic promise for its students. Principal investigators developing S-STEM proposals should talk over these issues with appropriate financial aid offices as well as their discipline faculty in developing policies and criteria that are included in the S-STEM proposal.

Proposals are welcome from all eligible institutions. If the institution has received a prior S-STEM (or CSEMS) award, the proposed project must build on the experience from the prior project. Proposal reviewers will want to know quantitative and qualitative outcomes of any current or former project and how the experience has affected plans for the current project. This is especially true when the same or related disciplines are involved, even if there is no overlap in personnel. Proposers may use the NSF web search (http://go.usa.gov/X5F, see the link "Abstracts of Recent Awards Made Through This Program" at the bottom of the page) to search for prior awards in the S-STEM program, by institution name or state. A brief but detailed discussion of any other project and its relation to the proposed project must be included in the project description.

I. Project Description Content Checklist.
In summary, the proposal should clearly describe the plan for implementing a program with the goals and characteristics outlined in the preceding text. The proposal should include, within the project description (limited to 15 single-spaced pages), the following:

- Results from prior NSF support, with particular emphasis on any prior S-STEM or CSEMS awards made to the institution;
- Statement of the project objectives and plans;
- Discussion of the project's significance, including demographic information and rationale for the number of scholarships and the scholarship amount requested;
- Discussion of activities on which the project builds (particularly connections to any existing S-STEM or CSEMS award at the institution);
- Description of the management plan, including discussion of the role of faculty in the disciplines in the operation of the project;
- Outline of the student selection process and criteria;
- Description of the student support services and programs, and their impact on students;
- Evidence of the quality of the institution's educational programs;
- Plans for project assessment and evaluation; and
- Plans for dissemination.

6. **References Cited.** These should be both discipline-based and based in the literature of STEM teaching and learning.
7. **Biographical Sketches.**
   Include a 2-page biographical sketch (following the instructions in the GPG) for the Principal Investigator and each listed Co-Principal Investigator and/or Senior Personnel.
8. **Budget, Budget Justification, and Allowable Costs:**

   Provide a budget for each year of support requested. The maximum S-STEM request is normally not to exceed $600,000 direct cost in total. Annual budgets are limited to $225,000 direct cost. The annual and cumulative limits, which apply separately, include all direct cost funds (scholarships, administrative costs, and student support costs).

   The following instructions refer to the NSF proposal budget form, a sample of which is available at http://www.nsf.gov/pubs/1999/99form1030/99form1030.pdf. The sections and budget line designations correspond to the Fastlane budget screen.

- Allocations for scholarships should be indicated in NSF budget form section F, "Participant Support," line F1 - "Stipends" of the FastLane budget form. Scholarships may be requested for up to $10,000 per student per year. Because many students may not be eligible for the maximum scholarship amount of $10,000, the proposal should explain how the number of scholarships requested and the total amount of scholarship funds requested were determined.
- In addition, up to 15% of the total scholarship amount shown in Section F, "Participant Support," Line F1 - "Stipends" may be requested for expenses related to program administration (up to 5%, for example, salaries, fringe benefits, materials and supplies) and student support services (up to 10%, for example, recruitment activities, mentoring, career counseling, participation in meetings or conferences). The request for funds under this 15% allowance must be assigned to the appropriate NSF budget categories on the NSF budget form and must be explained in the budget explanation. Refer to the GPG instructions for appropriate categories. Items that are for direct support of scholar participants (for example, student travel to professional meetings or meeting registrations) should be listed in the "Participant Support" section on lines F.2, "Travel" or F.3, "Subsistence." Other costs should be listed in other sections of the budget as appropriate. Do not enter any costs on line G.6. "Other Direct Costs" - "Other" or F.4. "Participant Support Costs" - "Other." The limits for administrative and student support costs apply to the cumulative budget; projects may propose to distribute these costs unevenly among the annual budgets.
- Faculty salary requests must be accompanied by an appropriate indication of the fraction of academic or summer months to be paid by the grant. If no salary is requested from the grant, then the fraction of NSF-funded academic and summer months should be listed on the budget form as zero.
- Indirect costs (NSF budget form line I) are subject to the institution's current Federally negotiated indirect cost agreement. These indirect costs are in addition to the direct costs described above. Total direct costs (NSF budget form line H) are limited to a maximum of $600,000, but the total budget request (sum of direct and indirect costs to be entered on budget line J) may thus exceed $600,000. Prospective PIs should consult with their university Office of Sponsored Programs about the calculation of indirect costs.

9. **Current and Pending Support.**
   Provide a list of Current and Pending Support for the Principal Investigator and each Co-Principal Investigator. All investigators should list the S-STEM proposal as a pending project.
10. **Facilities, Equipment, and Other Resources.**
    See GPG Section II. D.9.
11. **Supplementary Documentation.**
    Evidence of the high quality of academic programs or excellence in student recruitment, support, or career placement may be included as supplementary documentation. Scanned copies of letters of institutional support and letters documenting partnership commitments (e.g., industry partners for student internships) should also be included as supplementary documentation. Do not send paper copies to NSF.

B. Budgetary Information

Cost Sharing: Inclusion of voluntary committed cost sharing is prohibited.

Other Budgetary Limitations: Additional funds up to 15% of the total scholarship amount may be requested for expenses related to program administration (up to 5%) and student services (up to 10%), all of which must be listed under the appropriate NSF budget categories. See section V.A.8 above for details. Do not enter items in either categories G.6. or F.4., "Other."

C. Due Dates

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

    August 14, 2012

    August 13, 2013

    August 12, 2014

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://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

Reviewers will be asked to consider the above two merit review criteria with emphasis placed on the S-STEM program components (see "Program Description"). Those elements include:

- Student-support infrastructure for the successful graduation of scholarship recipients;
- Management plan that is effective and clearly articulated;
- Evidence of broad faculty participation and support from the appropriate academic, financial aid and student services personnel;
- Justification of the number and amount of scholarships requested based on current student demographics; and
- Educational program of high quality.

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 be completed and submitted by each reviewer. 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 at least 90 days prior to the end of the current budget period. (Some programs or awards require submission of more frequent project reports). Within 90 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.

In addition, in response to the need for NSF to report on the operation and success of the S-STEM program, a web-based data collection site has been developed for the purpose of collecting information about program participants.

Each S-STEM PI is required to complete information about each S-STEM scholar and subsequently update the information reported through the web site during each semester of continued S-STEM support. Instructions will be provided shortly after the award to successful grantees. This information must be provided within 30 days of the beginning of each semester or quarter and includes the following information about each S-STEM scholar: name, permanent address, school address, major, career goals, race/ethnicity (student's option to report), gender, date of birth, grade point average, participation in an internship (in an S-STEM-related area), and student employment (part-time or full-time; not necessarily in an S-STEM-related area). Any information that would permit identification of individual responses will be held in strict confidence.

An external evaluator has been retained to assist in the evaluation process at the NSF program level. This evaluator will use the demographic data and student contact information to conduct formative and summative evaluation of the S-STEM program which includes post-graduation and post-employment assessment. These data are not used to evaluate individual projects.

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:

- Connie K. Della-Piana, Lead Program Director, telephone: (703) 292-5309, email: cdellapi@nsf.gov

- John Krupczak, Alternate Lead Program Director, 855, telephone: (703) 292-4647, email: JKRUPCZA@nsf.gov

- Paul Tymann, Alternate Lead Program Director, 835, telephone: (703) 292-2260, email: PTYMANN@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 at https://public.govdelivery.com/accounts/USNSF/subscriber/new?topic_id=USNSF_179.

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**   (703) 292-5111
>   (NSF Information Center)**:**
>
> - **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