

## Robert Noyce Scholarship Program

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### Program Solicitation

NSF 05-528

*Replaces Document 04-527*



### National Science Foundation

Directorate for Education and Human Resources

Division of Undergraduate Education

### Letter of Intent Due Date(s) *(optional)*:

February 28, 2005

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

March 31, 2005

### REVISIONS AND UPDATES

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1. Deadlines have been changed.
2. Letters of Intent must be submitted through Fastlane.

### SUMMARY OF PROGRAM REQUIREMENTS

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#### General Information

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#### Program Title:

Robert Noyce Scholarship Program

#### Synopsis of Program:

The Robert Noyce Scholarship program seeks to encourage talented science, technology, engineering, and mathematics majors and professionals to become K-12 mathematics and science teachers. The program provides funds to institutions of higher education to support scholarships, stipends, and programs for students who commit to teaching in high need K-12 schools.

#### Cognizant Program Officer(s):

- Joan T. Prival, Lead Program Director, Directorate for Education & Human Resources, Division of Undergraduate

Education, 875 S, telephone: (703) 292-4635, fax: (703) 292-9015, email: [jprival@nsf.gov](mailto:jprival@nsf.gov)

- Kathleen A. Parson, Program Director, Directorate for Education & Human Resources, Division of Undergraduate Education, 835 N, telephone: (703) 292-4653, fax: (703) 292-9015, email: [kparson@nsf.gov](mailto:kparson@nsf.gov)
- Herbert Levitan, Program Director, Directorate for Education & Human Resources, Division of Undergraduate Education, 835 N, telephone: (703) 292-4627, fax: (703) 292-9015, email: [hlevitan@nsf.gov](mailto:hlevitan@nsf.gov)

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

- 47.076 --- Education and Human Resources

#### Eligibility Information

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- **Organization Limit:**

Institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965) in the United States or consortia of such institutions or nonprofit entities that have established consortia among such institutions of higher education may submit proposals.

- **PI Eligibility Limit:** None Specified.
- **Limit on Number of Proposals:** An institution, on its own or as a member of a consortium, may submit no more than one proposal per competition.

#### Award Information

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- **Anticipated Type of Award:** Standard or Continuing Grant
- **Estimated Number of Awards:** 8 to 10
- **Anticipated Funding Amount:** \$4,000,000 pending availability of funding in FY 2005

#### Proposal Preparation and Submission Instructions

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##### A. Proposal Preparation Instructions

- **Letters of Intent:** Submission of Letters of Intent is optional. Please see the full text of this solicitation for further information.
- **Full Proposal Preparation Instructions:** This solicitation contains information that supplements the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full text of this solicitation for further information.

##### B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is not required.
- **Indirect Cost (F&A) Limitations:** No indirect costs are allowed.
- **Other Budgetary Limitations:** Other budgetary limitations apply. Please see the full text of this solicitation for further information.

##### C. Due Dates

- **Letters of Intent (optional):**  
February 28, 2005
- **Full Proposal Deadline Date(s)** (due by 5 p.m. proposer's local time):  
March 31, 2005

#### Proposal Review Information

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- **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

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- **Award Conditions:** Standard NSF award conditions apply.
- **Reporting Requirements:** Standard NSF reporting requirements apply.

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## I. INTRODUCTION

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It is estimated that the nation's schools will need to hire 2.2 million teachers, including 240,000 middle and high school mathematics and science teachers, in the next decade due to projected enrollment increases, anticipated retirements, and the attrition of new teachers (National Commission on Mathematics and Science Teaching for the 21st Century, 2000). Furthermore, the demand for certified teachers has increased as student course-taking in high school science and mathematics has increased and as states implement the teacher quality requirements of No Child Left Behind with respect to teacher content knowledge in the assigned field of teaching (CCSSO, 2003).

Research on effective teachers has shown persistent correlations between student performance and teacher quality

(Sanders and Rivers, 1996; Jordan, Mendro, and Weerasinghe, 1997). Teachers' content knowledge, particularly in science and mathematics, is an important factor in determining student achievement (Goldhaber and Brewer, 1996, National Research Council, 2000). A large percentage of science and mathematics teachers lack even a minor in their teaching field, with 56% of public secondary students receiving instruction in the physical sciences from teachers without a major or minor in the physical sciences and 27% of students receiving mathematics instruction in classes taught by teachers lacking a minor in mathematics. Although the problem of out-of-field teaching is widespread, students in high-poverty schools are 77% more likely to be taught by an out-of-field teacher than students in low poverty schools (Ingersoll, 1999, 2002). As many as 50% of new teachers in urban school districts leave the teaching profession within their first three years, further exacerbating shortages and misassignment of teachers. A survey of urban school districts conducted by the Council of the Great City Schools and Recruiting New Teachers, Inc., in 1998-99, indicated that 95% of responding urban school districts had an immediate demand for high school science and mathematics teachers. Eighty percent reported a need for middle school science and mathematics teachers (Urban Teacher Collaborative, 2000).

The Robert Noyce Scholarship program, authorized under the National Science Foundation Authorization Act of 2002 (P.L. 107-368), responds to the critical need for K-12 teachers of science, technology, engineering, and mathematics by encouraging talented science, technology, engineering, and mathematics (STEM) students and STEM professionals to pursue teaching careers in elementary and secondary schools. The program provides funding to institutions of higher education to provide scholarships, stipends, and programmatic support for STEM majors and STEM professionals to enter and complete teacher credentialing programs. Scholarship recipients are required to complete two years of teaching in a high need school district for each year of scholarship or stipend support. The program seeks to increase the number of K-12 teachers with strong STEM content knowledge.

## **II. PROGRAM DESCRIPTION**

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The NSF Robert Noyce Scholarship program awards grants to institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965) in the United States or consortia of such institutions or nonprofit entities that have established consortia among such institutions of higher education to provide scholarships for juniors and seniors who are majoring in science, technology, engineering, or mathematics (STEM) and stipends for STEM professionals seeking to become teachers. A goal of the program is to recruit individuals with strong STEM backgrounds who might otherwise not have considered a career in K-12 teaching. Proposals may address either the scholarship or the stipend program or both programs. Scholarship and stipend recipients should be selected on the basis of academic merit, with consideration given to financial need and the diversity of participants in the program. Institutions are expected to provide the program and support to enable scholarship and stipend recipients to obtain teacher certification or licensing and to become successful elementary or secondary teachers. This support should be based on effective, evidence-based strategies and should be available to recipients during their participation in the program and continue after their completion of the program to ease the transition into teaching and aid retention during and beyond the obligatory service period. Program activities for scholarship and stipend recipients may include serving as resources for science and mathematics instruction in K-12 classrooms. Up to 15% of the proposed budget may be allocated for administrative and program costs associated with recruiting and preparing the teachers, providing support for the teachers as they begin teaching, and conducting monitoring and evaluation activities. The project leadership team is expected to include STEM discipline faculty.

### **Scholarships for STEM Majors**

Scholarship amounts must be at least \$7,500 per year but no more than \$10,000 per year; however, no individual may receive a scholarship for any year that exceeds the yearly cost of attendance (as defined in section 472 of the Higher Education Act of 1965 (20 U.S.C. 1087II)). Scholarship recipients must be U.S. citizens or nationals, or permanent resident aliens, must be majoring in mathematics, engineering, or a science discipline, and must be in the last 2 years of a baccalaureate degree program. It is expected that these students will complete a major in a STEM discipline. Students enrolled in institutions requiring a fifth year or post-baccalaureate program for teacher certification may apply the scholarship to the post-baccalaureate program. A recipient may receive up to two years of scholarship support. Recipients of scholarships must commit to completion of two years of service as a mathematics or science teacher for each year the scholarship is received. Service must be performed within 6 years after graduation from the program for which the scholarship was awarded and must be performed in a high need local educational agency that meets one or more of the following criteria:

- A. It has at least one school in which 50 percent or more of the enrolled students are eligible for participation in the free and reduced price lunch program established by the Richard B. Russell National School Lunch Act (42 U.S.C.1751 et seq.).
- B. It has at least one school in which: (i) more than 34 percent of the academic classroom teachers at the secondary level (across all academic subjects) do not have an undergraduate degree with a major or minor in, or a graduate degree in, the academic field in which they teach the largest percentage of their classes; or (ii) more than 34 percent of the teachers in two of the academic departments do not have an undergraduate degree with a major or minor in, or a graduate degree in, the academic field in which they teach the largest percentage of their classes.
- C. It has at least one school whose teacher attrition rate has been 15 percent or more over the last three school years.

### **Stipends for STEM Professionals**

Stipends of up to \$10,000 are available for a maximum of one year for science, technology, engineering, or mathematics (STEM) professionals who hold a baccalaureate, masters, or doctoral degree in science, mathematics, or engineering and enroll in a teacher certification program. Stipend recipients must be U.S. citizens or nationals, or permanent resident aliens. Recipients of stipends must commit to serving two years as a mathematics or science teacher in a high need local educational agency, as defined above, within 6 years after graduation or completion of the program for which the stipend was awarded. Current K-12 teachers seeking new or re-certification are not eligible to receive Noyce scholarships or stipends.

### **Institutional Responsibilities**

The institution shall require that each recipient of the scholarship or stipend accepts the terms of the scholarship or stipend and agrees to provide the institution with annual certification of employment and up-to-date contact information and to participate in surveys provided by the institution of higher education as part of an evaluation program. Monitoring the compliance of scholarship and stipend recipients with respect to their service requirements will be the responsibility of the institution of higher education receiving the award. It is expected that failure to satisfy the academic requirements of the program or to complete the service requirement will result in forfeiture of the scholarship or stipend award with repayments pro-rated accordingly to reflect partial service completed. The institution is responsible for collecting the repayment amounts in accordance with P.L. 107-368, SEC. 10 (g). All forfeited scholarship or stipend funds, less grantee administrative costs associated with collection of the repayment not to exceed 5% of the forfeited amount, will be returned to the United States Treasury. The institution is expected to establish procedures that ensure compliance with the service requirement with allowances for extreme hardship or other circumstances for which it is not in the best interests of the school district or not feasible for the scholarship/stipend recipient to fulfill the service obligation. The institution may establish procedures for waiving or suspending repayment of scholarships or stipends in cases of extreme hardship or other circumstances that would preclude the fulfillment of the service obligation.

Eligible institutions must provide evidence of exemplary teacher preparation efforts to ensure that scholarship and stipend recipients become successful science and mathematics teachers in elementary or secondary schools. Successful proposals also will provide evidence of functioning partnerships between institutions of higher education and school districts and an infrastructure that is supportive of new teachers. All projects are expected to include an evaluation plan for measuring the impact of the project and effectiveness of proposed strategies in attracting, preparing, and retaining STEM individuals in teaching careers as well as the effectiveness of the Noyce scholarship/stipend recipients as teachers. The evaluation plan should include a mechanism for tracking the scholarship/stipend recipients as they fulfill their teaching obligation and a method for collecting demographic data on the scholarship and stipend recipients. In addition to the project-specific evaluation, all projects will be expected to cooperate with an NSF third party evaluation of program impact that will require data collection. It is expected that individual project evaluation, as well as the overall program evaluation, will contribute to the knowledge base of effective strategies for attracting and retaining effective teachers with strong STEM content knowledge.

Proposers may wish to explore the resources related to K-12 teacher education available at MSPnet, <http://hub.mspnet.org/>, an electronic learning community for the Math and Science Partnership (MSP) program. Information about current awards funded under the Robert Noyce Scholarship Program resources can be found at the Division of Undergraduate Education website: <http://www.ehr.nsf.gov/ehr/DUE/>

## References

- Council of Chief State School Officers (2003). *State Indicators of Science and Mathematics Education 2003*. Washington, DC: Author
- Goldhaber, D.D. and D.J. Brewer (1997). Evaluating the Effect of Teacher Degree Level on Educational Performance. In W. J. Fowler (ed.), *Developments in School Finance, 1996*. Washington, DC: National Center for Education Statistics
- Ingersoll, R.M. (1999). The Problem of Underqualified Teachers in American Secondary Schools. *Educational Researcher*, 28 (2): 26-37.
- Ingersoll, R.M. (2002). *Out-of-field Teaching: Educational Inequality and the Organization of Schools: An Exploratory Analysis*. Seattle, WA: University of Washington Center for the Study of Teaching and Policy
- Jordan, H., R. Mendro, & D. Weerasinghe. (1997). *Teacher Effects on Longitudinal Student Achievement*.
- National Commission on Mathematics and Science Teaching for the 21st Century (2000). *Before It's Too Late*. Jessup, MD: Education Publications Center.
- National Research Council (2001). *Educating Teachers of Science, Mathematics, and Technology: New Practices for the New Millennium* (Committee on Science and Mathematics Teacher Preparation). Washington, DC: National Academy Press.
- Sanders, W.L. and J. C. Rivers, (1966). *Cumulative and Residual Effects of Teachers on Future Academic Achievement*. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.
- Urban Teacher Collaborative (2000). *The Urban Teacher Challenge: Teacher Demand in the Great City Schools*. Washington, D.C.: Council of the Great City Schools.

## III. ELIGIBILITY INFORMATION

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Institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965) in the United States or consortia of such institutions or nonprofit entities that have established consortia among such institutions of higher education may submit proposals. An institution may submit no more than one proposal per competition.

## IV. AWARD INFORMATION

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Estimated program budget, number of awards and average award size/duration are subject to the availability of funds. The anticipated funding amount in FY 2005 is \$4 million. Up to 15% of the proposed budget may be allocated for administrative and program costs as detailed in Section II. "Program Description" above. Depending on the quality of submissions and the availability of funds, NSF expects to fund approximately 8 to 10 awards of up to \$500,000 for a total award amount and duration of 3 to 4 years. Pending availability of funding and successful progress, awardees may request follow-on funding through submission of a new proposal at the end of the initial grant period for the purpose of tracking project outcomes.

## V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

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### A. Proposal Preparation Instructions

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### **Letters of Intent (*optional*):**

A Letter of Intent is optional, but encouraged, before submitting a full proposal. The Letter of Intent is not a preliminary proposal. It is intended to enhance the efficiency of the review process. Letters of Intent should be electronically submitted through FastLane by February 28, 2005. The Letter of Intent should include a brief synopsis of the project, indicating the grade level (elementary, middle, or high school) and discipline focus of the project. Additional institutions and school districts should be listed in the Participating Organizations section.

### **Full Proposal Instructions:**

Proposals submitted in response to this program announcement/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/cgi-bin/getpub?gpg>. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

The following instructions supplement the GPG guidelines.

Scholarships and stipends should be indicated in Section F.1 Participant Support - "Stipends" of the FastLane budget. Indirect costs are not allowed.

Proposals must include the following elements in the Project Description section:

- A description of the proposed scholarship or stipend program, including the number and size of scholarships and stipends, academic requirements, and projected cumulative number of new teachers to be produced over the duration of the program, including a comparison to number of teachers currently produced by the proposing institution(s);
- A description of the teacher preparation program in which the Noyce scholarship or stipend recipients will be enrolled. The proposal must include evidence of exemplary teacher preparation efforts to ensure that scholarship and stipend recipients become successful science and mathematics teachers in elementary and secondary schools;
- A description of recruitment activities designed to attract a large and diverse pool of applicants;
- A description of the selection process that will ensure the most qualified applicants are selected based on academic merit, with consideration given to financial need and increasing participation of minorities, persons with disabilities, and underrepresented genders relative to specific teaching areas;
- A description of the management and administrative structure and capability to administer the scholarship or stipend program;
- Evidence of an infrastructure that is supportive of new teachers. Include a description of the activities and support mechanisms that will be available to recipients to ensure they are able and willing to fulfill their commitment to teaching;
- Evidence of functioning partnerships between institutions of higher education and school districts;
- A description of plans to monitor and enforce compliance with the required teaching commitment;
- Evidence that the institution is committed to making the program a central institutional focus; and
- An evaluation plan that will provide information on the effectiveness of the project in attracting, preparing, and retaining STEM individuals in teaching careers and should include methodologies for measuring the effectiveness of the Noyce scholarship/stipend recipients as teachers. The evaluation plan should include a mechanism for tracking the scholarship/stipend recipients during the period in which they are fulfilling their service obligation and a plan for collecting demographic data and statistics on scholarship and stipend recipients.

### **Additional Requirements**

The PI and Co-PI leadership must include at least one faculty member from a STEM discipline. Letters of support from the Dean of Arts & Sciences, Dean of Education, and school district Superintendent(s) or comparable administrators should be submitted as evidence of institutional support for the proposal. Letters should be uploaded into the Supplementary Documentation section in FastLane.



A Project Data Form must be submitted (via FastLane) as part of all proposals. The information on this form is used to direct proposals to appropriate reviewers and to determine the characteristics of projects supported by the Division of Undergraduate Education. In FastLane, this form will show up in the list of forms for your proposal only after you have (1) selected the "Noyce" program solicitation number on the Cover Sheet and (2) saved the Cover Sheet.

Proposers are reminded to identify the program announcement/solicitation number (05-528) in the program announcement/solicitation block on the proposal Cover Sheet. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

**B. Budgetary Information**

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**Cost Sharing:**

Cost sharing is not required in proposals submitted under this Program Solicitation.

**Indirect Cost (F&A) Limitations:**

No indirect costs are allowed.

**Other Budgetary Limitations:**

Up to 15% of the proposed budget may be allocated for administrative and program costs as detailed in Section II. "Program Description" above.

**C. Due Dates**

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Proposals must be submitted by the following date(s):

**Letters of Intent (*optional*):**

February 28, 2005

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

March 31, 2005

**D. FastLane Requirements**

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Proposers are required to prepare and submit all proposals for this announcement/solicitation through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are 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](mailto: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 announcement/solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this announcement/solicitation.

*Submission of Electronically Signed Cover Sheets.* The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the [Grant Proposal Guide](#) for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Proposers are no longer required to provide a paper copy of the signed



## VI. PROPOSAL REVIEW INFORMATION

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### A. NSF Proposal Review Process

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Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest, at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority-serving institutions, or adjacent disciplines to that principally addressed in the proposal.

The National Science Board approved revised criteria for evaluating proposals at its meeting on March 28, 1997 (NSB 97-72). All NSF proposals are evaluated through use of the two merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

On July 8, 2002, the NSF Director issued [Important Notice 127](#), Implementation of new Grant Proposal Guide Requirements Related to the Broader Impacts Criterion. This Important Notice reinforces the importance of addressing both criteria in the preparation and review of all proposals submitted to NSF. NSF continues to strengthen its internal processes to ensure that both of the merit review criteria are addressed when making funding decisions.

In an effort to increase compliance with these requirements, the January 2002 issuance of the GPG incorporated revised proposal preparation guidelines relating to the development of the Project Summary and Project Description. Chapter II of the GPG specifies that Principal Investigators (PIs) must address both merit review criteria in separate statements within the one-page Project Summary. This chapter also reiterates that broader impacts resulting from the proposed project must be addressed in the Project Description and described as an integral part of the narrative.

Effective October 1, 2002, NSF will return without review proposals that do not separately address both merit review criteria within the Project Summary. It is believed that these changes to NSF proposal preparation and processing guidelines will more clearly articulate the importance of broader impacts to NSF-funded projects.

The two National Science Board approved merit review criteria are listed below (see the [Grant Proposal Guide](#) Chapter III.A for further information). The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which he/she is qualified to make judgments.

#### **What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

#### **What are the broader impacts of the proposed activity?**

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

NSF staff will give careful consideration to the following in making funding decisions:

### ***Integration of Research and Education***

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

### ***Integrating Diversity into NSF Programs, Projects, and Activities***

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- 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.

### **Additional Review Criteria:**

In considering the above criteria, reviewers will be asked to comment on the following:

- capacity and ability of the institution to effectively conduct the program;
- number and quality of students that will be served by the program;
- ability of the program to recruit STEM majors who would otherwise not pursue a career in teaching;
- quality of the preservice educational program;
- quality of the student-support and new teacher-support infrastructure;
- extent to which the proposed strategies reflect effective practices based on research;
- the degree to which the proposed programming will enable scholarship or stipend recipients to become successful mathematics and science teachers;
- feasibility and completeness of an evaluation plan that will measure the effectiveness of the proposed strategies; and
- institutional support for the program and the extent to which the institution is committed to making the program a central organizational focus.

## **B. Review Protocol and Associated Customer Service Standard**

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All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this announcement/solicitation will be reviewed by Panel Review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Director. In addition, the proposer will receive an explanation of the decision to award or decline funding.

NSF is striving to be able to tell proposers whether their proposals have been declined or recommended for funding within six months. The time interval begins on the closing date of an announcement/solicitation, or the date of proposal receipt, whichever is later. The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, 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 and 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.

## VII. AWARD ADMINISTRATION INFORMATION

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### A. Notification of the Award

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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 Division 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.A. for additional information on the review process.)

### B. Award Conditions

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An NSF award consists of: (1) the award letter, 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 letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1); \* or Federal Demonstration Partnership (FDP) Terms and Conditions \* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

\*These documents may be accessed electronically on NSF's Website at [http://www.nsf.gov/home/grants/grants\\_gac.htm](http://www.nsf.gov/home/grants/grants_gac.htm). Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, available electronically on the NSF Website at <http://www.nsf.gov/cgi-bin/getpub?gpm>. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Website at <http://www.gpo.gov>.

### C. Reporting Requirements

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For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after the expiration of an award, the PI also is required to submit a final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for the PI and all Co-PIs. 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 FastLane, for preparation and submission of annual and final project reports. This system permits electronic submission and updating of project reports, including information on project participants (individual and organizational), activities and findings, publications, and other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system.

## VIII. CONTACTS FOR ADDITIONAL INFORMATION

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General inquiries regarding this program should be made to:

- Joan T. Prival, Lead Program Director, Directorate for Education & Human Resources, Division of Undergraduate Education, 875 S, telephone: (703) 292-4635, fax: (703) 292-9015, email: [jprival@nsf.gov](mailto:jprival@nsf.gov)
- Kathleen A. Parson, Program Director, Directorate for Education & Human Resources, Division of Undergraduate Education, 835 N, telephone: (703) 292-4653, fax: (703) 292-9015, email: [kparson@nsf.gov](mailto:kparson@nsf.gov)
- Herbert Levitan, Program Director, Directorate for Education & Human Resources, Division of Undergraduate Education, 835 N, telephone: (703) 292-4627, fax: (703) 292-9015, email: [hlevitan@nsf.gov](mailto:hlevitan@nsf.gov)

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188, email: [fastlane@nsf.gov](mailto:fastlane@nsf.gov)

## IX. OTHER PROGRAMS OF INTEREST

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The NSF *Guide to Programs* is a compilation of funding for research and education in science, mathematics, and engineering. The NSF *Guide to Programs* is available electronically at <http://www.nsf.gov/cgi-bin/getpub?gp>. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter.

Many NSF programs offer announcements or solicitations concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices. Any changes in NSF's fiscal year programs occurring after press time for the *Guide to Programs* will be announced in the NSF [E-Bulletin](#), which is updated daily on the NSF Website at <http://www.nsf.gov/home/ebulletin>, and in individual program announcements/solicitations. Subscribers can also sign up for NSF's [Custom News Service](http://www.nsf.gov/home/cns/start.htm) (<http://www.nsf.gov/home/cns/start.htm>) to be notified of new funding opportunities that become available.

### Related Programs:

- Centers For Learning and Teaching ([NSF 04-501](#))
- Teacher Professional Continuum ([NSF 04-568](#))

## ABOUT THE NATIONAL SCIENCE FOUNDATION

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The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Awardees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

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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>

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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; 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 applicant 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 needing information as part of the review process or in order to coordinate programs; 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," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). 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 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 this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Division of Administrative Services, National Science Foundation, Arlington, VA 22230.



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