Program for Research and Education with Small Telescopes (PREST)

PROGRAM SOLICITATION
NSF 04-557

National Science Foundation

Directorate for Mathematical & Physical Sciences
Division of Astronomical Sciences

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

June 04, 2004

January 20, 2005

January 20, 2006

January, Annually Thereafter

REVISION NOTES

Revisions have been made to clarify language in the solicitation, based on experience with the first competition. These changes primarily concern the nature of the requirements for research and facility access, and guidelines for proposal preparation.

As announced on May 21, 2009, proposers must prepare and submit proposals to the National Science Foundation (NSF) using the NSF FastLane system at http://www.fastlane.nsf.gov/. This approach is being taken to support efficient Grants.gov operations during this busy workload period and in response to OMB direction guidance issued March 9, 2009. NSF will continue to post information about available funding opportunities to Grants.gov FIND and will continue to collaborate with institutions who have invested in system-to-system submission functionality as their preferred proposal submission method. NSF remains committed to the long-standing goal of streamlined grants processing and plans to provide a web services interface for those institutions that want to use their existing grants management systems to directly submit proposals to NSF.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Program for Research and Education with Small Telescopes (PREST)

Synopsis of Program:

The Program for Research and Education with Small Telescopes (PREST) is designed to address a spectrum of research and teaching needs for a large number of individuals at institutions without observatories or the resources needed to make their existing observing facilities reliable and productive tools for research and training. The PREST activity provides funding and modest operational support for modern, instrumented telescopes in the range of 0.5 to 2.5 meters aperture to organizations or consortia presenting an integrated program of research, student training, and educational programming.

Cognizant Program Officer(s):

- Jeffrey R. Pier, Program Director, PREST, 1030 S, telephone: (703) 292-2977, fax: (703) 292-9034, email: jpier@nsf.gov

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

- 47.049 --- Mathematical and Physical Sciences

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 4 to 8 depending on number and quality of proposals received

Anticipated Funding Amount: $1,200,000 in FY2004 pending the availability of funds.

Eligibility Information

Organization Limit:

None Specified

PI Limit:

None Specified

Limit on Number of Proposals per Organization:

None Specified

Limit on Number of Proposals per PI:

None Specified

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Not Applicable
- **Preliminary Proposal Submission:** Not Applicable
- **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:** Cost Sharing is not required under this solicitation.
- **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):

  June 04, 2004

  January 20, 2005

  January 20, 2006

  January, Annually Thereafter

Proposal Review Information Criteria

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

Award Administration Information

Award Conditions: Additional award conditions apply. Please see the full text of this solicitation for further information.

Reporting Requirements: Standard NSF reporting requirements apply.

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I. INTRODUCTION

The Program for Research and Education with Small Telescopes (PREST) is designed to address a spectrum of research and teaching needs for a large number of individuals at organizations without observatories or the resources needed to make their existing observing facilities reliable and productive tools for research and training. For many years, the national observatories provided modest aperture telescopes equipped with current instrumentation for use by the astronomical community pursuing research activities in optical and infrared astronomy. Many of the users of these telescopes were faculty and their students at institutions that had no similar local resources. The move toward 8 and 10 meter aperture telescopes has led to the closure of many telescopes of modest aperture particularly at the northern hemisphere site of the U.S. national observatory. These closures have reduced the number of 'astronomer nights' available to the US optical/IR community, which has impacted most seriously those astronomers at institutions without their own facilities.

Telescopes of modest aperture are still important research tools, not only for the science they enable on their own but because they allow preliminary or planning studies necessary for projects being developed for larger telescopes. In addition, many astronomers now without access to smaller telescopes are at primarily undergraduate institutions or in state university systems. A large number of students from underrepresented groups attend such institutions, and their inclusion in research activities is an important mechanism to diversify the scientific workforce. Even though many faculty are active in involving undergraduate students in their research, an undesirable repercussion of the closure of small telescopes has been that fewer undergraduate and graduate students are obtaining direct observational experience. A lack of direct experience with instruments and observing practices can severely limit an investigator's ability to optimize and interpret the data and may have a significant deleterious impact on the next generation of instrument builders and observers.

II. PROGRAM DESCRIPTION

The PREST activity will provide funding and modest operational support for modern, instrumented telescopes in the range of 0.5 to 2.5 meters aperture to organizations or consortia presenting an integrated program of research, student training, and educational programming. All organizations or consortia receiving funds under this program must be willing to make some observing time on the facility available to the larger professional astronomical community. Partnerships among research institutions, two- and four- year institutions and local schools or community science centers are encouraged. Consortia of educational and research institutions or organizations are eligible to apply. Eligible projects include acquisition of telescope systems or instrumentation or the refurbishment or enhancement of existing facilities. If proposing to upgrade existing facilities, the proposers must demonstrate that the resulting facility will provide a robust, modern observing environment for its users. A small amount of funding is available to help defray the operating costs of these facilities. Proposals must meet the 15-page limitation on the Project Description.

A. ELIGIBLE PROJECTS

Eligible projects include the following:

- Acquisition of telescopes or necessary facility infrastructure, such as domes.
- Instrumentation for new or existing telescopes.
- Refurbishment, improvements or enhancements of existing telescopes, instrument systems, telescope operations systems or other improvements that increase the telescope and instrument capabilities, including enhanced ease of visitor use. Major construction such as the creation of lab space is not an allowable cost.

Proposals must describe clearly what improvements in capability will result from the requested funding and how these support the scientific and educational goals.

While the primary intent of this activity is to provide funds for facilities, the NSF recognizes that many organizations or consortia may be unable to secure immediate funding for the full operational costs for such facilities. As a result, proposers may also request

support for up to $50,000 per year in operating costs for facilities being constructed or enhanced through this program. If such requests are made, the proposers must indicate clearly how such funds will be used, to what extent and how other sources will supplement the requested funds, and how long-term sustainability will be achieved. Requests for funding that are simply substitutes for existing operations funds for telescopes are not appropriate for this program.

B. DESCRIPTION OF FACILITY PROGRAMS

In all cases, PI's must present a scientific research program that will be undertaken with the facility that includes both faculty and student involvement. Research is expected to be of professional quality, of a nature suitable for publication in peer-reviewed professional astronomical journals. It is understood that the proposers are not likely to be able to describe fully all possible research projects that will be conducted over the proposal period, but proposers must provide a description of sample research topics or projects, the scope of the research to be conducted, and the special capabilities the telescope facility will provide to users in sufficient detail for the reviewers and NSF to judge the scientific merit of the activities and their relevance to and impact on the field of astronomy. If the proposal comes from a consortium of users, each organization or institution involved must present a plan for use of the facility as part of the Project Description and demonstrate an intention to participate in the program.

PI's must also present a coherent educational program that will take advantage of the telescope facility and broaden its use. The nature of this educational program is not constrained to any particular educational or public group, and not every group need be involved in the proposed activity. It is expected that much, if not all, of the research carried out with the observational facility will be done in conjunction with students (see subsection C below). Consistent with NSF's goal to broaden participation by under-represented groups in science and engineering, proposers are urged to consider ways in which their proposed activities can work toward this goal. Collaborations with local organizations (community colleges, K-12 schools, community science centers, etc) are encouraged, but not required. Proposers may want to consider joining programs and activities already established, for example those at national centers or sponsored by professional organizations. If collaborations with such organizations are proposed, each organization must describe clearly its role in the facility programming or operation and demonstrate its intent to participate in the project.

C. ROLE OF STUDENTS AND STUDENT TRAINING

The participation of students is an integral and essential part of this program. The funded facilities are seen as providing training opportunities in instrumentation and observational techniques and observing programs. Proposals must describe the role of undergraduate or graduate students as appropriate in any instrumentation projects, improvement projects and, ultimately, the research and educational programs that the facilities will enable. Examples of areas in which student participation is expected and encouraged, as appropriate, are listed below. Proposed projects are not expected to include activities in all of these areas.

- Student research, independently or in conjunction with faculty
- Design, fabrication, and testing of instrumentation and data processing software
- Operating the telescopes, carrying out observing programs or supporting users of the facilities
- Classroom activities, such as undergraduate or graduate labs for science majors or non-majors
- Activities in collaboration with regional 2-year institutions.
- Participation in public or K-12 school programs.

D. ACCESS TO A BROADER PROFESSIONAL COMMUNITY

All organizations or consortia receiving funds under this program must be willing to make a fraction of the observing time on the facility enabled by this program available to qualified users for integrated scientific research and educational programs. Proposers must provide a letter stating their plan for making time available on the facility to scientists and their students from the professional astronomical community. This letter should be provided as a supplemental document to the proposal. The PI's must propose a scheme for assessing the value or justifying the fraction of observing time made available based on the amount of NSF support received.

Proposals must contain a description of the amount, the scheduling, and the nature of observing time and facilities made available to the community, including the duration of commitment and any conditions of use imposed. Proposals must present a plan for making such time available and describe the level and type of training and technical, operational, and logistical support available for outside users. It is understood that the amount and extent of user support provided will vary with the resources available to the proposing institutions or organizations; in particular, it is not expected that the level of support provided would be comparable to that at major facilities or national centers.

Proposers must also discuss how they would evaluate the intellectual merit and broader impact of requests for observing time and how they would accommodate the scheduling of outside users. Proposers are encouraged to consider and describe the benefit of potential interactions between visiting observers and the faculty and students of the observatory's host institution or organization.

E. PROGRAM EVALUATION

Proposals should describe plans for assessing progress toward and success in achieving the proposed program goals. Proposals should also define metrics by which program effectiveness will be measured over the duration of the proposal period. It is expected that, in the event of an award, annual and final reports to NSF will provide evaluations of the program based on these metrics. Any projects awarded more than three years of funding will be reviewed in their 3rd year and a decision on continued funding will rest on how well the proposal goals have been met using, in part, the metrics established in the proposal.

III. AWARD INFORMATION

- **Anticipated Type of Award:** Standard or Continuing Grant
- **Estimated Number of Awards:** 4 to 8 - depending on number and quality of proposals received
- **Anticipated Funding Amount:** $1,200,000 in FY2004 pending the availability of funds.

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds. Awards may be for up to 5 years duration. Any project awarded more than three years of funding will be reviewed in its 3rd year with possible site visits or reverse site visits, following which a decision will be made on the award of the 4th and/or 5th years of funding.

IV. ELIGIBILITY INFORMATION

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the Grant Proposal Guide, Chapter I, Section E.

Organization Limit:

None Specified

PI Limit:

None Specified

Limit on Number of Proposals per Organization:

None Specified

Limit on Number of Proposals per PI:

None Specified

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

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

- Full proposals submitted via FastLane: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov. Proposers are reminded to identify this program solicitation number in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov. The complete text of the NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: (http://www.nsf.gov/publications/pub_summ.jsp?ods_key=grantsgovguide). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper copies of the Grants.gov Application Guide also may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov.

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

Collaborative Proposals. All collaborative proposals submitted as separate submissions from multiple organizations must be submitted via the NSF FastLane system. Chapter II, Section D.3 of the Grant Proposal Guide provides additional information on collaborative proposals.

The following instructions supplement the GPG guidelines and the information in Section II.

Proposals must have identifiable sections within the 15-page Project Description that address the scientific, educational, technical, and managerial aspects of the proposed program. Proposals that do not address fully the required items may be judged unresponsive to the solicitation and returned without review.

- Issues to address with regard to the proposed scientific and educational programs related to the description of facility programs, the role of students and student training, access to the broader professional community, and program evaluation are described above in Section II. Program Description.

- A section on the technical aspects of the proposed activity must present a discussion of technical issues and concerns and provide strategies for addressing them. It should include an overview of the instrument or improvement program proposed, including optical, mechanical, electronics, and software components, as appropriate. PI's should provide evidence that the proposed technical approach is viable and that the project has the technical capability, expertise, and resources to carry it out. The proposal should also provide evidence that the proposed facility will enable the planned scientific research and educational program.

A section on management must include a discussion of the procedures and processes that will be used to manage the project, including procedures to plan and organize the work, major tasks and milestones, and metrics to monitor and assess progress. This section should discuss any risks and challenges the project faces and present plans for addressing these. The proposal should describe personnel involved in the project as well as subcontractors or vendors used, as appropriate. The interrelation and organization of various groups involved in the project must be described and show clear project and management responsibility. Should the proposal come from a consortium, all organizations or institutions involved must provide letters of their intention to participate in the project, included in the proposal as supplementary documentation.

- Within the management section, the proposers should discuss their plans for providing access to professional users from other institutions as discussed above. A letter from the proposing organization stating the amount and nature of observing time and facilities made available must be included with the proposal as supplementary documentation.

B. Budgetary Information

Cost Sharing: Cost sharing is not required under this solicitation.

Other Budgetary Limitations:

No more than $50,000 can be requested per year for operations costs associated with the proposed facility.

C. Due Dates

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

  June 04, 2004

  January 20, 2005

  January 20, 2006

  January, Annually Thereafter

For fiscal year 2005 and following, the deadline will be 20 January, annually.

D. FastLane / Grants.gov Requirements

- **For Proposals Submitted Via FastLane:**

  Detailed technical instructions regarding the technical aspects of 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. 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.

  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. Further instructions regarding this process are available on the FastLane Website at: https://www.fastlane.nsf.gov/fastlane.jsp.

- **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. The Grants.gov's Grant Community User Guide is a comprehensive reference document that provides technical information about Grants.gov. Proposers can download the User Guide as a Microsoft Word document or as a PDF document. The Grants.gov User Guide is available at: http://www.grants.gov/CustomerSupport. In addition, the NSF Grants.gov Application Guide provides additional technical guidance regarding 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.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program where they will be reviewed if they meet NSF proposal preparation requirements. 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 who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with the 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.

A. NSF Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. 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 the reviewer is qualified to make judgements.

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, original, or potentially transformative 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?

Examples illustrating activities likely to demonstrate broader impacts are available electronically on the NSF website at: http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf.

Mentoring activities provided to postdoctoral researchers supported on the project, as described in a one-page supplementary document, will be evaluated under the Broader Impacts criterion.

NSF staff also 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 addition to the above merit review criteria, each proposal will be evaluated on the basis of:

- Overall quality of the management and technical plans
- Overall value of the observing time and facility resources made available for professional community use
- Thoroughness in addressing the required proposal elements described in Sections II. PROGRAM DESCRIPTION and Section V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS.

B. Review and Selection Process

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

Reviewers will be asked to 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.

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 is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director accepts the Program Officer's 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 Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

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

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 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 (GC-1); * or Research Terms and Conditions * and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. 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.

Special Award Conditions:

Awards may be for up to 5 years. All projects are required to submit annual progress reports in accordance with NSF reporting requirements. Any projects awarded more than three years of funding will undergo additional review in their 3rd year, including possible site visits or reverse site visits, following which a decision will be made on the award of 4th and/or 5th years of funding.

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 before the end of the current budget period. (Some programs or awards require more frequent project reports). Within 90 days after expiration of a grant, the PI also is required to submit a final project report.

Failure to provide the required annual or final project reports will delay NSF review and processing of any future funding increments as well as any pending proposals for that PI. 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. Such reports provide information on activities and findings, project participants (individual and organizational) 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. Submission of the report via FastLane constitutes certification by the PI that the contents of the report are accurate and complete.

VIII. AGENCY CONTACTS

General inquiries regarding this program should be made to:

- Jeffrey R. Pier, Program Director, PREST, 1030 S, telephone: (703) 292-2977, fax: (703) 292-9034, email: jpier@nsf.gov

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.
- Kim S. Elliott, Computer Specialist, 1053 S, telephone: (703) 292-4894, email: kelliott@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, National Science Foundation Update is a free e-mail subscription service 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 Regional Grants Conferences. Subscribers are informed through e-mail when new publications are issued that match their identified interests. Users can subscribe to this service by clicking the "Get NSF Updates by Email" link on the NSF web site.

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this new 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 40,000 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 Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

Facilitation Awards for Scientists and Engineers with Disabilities provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See Grant Proposal Guide Chapter II, Section D.2 for instructions regarding preparation of these types of proposals.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090 and (800) 281-8749, FIRS at (800) 877-8339.

The National Science Foundation Information Center may be reached at (703) 292-5111.

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Website at http://www.nsf.gov

- **Location:** 4201 Wilson Blvd. Arlington, VA 22230
- **For General Information** (NSF Information Center)**:** (703) 292-5111
- **TDD (for the hearing-impaired):** (703) 292-5090
- **To Order Publications or Forms:**

  Send an e-mail to: nsfpubs@nsf.gov

  or telephone: (703) 292-7827
- **To Locate NSF Employees:** (703) 292-5111

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding applicants or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and

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