

# Information Technology Workforce (ITWF)

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## Program Solicitation

NSF 03-609

Replaces Document NSF 02-170



### National Science Foundation

Directorate for Computer and Information Science and Engineering

Division of Experimental and Integrative Activities

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

January 21, 2004

## SUMMARY OF PROGRAM REQUIREMENTS

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### General Information

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#### Program Title:

Information Technology Workforce (ITWF)

#### Synopsis of Program:

Since its inception in 2000, the Information Technology Workforce Program (ITWF) has supported basic research studies on the underrepresentation of women and minorities in information technology (IT). ITWF is expanding its portfolio to include implementation/intervention projects that--based on research findings--seek to increase the numbers of women and underrepresented minority students and/or faculty in IT in the Nation's colleges and universities. Implementation projects must incorporate rigorous programs of evaluation and dissemination.

#### Cognizant Program Officer(s):

- Caroline E. Wardle, Senior Science Advisor, Directorate for Computer & Information Science & Engineering, Division of Experimental and Integrative Activities, 1160 N, telephone: (703) 292-8980, fax: (703) 292-9030, email: [cwardle@nsf.gov](mailto:cwardle@nsf.gov)
- Harriet G. Taylor, Program Director, Directorate for Computer & Information Science & Engineering, Division of Experimental and Integrative Activities, 1160 N, telephone: (703) 292-8980, fax: (703) 292-9030, email: [htaylor@nsf.gov](mailto:htaylor@nsf.gov)
- Lawrence Burton, Senior Analyst, Directorate for Social, Behavioral & Economic Sciences, Division of Science Resources Statistics, 965 S, telephone: (703) 292-7794, fax: (703) 292-9092, email: [lburton@nsf.gov](mailto:lburton@nsf.gov)

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

- 47.070 --- Computer and Information Science and Engineering

## Eligibility Information

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- **Organization Limit:**

There are no organization limits for research projects.

Only proposals involving multiple institutions will be eligible for implementation/intervention project awards.

- **PI Eligibility Limit:** None Specified.
- **Limit on Number of Proposals:** None Specified.

## Award Information

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- **Anticipated Type of Award:** Standard or Continuing Grant or Cooperative Agreement
- **Estimated Number of Awards:** 8 to 10
- **Anticipated Funding Amount:** \$5,000,000

## Proposal Preparation and Submission Instructions

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### A. Proposal Preparation Instructions

- **Full Proposal Preparation Instructions:** This solicitation contains information that deviates from 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:** Not Applicable.
- **Other Budgetary Limitations:** Not Applicable.

### C. Due Dates

- **Full Proposal Deadline Date(s)** (due by 5 p.m. proposer's local time):  
January 21, 2004

## 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:** Additional reporting requirements apply. Please see the full text of this solicitation for

further information.

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## I. INTRODUCTION

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The ITWF program is being expanded to support implementation/intervention projects (hereafter referred to as implementation projects) that are based on research findings and are designed to increase the representation of women and underrepresented minorities in IT. Implementation projects must incorporate rigorous programs of evaluation and dissemination.

ITWF will also continue to support scientific research studies focused on the underrepresentation of women and minorities in IT. ITWF takes a broad view of IT as including both traditional computer science as well as new multidisciplinary fields encompassing a broad range of information systems and computing technologies.

In selecting proposals to fund, preference will be given to research or implementation projects that focus on increasing the number of women and underrepresented minority students and/or faculty in IT in the Nation's colleges and universities.

## II. PROGRAM DESCRIPTION

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In FY' 04, ITWF will support two categories of projects: research projects and implementation projects.

### **ITWF Research Projects**

The ITWF program will continue to welcome research proposals that address important research questions related to the underrepresentation of women and minorities in IT, with a focus on increasing the number of women and underrepresented minority students and/or faculty in IT in the Nation's colleges and universities.

ITWF supports research and related education activities that include: development and experimental evaluation; simulation and modeling; survey analysis; statistical models; ethnographic work to test models; case studies; and/or the development of new methods for understanding increasingly complex processes and dynamics of transformation. Formal meta-analysis methodologies across previous studies and intervention programs will be supported in order to build on the results of earlier work and to add to the research base.

ITWF research projects require multi-disciplinary collaboration among investigators in IT, the social sciences and/or education. The research can address issues at the individual level, at the societal level, at the institutional level, or across levels of analysis. All proposals should take into consideration existing relevant research. Small projects (one to two investigators) as well as medium-sized multi-site team projects (three to five investigators) will be supported. Additional requirements for research project descriptions are provided in Section V.A.1 below.

### **ITWF Implementation Projects**

The ITWF portfolio is being expanded to support implementation projects that are based on research findings and are designed to increase the representation of women and underrepresented minority students and/or faculty in the Nation's colleges and universities. These must incorporate rigorous programs of evaluation and dissemination. The research basis for the implementation should be formal, documented, scientific research findings, possibly from a variety of disciplines, addressing the underrepresentation of women and/or minorities in IT in the Nation's colleges and universities. It is not required that the principal investigator or other active participants in the project be the originators of the research findings. However the proposal should describe the group's expertise in the research area(s).

Implementation projects might include informal or formal educational experiences or strategies that intervene and reverse traditional patterns of low participation or low retention in IT. The rationale for the selection of the particular research findings and implementation method(s) must be described as well as details of the implementation. Projects must include substantial assessment and evaluation of project outcomes and impact.

Implementation projects must be multi-institutional. With justification, the implementation may be piloted for up to two years at a single institution before being extended to other participating institutions. Project descriptions should include the rationale for the institutions and populations selected for the project. (See Section V.A.2 for additional information required in implementation project descriptions.) Projects must be potentially replicable at other institutions. Evidence of institutional endorsement of the proposed implementation must be included for each participating institution, including commitment to continuing the project concepts beyond the period of funding. Funding selections will be influenced by sustainability and portability of the methods employed in the project.

NSF provides assistance in developing an implementation project through program oversight and the annual PI's meeting. In addition, NSF staff will visit implementation sites to learn about the implementation and performance expectations.

### **Participants**

Projects may involve a diverse set of participants such as: faculty with disciplinary content expertise; experts with research domain knowledge; students; and those with expertise in educational methodologies and pedagogy. Multi-institution participation is encouraged in research projects and is required for implementation projects. Implementation projects involving a single-institution pilot for up to 2 years must include multiple institutions in years thereafter.

### **Project Management Plan**

The Project Management Plan, presented as a description, table or diagram, should outline the project tasks, dates when the tasks will be completed, and the identity of the participant who will be responsible for implementing the task. The dates should be fine-grained (for example, monthly) to demonstrate that the plan is well thought out.

### **Project Dissemination**

All projects must have a dissemination plan to deliver findings to professional peers and the appropriate research and educational communities.

### **Proposals Involving Human Subjects**

Investigators proposing projects involving human subjects are reminded that they must either (1) have approval from the organization's Institutional Review Board (IRB) before issuance of an NSF award; or (2) identify the applicable subsection exempting the proposal from IRB review, as established in the Common Rule (Federal Policy for the Protection of Human Subjects, 45 CFR Section 690), see the Grant Proposal Guide for more details.

## **III. ELIGIBILITY INFORMATION**

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The categories of proposers identified in the [Grant Proposal Guide](#) are eligible to submit proposals under this program announcement/solicitation. There are no organization limits for research projects. Implementation projects must involve multiple institutions to be considered for funding.

## **IV. AWARD INFORMATION**

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ITWF awards will be made in the following two categories:

- Research projects may be funded for up to 3 years and will generally range from \$75,000 to \$250,000 per year up to a maximum award of \$750,000.
- Implementation projects may be funded for up to 4 years and will generally range from \$75,000 to \$250,000 per year up to a maximum award of \$1,000,000. For implementation projects, NSF anticipates that a successful site visit review of progress after approximately two years of work will be essential for the authorization of 3rd-year funding.

Depending on the availability of funds, 8 -10 proposals will be selected for funding in the ITWF program.

## **V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS**

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### 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).

### Project Summary

The proposal must contain a summary that briefly describes the goals and methods of the project, and should indicate at the beginning of the summary whether this is a research or implementation project. **The summary must contain brief descriptions of the Intellectual Merit and Broader Impacts of the proposed project.** To facilitate review of this requirement, project summaries should contain specific paragraphs with headings on the Intellectual Merit and Broader Impact.

This is discussed further in the Proposal Review Process section (VI.A). Due to a recent National Science Board policy, proposals that do not explicitly discuss these two criteria will be returned without review.

The following instructions supplement the GPG guidelines.

### Project Components

Following are descriptions of project components within an ITWF project. Proposals must address either component 1 or component 2 depending on whether the project is a research project or an implementation project.

#### 1. Research Project

The Project Description must include:

1. A description of the research and educational activities to be undertaken and the possible impact on the underrepresentation issues in IT.
2. The research basis for the proposed activity, including a review of relevant research.
3. A research plan describing methodologies and main activities.
4. A description of the duties and responsibilities of the principal investigator and all other associated personnel, and qualifications of key team members and their expertise or suitability for their roles in the project.
5. For the principal investigator and other key team members, a discussion of prior related work, including results of previous funding.

#### 2. Implementation Project

The Project Description must include:

1. A description of the specific strategies being implemented.
2. The research basis and need for the implementation.
3. A project plan describing overall project methodologies and plans for recruiting and selecting participants and ensuring participation.
4. A description of the role of each institution in the overall project.
5. A description of the duties and responsibilities of the principal investigator and all other associated

- personnel, and qualifications of key team members and their expertise or suitability for their roles in the project.
6. Plans for institutionalizing successful activities at participating institutions.
  7. A description of how results will be replicated at other institutions.
  8. For prior grantees, a discussion of the results of prior work. For all investigators, a discussion of relevant prior work in the area of the project.
  9. A detailed evaluation and assessment plan. The plan must cover all of the years of funding and all institutions involved in the project. The plan must identify indicators or outcome measures that will be used to determine whether the project was effective in meeting its objectives. The proposal must describe resources devoted to evaluation including allocations in the budget.

For both research and implementation projects, no videotapes, diskettes, textbooks, or CD-ROMs will be accepted. A proposal that does not adhere to the guidelines set forth above will be returned without review by NSF.

## Supplementary Documents

Letter(s) of institutional and academic departmental commitment to implementation and institutionalization of the proposed project are required and must be included in the Supplementary Documents section of FastLane. Such letters should be signed by the appropriate Department Chair(s), Dean(s) or academic officer(s) of the participating institutions. NOTE: This should not be construed as a requirement for cost sharing.

Proposers are reminded to identify the program announcement/solicitation number (03-609) 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.

## C. Due Dates

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

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

January 21, 2004

## 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: <http://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 Proposal Cover Sheet to NSF. Further instructions regarding this process are available on the FastLane Website at: <http://www.fastlane.nsf.gov>

## 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:**

An important priority for the ITWF program is the support of projects designed to increase the numbers of women and underrepresented minority students and/or faculty in IT in the Nation's colleges and universities.

As part of the intellectual merit of an ITWF research proposal, reviewers will be asked to determine that the proposed work uses an appropriate research method, and that there is a multi-disciplinary collaboration among researchers in IT, the social sciences and/or education. Reviewers will also evaluate the proposed dissemination plan for results of the research.

As part of the review of an ITWF implementation proposal, reviewers will be asked to determine that the proposed project is based on appropriate research findings and that multiple institutions are involved in the implementation. Reviewers will be asked to assess the sustainability and portability of the project. Reviewers will also be asked to appraise the evaluation and assessment plans as well as the dissemination plan.

## **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 Ad Hoc 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.

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 applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the date of receipt. 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.

NSF requires annual reports from implementation projects that are more extensive in scope than those required of single investigator research awards. NSF may also require in the future that projects collect and submit to NSF data on indicators of progress and impact.

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:

- Caroline E. Wardle, Senior Science Advisor, Directorate for Computer & Information Science & Engineering, Division of Experimental and Integrative Activities, 1160 N, telephone: (703) 292-8980, fax: (703) 292-9030, email: [cwardle@nsf.gov](mailto:cwardle@nsf.gov)
- Harriet G. Taylor, Program Director, Directorate for Computer & Information Science & Engineering, Division of Experimental and Integrative Activities, 1160 N, telephone: (703) 292-8980, fax: (703) 292-9030, email: [htaylor@nsf.gov](mailto:htaylor@nsf.gov)
- Lawrence Burton, Senior Analyst, Directorate for Social, Behavioral & Economic Sciences, Division of Science Resources Statistics, 965 S, telephone: (703) 292-7794, fax: (703) 292-9092, email: [lburton@nsf.gov](mailto:lburton@nsf.gov)

For questions related to the use of FastLane, contact:

- Cornell Davis, Program and Technology Specialist, Directorate for Computer & Information Science & Engineering, Division of Experimental and Integrative Activities, 1160 N, telephone: (703) 292-4777, fax: (703) 292-9030, email: [cdavis@nsf.gov](mailto:cdavis@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>) to be notified of new funding opportunities that become available.

**Related Programs:**

- Course, Curriculum, and Laboratory Improvement (CCLI) ([NSF 03-598](#))
- National Science, Technology, Engineering, and Mathematics Education Digital Library ([NSF 03-530](#))
- NSF Computer Science, Engineering, and Mathematics Scholarships ([NSF 03-501](#))
- NSF GRADUATE TEACHING FELLOWS IN K-12 EDUCATION ([NSF 03-532](#))
- Research on Gender in Science and Engineering ([NSF 03-588](#))
- Societal Dimensions of Engineering, Science, and Technology ([NSF 01-152](#))

ITWF research projects are eligible for REU (Research Experiences for Undergraduates) supplements, which expressly support the participation of undergraduate students on the project research team. Please see the REU announcement for complete parameters and the method for making a request for an REU supplement ([NSF 03-577](#)).

## 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.

NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities and persons with disabilities to compete fully in its programs. In accordance with Federal statutes, regulations and NSF policies, no person on grounds of race, color, age, sex, national origin or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF, although some programs may have special requirements that limit eligibility.

*Facilitation Awards for Scientists and Engineers with Disabilities (FASSED)* provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the GPG Chapter II, Section D.2 for instructions regarding preparation of these types of proposals.

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 or (800) 281-8749
- **To Order Publications or Forms:**

Send an e-mail to: [pubs@nsf.gov](mailto:pubs@nsf.gov)

or telephone: (703) 292-7827

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

## PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

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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.

OMB control number: 3145-0058.

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