Tribal Colleges and Universities Program (TCUP)

National Science Foundation
Division of Human Resource Development
Directorate for Education and Human Resources

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

November 20, 2003
      November 20, Annually Thereafter

Planning Proposal Due Date(s):

February 05, 2004
      February 5, Annually Thereafter

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Tribal Colleges and Universities Program (TCUP)

Synopsis of Program:

This program provides awards to enhance the quality of science, technology, engineering and mathematics (STEM) instructional and outreach programs, with an emphasis on the leveraged use of information technologies at Tribal Colleges and Universities, Alaskan Native-serving Institutions and Native Hawaiian-serving institutions. Support is available for the implementation of comprehensive institutional approaches to strengthen STEM teaching and learning in ways that improve access to, retention within and graduation from STEM programs, particularly those that have a strong technological foundation. Through this program, assistance is provided to eligible institutions in their efforts to bridge the digital divide and prepare students for careers in information technology, science, mathematics and engineering fields. Proposed activities should be the result of a careful analysis of institutional needs, address institutional and NSF goals, and have the potential to result in significant and sustainable improvements in STEM program offerings. Typical project implementation strategies include curriculum enhancement, faculty professional development, undergraduate research and community service, academic enrichment, infusion of technology to

enhance STEM instruction, collaborations, and other activities that meet institutional and community needs.

Cognizant Program Officer(s):

- Lura (Jody) Chase, Program Director, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-8682, fax: (703) 292-9018, email: lchase@nsf.gov

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

- 47.076 --- Education and Human Resources

Eligibility Information

- **Organization Limit:** Organizations eligible to submit proposals include Tribal Colleges and Universities, Alaskan Native-serving institutions and Native Hawaiian-serving institutions as defined in this solicitation.
- **PI Eligibility Limit:** The Principal Investigator will normally be the Chief Academic Officer of the institution, or other senior academic official.
- **Limit on Number of Proposals:** 1. Only one proposal (for either a planning grant or an implementation award) per institution in any one fiscal year.

Award Information

- **Anticipated Type of Award:** Other - Grants and Cooperative Agreements
- **Estimated Number of Awards:** 10 - Approximately 4 implementation awards resulting from Full Proposals will be awarded as cooperative agreements annually, and approximately 6 planning grants resulting from Planning Proposals will be awarded as standard grants annually.
- **Anticipated Funding Amount:** $4,300,000 (approximately) $4.3 million pending availability of funds.

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **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:** 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 Date(s)** (due by 5 p.m. proposer's local time):
  - November 20, 2003
    - November 20, Annually Thereafter
- **Planning Proposals:**
  - February 05, 2004
    - February 5, Annually Thereafter

Proposal Review Information

- **Merit Review Criteria:** National Science Board approved criteria apply.

Award Administration Information

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

TABLE OF CONTENTS

I. INTRODUCTION

Programs managed by the Division of Human Resource Development (HRD), within the Directorate for Education and Human Resources, seek to increase the participation and advancement of underrepresented groups and institutions at every level of science, technology, engineering, and mathematics (STEM) education and research. In so doing, these programs contribute to attainment of an outcome goal of the NSF Strategic Plan FY 2001-2006: A diverse, internationally competitive and globally-engaged workforce of scientists, engineers and well-prepared citizens.

The programs of the ethnic diversity continuum (Tribal Colleges and Universities Program, Historically Black Colleges and Universities Undergraduate Program, Louis Stokes Alliances for Minority Participation, Alliances for Graduate Education and the Professoriate, and Centers of Research Excellence in Science and Technology) provide coordinated and integrated approaches to developing and leveraging individual talents and institutional infrastructures in order to increase substantially the number of underrepresented ethnic minorities well prepared for participation and leadership in the STEM workforce. Managed synergistically, these programs enable seamless student transitions from undergraduate study at the associate and baccalaureate levels to attainment of doctoral degrees as

well as strengthen the research vigor and competitiveness of graduate students and faculty at participating institutions.

Although programs in the Division of Human Resource Development focus primarily on underrepresented communities, all NSF programs encourage proposals that incorporate this goal. See the NSF Guide to Programs for descriptions of all NSF funding opportunities.

II. PROGRAM DESCRIPTION

The Tribal Colleges and Universities Program (TCUP) promotes sustainable improvement of undergraduate science, technology, engineering and mathematics (STEM) instructional and outreach programs, with an emphasis on the leveraged use of information technologies, at Tribal Colleges and Universities, Alaskan Native-serving institutions and Native Hawaiian-serving institutions. Support is available for the implementation of comprehensive institutional approaches to strengthen STEM teaching and learning in ways that improve access to, retention within and graduation from STEM disciplines, particularly in those programs that have a strong technological foundation. Through this program, assistance is provided to eligible institutions in their efforts to bridge the digital divide and prepare students for careers in information technology, science, mathematics and engineering fields. The National Science Foundation allows maximum flexibility in the design of efforts to improve undergraduate STEM education. Proposed activities should be the result of a careful analysis of institutional needs, address institutional and NSF goals, and have the potential to result in significant and sustainable improvement of STEM programs. The examples provided below illustrate the possible scope of project activities for implementation awards and planning grants.

Typical project implementation strategies include course and curriculum development, reform and enhancement; faculty professional development; the integration of active learning pedagogies into the STEM curriculum; community outreach; student support, academic enrichment activities and internships; student recruitment, retention and placement; infusion of technology to enhance STEM instruction; collaborations with four-year institutions, business and industry; strengthening the abilities of technical support personnel; and, other activities that meet institutional and community needs. While the primary focus of TCUP is at the associate and baccalaureate degree levels, projects are encouraged to address student advancement through the critical transition points during STEM education - the transition between high school and college, 2- and 4-year colleges, undergraduate and graduate studies, and from college to the workplace.

CURRICULUM ENHANCEMENT Course and curriculum development or enhancement are critical to achieve institution-wide improvements in undergraduate STEM education. Proposers may include plans to strengthen and update the STEM curricula through the development, adaptation and implementation of instructional materials, experiences and practices. Supportable activities include, but are not limited to:

- development and introduction of STEM program offerings;
- restructuring the STEM curricula, courses and laboratories through the incorporation of advances in science and engineering knowledge, research-based teaching and learning techniques and practices, and through the integration of technology into the curricula;
- revision of STEM gate-keeping and bottleneck courses based on appropriate content and performance standards; and
- integration of student research, community service and other active learning pedagogies into the curriculum.

FACULTY DEVELOPMENT A well-trained faculty with continuous learning opportunities remains an integral part of a strong institutional infrastructure and positively impacts the quality of undergraduate education. Faculty development activities suitable for TCUP support include, but are not limited to the following:

- sabbaticals and exchange programs to enhance research competencies and knowledge of recent technological developments;
- professional development workshops on innovative teaching practices and assessment;
- visiting faculty, including industry practitioners;
- special seminars to enhance disciplinary knowledge;
- faculty reassigned time or released time to participate in appropriate STEM curricular reform and academic enhancement activities;
- opportunities to participate in research and community service in conjunction with student experiences; and
- faculty reassigned time or released time to mentor students.

UNDERGRADUATE TRAINING AND RESEARCH EXPERIENCES Stipends may be provided to students (U.S. citizens and permanent residents, only) at eligible institutions who are engaged in STEM related research or training activities or appropriate community service. Research experiences may be on campus with local investigators or at off-campus sites (e.g., industrial, academic, governmental research laboratories). Community service may be provided off-campus. Activities suitable for TCUP support include, but are not limited to the following:

- development of appropriate partnerships with other academic institutions, industrial laboratories, national laboratories, and NSF-supported research centers to ensure quality student training and research experiences that complement academic studies;
- meaningful internships or cooperative education opportunities related to students' skill development at appropriate off-campus sites;
- student internships at local schools to provide technical training or support; and
- students serving as resources to help the local community meet technology-related goals and objectives based on community needs.

ADVISORY COMMITTEE Implementation projects should establish an external advisory committee, normally chaired by the college or university President. This committee will help guide the implementation and assessment of project activities. The size of the committee is left to the discretion of the applicants. However, there should be adequate representation from partner institutions, industry and the local community. Prospective candidates for the committee should be identified in the Project Description.

PROJECT STAFF Project staffing requirements will depend on the design, scope and the discipline focus. General NSF provisions allow salaries of project staff to be requested as direct costs. However, proposals should include plans to sustain project activities after NSF funding has ended. In addition to the Principal Investigator who is normally the Chief Academic Officer of the institution, typical project organization consists of a Project Manager and a Steering Committee with faculty from the relevant disciplines or programs.

PROJECT LENGTH Implementation projects will be funded up to five years and should be designed to produce significant and sustainable improvements in undergraduate STEM education. Information bearing on project implementation, faculty participation and student participation and performance will be required on an annual basis. Planning grants will have a duration of up to one year. In support of the total time-frame, both types of proposals must include a detailed management plan and activity timeline covering the entire duration of the project, describing major activities, milestones and the responsibilities of each participating academic program or partner organization.

PROJECT SIZE Ideally, implementation projects should seek to influence all STEM program offerings. Proposers should clearly state the numbers of faculty and students that will benefit from project activities. The scope of the project should be clearly defined within the context of the institution.

PLANNING GRANTS Planning grants will be supported to fund institutional self-assessments and the development of action plans to enhance STEM instruction. Proposals should (1) describe the current status of the institution's STEM program, infrastructure and student enrollment; and, (2) describe the activities to be supported through the planning grant, including surveys, research, consultations, program evaluations, and development of models or strategic plans to improve STEM instruction. Planning grant activities suitable for support include, but are not limited to faculty reassigned time or released time to participate in appropriate project activities; visiting faculty or consultants; computer services; and, professional travel that will contribute to the quality of the planning effort.

III. ELIGIBILITY INFORMATION

Organizations eligible to submit proposals include Tribal Colleges and Universities, Alaskan Native-serving institutions and Native Hawaiian-serving institutions. Executive Order 13021 - Defines Tribal Colleges and Universities ("tribal colleges") as those institutions cited in section 532 of the Equity in Educational Land-Grant Status Act of 1994 (7 U.S.C. 301 note), any other institution that qualifies for funding under the Tribally Controlled Community College Assistance Act of 1978, (25 U.S.C. 1801 et seq.), and Navajo Community College, authorized in the Navajo Community College Assistance Act of 1978, Public Law 95-471, Title II (25 U.S.C. 640a note). The term "Alaskan Native-serving institution" means an institution of higher education that is an eligible institution under section 1058(b) of the Higher Education Act; and at the time of submission, has an enrollment of undergraduate students that is at least 20 percent Alaskan Native students. The term "Native Hawaiian-serving institution" means an institution of higher education which is an eligible institution under section 1058(b) of the Higher Education Act; and at the time of submission, has an enrollment of undergraduate students that is at least 10 percent Native Hawaiian students.

IV. AWARD INFORMATION

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds. The estimated number of awards is 4 implementation awards and 6 planning grants each year. Implementation awards will be managed through cooperative agreements. These will range from $200,000 to $500,000 per year for up to five years. Support is also available for planning grants of up to $50,000 with a one-year duration to fund institutional self assessments and the development of action plans to enhance STEM programming. Funds should be budgeted for the project director of an implementation award to attend a two-day grantee meeting in the Washington, DC area each award year.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

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.

Organizations applying for the first time, or which have not received an NSF award within the preceding two years, should refer to the Grant Policy Manual (GPM), Section 501 (http://www.nsf.gov/pubsys/ods/getpub.cfm?ods_key=nsf02151), for instructions on specific information that may be requested by NSF, or consult the Prospective New Awardee Guide (NSF 02-44) on the NSF website at http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf02044.

The Grant Proposal Guide (http://www.nsf.gov/pubs/2003/nsf03041/start.htm) provides guidance for the preparation and submission of proposals to NSF.

Proposals submitted to the Tribal Colleges and Universities Program should include the following information that supplements the GPG guidelines:

- INFORMATION ABOUT PRINCIPAL INVESTIGATORS AND CO-PRINCIPAL INVESTIGATORS NSF requests information on the gender, race, ethnicity and disability status of individuals named as PIs/co-PIs on proposals and awards. Except for the required information about current or previous Federal research support and the name(s) of the PI/co-PI, submission of the information is voluntary, and individuals who do not wish to provide the personal information should check the box provided for that purpose. Refer to the Grant Proposal Guide (GPG) for guidelines.

- COVER SHEET In FastLane, under "NSF Unit Consideration," select "TRIBAL COLLEGES AND UNIVERSITIES PROGRAM" as the program to consider the proposal. Select "DIVISION OF HUMAN RESOURCE DEVELOPMENT" as the division to consider the proposal. If the proposal is for a planning grant, begin the project title with the words "Planning Grant for..."

- PROJECT SUMMARY Not more than one page in length, the summary should consist of a self-contained description of the activities that would be implemented if the proposal were funded.

- TABLE OF CONTENTS A Table of Contents is automatically generated for the proposal by the FastLane system.

- PROJECT DESCRIPTION This section is the main body of the proposal and may not exceed 15 pages. The description of the project should: (1) clearly state project goals, objectives, and a timeline for proposed activities with an indication of their

anticipated impact; (2) provide a clear picture of the current status of the institution's STEM infrastructure and an institutional plan to enhance the STEM program by indicating the anticipated value added by the NSF-supported efforts; (3) build on existing research about underrepresented minority participation in the STEM educational continuum; (4) describe the expected impact of the project across STEM offerings at the institution; (5) describe the management structure that will be used to communicate and facilitate project goals throughout the institution; (6) provide a list of external advisory committee members; and, (7) provide evidence of the commitment of the proposing institution to the improvement of undergraduate STEM education including plans and resource alignment strategies to continue elements of the project after NSF funding ends.

EVALUATION An evaluation and assessment plan is required within the Project Description so that project development and implementation can be monitored at all stages. One of the key objectives of the TCUP is to improve the quality of undergraduate STEM education through the development, adaptation and implementation of effective educational techniques and practices to enhance STEM instruction. Accordingly, proposed evaluation and assessment plans should include indicators of progress that address the extent to which: (1) educational techniques and practices shown to be effective elsewhere, are adapted or modified for use at the awardee institution; (2) a plan has been developed to assess the effectiveness of the educational techniques or practices implemented; (3) faculty at the awardee institution have been prepared to use the modified educational techniques or practices; (4) modified techniques or practices have been incorporated into the curriculum; (5) innovative courses or program components are developed; (6) the effectiveness of implemented educational techniques, practices, courses or components is assessed; and, (7) project activities affect student learning and student access to quality STEM education as defined by measurable quantitative student-based outcomes such as:

- number of STEM majors involved in active learning activities, research activities, or community service;
- number of STEM majors who have enrolled in and successfully completed newly developed or revised courses or programs;
- rates of successful completion of STEM gate-keeper courses;
- student retention in STEM disciplines;
- number of STEM graduates with Grade Point Averages of 3.0 or higher;
- number of STEM students matriculating into 4-year colleges; and,
- number of graduates that enter the STEM workforce.
- For those projects that acquire equipment, indicators of success should also address the extent to which the equipment has been successfully incorporated into the curriculum. For information about evaluation methodology, see User-Friendly Handbook for Mixed Method Evaluations (NSF 97-153).

PLANNING GRANTS Institutions that are eligible to submit proposals to the Tribal Colleges and Universities Program may, but are not required to, apply for a planning grant to help the institution conduct an assessment of its STEM infrastructure and develop an institutional plan to enhance its STEM program. TCUP planning grants are expected to provide up to $50,000 for up to one year. These awards are non-renewable. Project Directors are welcome to confer with NSF TCUP staff prior to proposal submission.

Proposers are reminded to identify the program announcement/solicitation number (03-592) 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

Cost Sharing:

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

Other Budgetary Limitations:

Equipment costs may not exceed 30% of the total budget request.

C. Due Dates

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

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

> November 20, 2003
> > November 20, Annually Thereafter

Planning Proposal Date(s):

> February 05, 2004
> > February 5, Annually Thereafter

D. FastLane Requirements

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. 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

A. NSF Proposal Review Process

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.

B. Review Protocol and Associated Customer Service Standard

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.

In most cases, proposers will be contacted by the Program Officer after his or her recommendation to award or decline funding has been approved by the Division Director. This informal notification is not a guarantee of an eventual 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 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

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 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

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. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from 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

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

General inquiries regarding this program should be made to:

- Lura (Jody) Chase, Program Director, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-8682, fax: (703) 292-9018, email: lchase@nsf.gov

For questions related to the use of FastLane, contact:

- email: fastlane@nsf.gov

IX. OTHER PROGRAMS OF INTEREST

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.

The Tribal Colleges and Universities Program is among those that promote the involvement of underrepresented minorities in science, technology, engineering and mathematics, and foster innovation in education for all students. Related programs include the: Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) (NSF 02-162), Louis Stokes Alliances for Minority Participation (LSAMP) (NSF 03-503), Centers of Research Excellence in Science and Technology (CREST) (NSF 03-579), and Research on Gender in Science and Engineering (RGSE) (NSF 03-502). The following programs might also be of interest:

- Advanced Technological Education (ATE) (NSF 03-523)
- NSF Graduate Teaching Fellows in K-12 Education (GK-12) (NSF 03-532)
- Course, Curriculum, and Laboratory Improvement (CCLI) (NSF 03-558)
- Research Experiences for Undergraduates (REU) (NSF-03-577)

ABOUT THE NATIONAL SCIENCE FOUNDATION

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

- **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

     or telephone: (703) 292-7827

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

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The National Science Foundation
4201 Wilson Boulevard, Arlington, Virginia 22230, USA
Tel: 703-292-5111, FIRS: 800-877-8339 | TDD: 703-292-5090 or (800) 281-8749