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Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)

Program Solicitation

NSF 04-603

Replaces Document 03-594



National Science Foundation

Directorate for Education and Human Resources

Division of Human Resource Development

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

September 30, 2004

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

November 08, 2004

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Historically Black Colleges and Universities Undergraduate Program (HBCU-UP)

Synopsis of Program:

This program provides awards to enhance the quality of science, technology, engineering, and mathematics (STEM) instructional and outreach programs at Historically Black Colleges and Universities (HBCUs) as a means to broaden participation in the Nation's STEM workforce. Support is available for implementation projects and planning grants. Implementation projects should include comprehensive institutional approaches to strengthen STEM teaching and learning. 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, academic enrichment, infusion of technology to enhance STEM instruction, collaborations with research institutions and industry, and other activities that meet institutional needs. Planning grants provide support to an institution in order to undertake an institutional STEM self-analysis and to identify activities and strategies for an implementation project.

Cognizant Program Officer(s):

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

- 47.076 --- Education and Human Resources

Eligibility Information

- **Organization Limit:**

Historically Black Colleges and Universities that are accredited and that currently offer associate or baccalaureate degrees in science, technology, engineering, and mathematics (STEM) fields.

- **PI Eligibility Limit:**

Principal Investigators for HBCU-UP awards are normally the chief academic officer of the institution, or other senior academic official.

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

Award Information

- **Anticipated Type of Award:** Standard or Continuing Grant
- **Estimated Number of Awards:** 8 - Approximately 6 implementation projects and 2 planning grants
- **Anticipated Funding Amount:** \$6,000,000 - Approximately \$6 million, pending the availability of funds

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

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

B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is not required.
- **Indirect Cost (F&A) Limitations:** Not Applicable.
- **Other Budgetary Limitations:** Other budgetary limitations apply. Please see the full text of this solicitation for further information.

C. Due Dates

- **Letters of Intent (optional):**
September 30, 2004
- **Full Proposal Deadline Date(s)** (due by 5 p.m. proposer's local time):
November 08, 2004

Proposal Review Information

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

Award Administration Information

- **Award Conditions:** Standard NSF award conditions apply.
- **Reporting Requirements:** Additional reporting requirements apply. Please see the full text of this solicitation for further information.

TABLE OF CONTENTS

Summary of Program Requirements

- I. **Introduction**
- II. **Program Description**
- III. **Eligibility Information**
- IV. **Award Information**
- V. **Proposal Preparation and Submission Instructions**
 - A. Proposal Preparation Instructions
 - B. Budgetary Information
 - C. Due Dates
 - D. FastLane Requirements
- VI. **Proposal Review Information**
 - A. NSF Proposal Review Process
 - B. Review Protocol and Associated Customer Service Standard
- VII. **Award Administration Information**
 - A. Notification of the Award
 - B. Award Conditions
 - C. Reporting Requirements
- VIII. **Contacts for Additional Information**
- IX. **Other Programs of Interest**

I. INTRODUCTION

The Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) is committed to increasing the quality of science, technology, engineering, and mathematics (STEM) education and the number of students participating in STEM programs and research at HBCUs. HBCU-UP recognizes and supports the important role that HBCUs play in increasing the numbers of underrepresented ethnic minorities that are well prepared for participation and leadership at every level of education and research in STEM.

HBCU-UP is one of the National Science Foundation's programs designed to make progress toward the Foundation's People Goal; "A diverse, competitive and globally engaged U.S. workforce of scientists, engineers, technologists and well prepared citizens." HBCU-UP is managed by the Division of Human Resource Development (HRD), located in the Directorate for Education and Human Resources. For Fiscal Year (FY) 2005, HBCU-UP will support awards for five-year implementation projects as well as twelve- to eighteen-month planning grants.

II. PROGRAM DESCRIPTION

The Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) supports a wide range of activities that will increase the quality of STEM education, increase participation and success in undergraduate STEM programs, and increase access to undergraduate STEM research opportunities.

NSF expects that the activities and strategies included in implementation proposals will be designed specifically to address the HBCU's institutional STEM needs, long-term goals, and mission. Therefore NSF allows maximum flexibility in the design of implementation projects under HBCU-UP. Institutions that have not already identified these activities and strategies in an inclusive planning process, are encouraged to consider applying for a planning grant to perform an institutional STEM self-analysis.

IMPLEMENTATION PROJECTS

Activities may include, but are not limited to:

Course and curriculum development, revision, and enhancement:

- Revise STEM gate-keeping and bottleneck courses
- Develop, adapt, and/or implement new instructional materials
- Develop and introduce new STEM program offerings
- Incorporate advances in science and engineering knowledge into courses and laboratories
- Implement research-based teaching and learning techniques and practices
- Integrate technology into STEM curricula and instruction
- Integrate student research and other active-learning opportunities into the STEM curriculum
- Enhance STEM equipment available for undergraduate education

Undergraduate student support services, academic success, and educational enrichment:

- Research opportunities for undergraduate students on-campus or off-site
- Internships or cooperative education opportunities
- Undergraduate STEM scholarships and awards
- Tutoring services – peer, faculty and professional

- Mentoring programs – peer, faculty and professional
- Increase access to computer labs and STEM equipment
- Travel for presentations at research conferences
- Advising and counseling services
- Career services
- Graduate school planning and preparation – test taking courses, application preparation, curriculum vitae development, funding opportunities and financial aid information

NOTES: *Student financial support may only be provided to students who are U.S. citizens, nationals, or permanent residents of the U.S. Graduate student research is not supported under the HBCU-UP program.*

Faculty professional development:

- Professional development workshops - pedagogy training, mentoring training, using technology in classrooms, innovative teaching practices, grant writing skills, and student assessment techniques
- Research opportunities for faculty on-campus or off-site
- Release time to participate in HBCU-UP activities such as:
 - STEM curricular revision and academic enhancement
 - Supervising undergraduate research
- Sabbaticals and exchange programs
- Visiting faculty and industry practitioners
- STEM disciplinary and topical seminars

Project Scope: The scope will depend on the size and number of STEM programs and the complexity of the current and proposed project activities - ideally all STEM programs and STEM students and faculty would be affected by the HBCU-UP activities. The scope of the project should be clearly defined numerically, outlining the impact on students and faculty of the proposed HBCU-UP activities. If the proposed scope will be limited the reasons should be clearly outlined.

If an institution has previously received an HBCU-UP implementation award, it is critical that the proposal provide complete information on the outcomes of that HBCU-UP project including a description of how the activities are being sustained by the institution. *New HBCU-UP awards will only be made if the proposed activities do not simply continue previous HBCU-UP activities.* The activities in the new proposal should be based on a thorough evaluation of the previous HBCU-UP project, and move the institution to the next level of STEM program quality.

All HBCU-UP implementation proposals should:

- Support **new** STEM activities or enhancements - not simply support existing activities.
- Coordinate all institutional STEM strengthening activities (new and existing) in order to create a **comprehensive STEM program** that will result in **significant and sustainable** improvements.
- Raise the **quality** of STEM education and student learning, including increasing opportunities for quality student and faculty research experiences.
- **Establish and develop partnerships** with other academic institutions that serve minority students, other institutions of higher education, industrial laboratories, national laboratories, and other research centers to enhance and support HBCU-UP activities.

Although the primary focus of HBCU-UP is at the associate and baccalaureate STEM degree levels, projects can also address critical transition points such as the transition between high school and college, between 2- and 4-year colleges, from undergraduate to graduate studies, and from college to the workplace.

Project Length: Implementation projects will be funded for up to five years. The activities should be designed to produce significant improvements in undergraduate STEM education that have the potential to become sustainable by the end of the five years.

Planning Grants

Activities may include, but are not limited to:

- Faculty release time to manage and participate in planning activities
- Visiting faculty or consultants involved in the planning process
- Data collection
- STEM Program evaluation
- Computer services
- Research on effective STEM strengthening strategies
- Travel for site visits to exemplar institutions including existing HBCU-UP project sites
- Professional travel related to improving the planning activities

Planning Grant Scope: The scope should include an institutional STEM self-assessment and the development of an action plan including activities and strategies to enhance the institution's STEM programs.

Project Length: Planning grants will be funded for twelve to eighteen months. The activities should prepare the institution to submit a strong implementation proposal to the HBCU-UP program.

III. ELIGIBILITY INFORMATION

- Eligible institutions are Historically Black Colleges and Universities that are accredited and that currently offer associate or baccalaureate degrees in science, technology, engineering, and mathematics (STEM) fields.
- An institution may have only one active HBCU-UP award.
- Only one HBCU-UP proposal (for either a planning grant or an implementation project) may be submitted per eligible institution.

IV. AWARD INFORMATION

Implementation Projects

- Number of Awards: Approximately 6
- Average Award: \$1 to \$2.5 million (\$200,000 to \$500,000 per year)

- Project Length: Up to five years
- Cost Share Requirement: none
- Restrictions: Equipment costs may not exceed 30% of the total budget request.
- Grant Administration: Implementation projects will be managed by NSF as continuing grants.

Planning Grants

- Number of Awards: Approximately 2
- Average Award: up to \$50,000
- Project Length: Twelve to eighteen months
- Cost Share Requirement: none
- Restrictions: Equipment costs are not normally allowed under planning grants.
- Grant Administration: Planning grants will be managed by NSF as standard grants.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Letters of Intent (*optional*):

Letters of intent are optional but highly encouraged and should be sent by email to jdearo@nsf.gov. Letters must be limited to one page and contain the following information: 1) The intent of the institution to submit an implementation project or planning grant proposal to HBCU-UP, and 2) The proposed Principle Investigator's name and email address.

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.

The GPG provides general instructions for each section required in the full proposal. Additional program specific guidance is provided below.

- *Cover Sheet* -
 - For all HBCU-UP proposals under "NSF Unit Consideration" please select:
 - "HRD-Division of Human Resource Development" as the division
 - "Hist Black Colleges and Univ" as the program
 - Planning grant proposals:

- Please begin the project title with "Planning Grant for..."
- The "proposal duration" should be between 12 and 18 months
- Be sure to review the regulations regarding Human Subjects (45 CFR 690.101-124 <http://www.nsf.gov/bfa/dga/policy/docs/45cfr690.pdf>) to determine if these regulations apply to your proposed activities. If applicable, check the box on the cover sheet and indicate whether or not the review is pending or if the proposal is exempt according to an Internal Review Board review citing the applicable subsection.
- *Project Summary* - The Project Summary is a self-contained one-page description of the activities that would be implemented if the proposal were funded. **IMPORTANT NOTE: Both NSF merit selection review criteria must be addressed separately** in the one-page project summary: What is the intellectual merit of the proposed activity? and What are the broader impacts of the proposed activity? *Proposals will be returned, without review, if they do not address both merit selection review criteria separately.*
- *Project Description* - Refer to the "Project Description" information below for implementation projects and planning grants (15 page limit).
- *References Cited* - Provide references to sources that were used in the design and development of the HBCU-UP implementation project activities or planning grant.
- *Biographical Sketches* - Outline the experiences of the PI and co-PIs (two-page limit each person) that are related to the proposed HBCU-UP implementation project or planning grant activities. Include two-page position descriptions, with minimum qualifications, for any proposed project staff position.
- *Budget* - Funds should be budgeted for the PI and the co-PI, who will act as the project manager, to attend a three-day grantee meeting in the Washington, DC area each award year for implementation projects and planning grants.

Implementation Projects

The implementation project description should include the following information:

Background and context –

- Provide information on the institution's current STEM capability including a description of STEM programs, student enrollment and performance, faculty, and STEM resources at the institution and partner organizations.
 - **Baseline Data:** Include baseline data describing the current state of your STEM programs. Competitive proposals will provide the key information that will allow the reviewers to determine the scope and impact of the proposed project in terms of the numbers of students and faculty that will be involved in each activity.
 - Proposers are highly encouraged to review the Self Evaluation Indicator System (SEIS), which is part of the reporting requirements for HBCU-UP awardees, as a guide for the types of data that should be included. You can download a copy of the SEIS questions at <http://www.ehr.nsf.gov/EHR/HRD/SEISSample.pdf>.
 - For institutions that have previously received an HBCU-UP implementation award, competitive proposals for a second award will also answer the following questions concerning the first HBCU-UP project (these questions could be answered in a table):
 - What were the objectives of the project (numerical when possible)?
 - What activities were implemented?
 - What were the results of the activities (numerical when possible)?
 - Have the activities been institutionalized? If not, why not?
 - For institutions that have received an HBCU-UP planning grant, competitive proposals will provide a description of the results of the planning grant activities.
- Describe the relationship between the HBCU-UP project goals and objectives and the institution's long-term STEM goals and mission.

- Provide evidence of the commitment of the institution administration (and partners if applicable) as well as the STEM faculty and leadership to improve undergraduate STEM education at the HBCU.

Proposed activities –

- Describe the proposed activities that will be implemented. Competitive proposals will provide answers to following questions for each proposed activity:
 - **WHAT:** What are the goals and objectives? Include the number of STEM students and faculty that will be impacted by the activity each year of the project. Describe whether the proposed activity addresses the needs of other underrepresented groups, such as women and persons with disabilities, in addition to minority populations .
 - **HOW:** Describe the activity that will be implemented in order to achieve these goals and objectives? Include enough details so that the scope of your proposed activity is clear. What are the strategies and methods that will be used? How will the activity be sustained after NSF funding ends?
 - **WHY:** Provide evidence that the proposed activity is based on research and/or other projects that have been shown to be effective in achieving similar goals and objectives. What are the expected outcomes of the activity at your institution?
 - **WHEN and WHO:** Outline the five-year timeline for the proposed activity with measurable milestones. Include the project staff, administrators, and/or partners that are responsible for the activity and milestones.
- Institutions that have previously received an HBCU-UP implementation award will also need to explain:
 - How the proposed activities will build on the previous project and not just continue previous activities.
 - How the proposed activities will move the institution to the next level of STEM program quality.

Project Management –

- Provide a management plan for the project that will ensure that the activities will be implemented on time and within budget. Implementation projects will be managed as continuing grants by NSF.
- Project staff organization - staffing requirements will depend on the design, scope, and the disciplines involved:
 - The Principal Investigator (PI) is normally the chief academic officer of the institution.
 - The Project Manager should be the co-PI who will have the most day-to-day contact with the project.
 - Many projects will have an Internal Steering Committee or Internal Advisory Committee with faculty from relevant disciplines and programs – the size and composition depends on the complexity of the project. This committee should meet regularly throughout the project. Describe the responsibilities and duties of the committee.
 - HBCU-UP requires that projects have an External Advisory Committee that meets at least once a year, chaired by the chief executive officer of the institution. The External Advisory Committee should have representatives from other institutions including two-year institutions, industry, and local school districts. Persons involved in the implementation of the project activities should not serve on the External Advisory Committee. Describe the responsibilities and duties of the committee.
- Evaluation and assessment plan:
 - Describe the formative project evaluation methods that will be used to improve the implementation of the HBCU-UP activities during the grant period.
 - Describe the summative evaluation of the project which will provide project outcomes and determine if the project goals and objectives have been met.
 - Describe the plans to disseminate the outcomes of the project.

- NSF reporting requirements:
 - Describe how the management plan will facilitate the timely submission of complete and accurate annual reports as well as the final report.
 - **Describe how outcomes data will be collected and submitted in a timely manner to the Self Evaluation Indicator System (SEIS). SEIS data is collected annually and at the end of the project.**

Planning Grants

Please note that the project summary for planning grants must also address both NSF merit selection review criteria separately: What is the intellectual merit of the proposed activity? and What are the broader impacts of the proposed activity? *Proposals will be returned, without review, if they do not address both merit selection review criteria separately.*

The planning grant description should include the following information:

Background and context –

- Provide information on the institution's current STEM capability including a description of STEM programs, student enrollment and performance, faculty, and STEM resources at the institution and partner organizations.
 - **Baseline Data:** Include baseline data describing the current state of your STEM programs. Competitive proposals will provide the key information that will allow the reviewers to determine the scope and impact of a potential implementation project in terms of the numbers of students and faculty that will be involved in each potential activity.
 - Proposers are highly encouraged to review the Self Evaluation Indicator System (SEIS), which is part of the reporting requirements for HBCU-UP awardees, as a guide for the types of data that should be included. You can download a copy of the SEIS questions at <http://www.ehr.nsf.gov/EHR/HRD/SEISSample.pdf>.
- Describe the relationship between the HBCU-UP planning grant objectives and the institution's long-term STEM goals and mission.
- Provide evidence of the commitment of the institution administration (and partners if applicable) as well as the STEM faculty and leadership to improve undergraduate STEM education at the HBCU.

Proposed activities –

- Describe the activities to be supported by the planning grant.
- Provide a timeline for the planning grant's major activities and milestones - identify who will participate and who will be responsible for completing each activity.
- Outline the potential impact of a full HBCU-UP implementation project on STEM programs.

Project Management –

- Provide a management plan for the project that will ensure that the activities will be implemented on time and within budget. Planning grants will be managed as standard grants by NSF.
- Project staff organization - staffing requirements will depend on the design, scope, and the disciplines involved:
 - The Principal Investigator (PI) is normally the chief academic officer of the institution.
 - The Project Manager should be the co-PI who will have the most day-to-day contact with the planning grant.

- Planning grants should have an Internal Steering Committee with faculty from relevant disciplines and programs as well as key decision-making administrators – the size and composition should be representative of your STEM programs. The participation of representatives from the local community including school districts, community colleges and industry is also encouraged. Describe the responsibilities of the committee and the planned frequency of meetings.
- Evaluation and assessment plan of the planning grant activities:
 - Describe the formative project evaluation methods that will be used to improve the implementation of the HBCU-UP planning activities during the grant period.
 - Describe the summative evaluation of the project which will provide outcomes and determine if the planning grant goals and objectives have been met.
- NSF reporting requirements:
 - Describe how the management plan will facilitate the timely submission of a complete and accurate final report.

Proposers are reminded to identify the program announcement/solicitation number (04-603) 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 NSF budget requested for HBCU-UP.
- Financial support may be provided to student participants under HBCU-UP. However, financial support may only be provided to students that are U.S. citizens, nationals, or permanent residents of the U.S. Student support should be included under "Participant support costs" on line F.1. "Stipends" of the budget. Stipends to undergraduate students should not replace other need based grants and scholarships already awarded to the students.
- Funds should be budgeted for the PI and the co-PI, who will act as the project manager, to attend a three-day grantee meeting in the Washington, DC area each award year for implementation projects and planning grants.

C. Due Dates

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

Letters of Intent (*optional*):

September 30, 2004

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

November 08, 2004

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: <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 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 Panel Review.

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

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

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

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

VII. AWARD ADMINISTRATION INFORMATION

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.

Special reporting requirements:

HBCU-UP awardees are required to submit data via the Self Evaluation Indicator System (SEIS) each year of the award and after the award is over as part of the annual project reports and the final project report submitted to the cognizant Program Officer via FastLane. The SEIS data is used by NSF to assess project progress as well as for HBCU-UP outcomes at the program level for Government Performance and Results Act (GPRA) reporting and other reporting requirements. SEIS data will only be published as aggregate data unless permission from the institution is received to publish the data individually.

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:

- Victor A. Santiago, Program Director, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4673, fax: (703) 292-9018, email: vsantiag@nsf.gov
- Jessie A. DeAro, Associate Program Director, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-5350, fax: (703) 292-9018, email: jdearo@nsf.gov

For questions related to the use of FastLane, contact:

- Victoria A. Smoot, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4677, fax: (703) 292-9018, email: vsmoot@nsf.gov
- Gloria Strothers, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4718, fax: (703) 292-9018, email: gstrothe@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) (<http://www.nsf.gov/home/cns/start.htm>) to be notified of new funding opportunities that become available.

The Historically Black Colleges and Universities Undergraduate Program is among a number of NSF programs that promote the involvement of underrepresented minorities in science, technology, engineering, and mathematics and foster innovation in education for all students. Related programs in the Division of Human Resource Development include the Tribal Colleges and Universities Program (TCUP), Louis Stokes Alliances for Minority Participation (LSAMP), Centers of Research Excellence in Science and Technology (CREST), Alliances for Graduate Education and the Professoriate (AGEP), Research on Gender in Science and Engineering (GSE), and Research in Disabilities Education (RDE). The following programs might also be of interest:

Biological Studies (BIO) (<http://www.nsf.gov/cgi-bin/bio/biolist.pl>)

- Undergraduate Mentoring in Environmental Biology (UMEB)

Computer and Information Science and Engineering (<http://www.cise.nsf.gov/>)

- Combined Research and Curriculum Development and Educational Innovation Program (CRCD/EI)

- Information Technology Workforce (ITWF)

Cross Directorate (<http://www.nsf.gov/home/crssprgm/>)

- Faculty Early Career Development Program (CAREER)
- Research Experiences for Undergraduates (REU)
- Major Research Instrumentation program (MRI)
- Science of Learning Centers (SLC)
- Science and Technology Centers (STC)

Education and Human Resources (EHR) (<http://www.nsf.gov/home/ehr/>)

- Advanced Technological Education (ATE)
- NSF Graduate Teaching Fellows in K-12 Education (GK-12)
- Course, Curriculum, and Laboratory Improvement (CCLI)

Engineering (ENG) (<http://www.eng.nsf.gov/eec/>)

- Engineering Research Centers (ERC)

International Science and Engineering (INT) (<http://www.nsf.gov/sbe/int/start.htm>)

- Funding opportunities for principle investigators
- Funding opportunities for undergraduate students

Mathematical and Physical Sciences (MPS) (<http://www.nsf.gov/mps/start.htm>)

- Partnerships for Research and Education in Materials (PREM)
- Enhancing the Mathematical Sciences Workforce in the 21st Century (EMSW21)

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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

- **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 information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Division of Administrative Services, National Science Foundation, Arlington, VA 22230.

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