Centers of Research Excellence in Science and Technology (CREST)

CREST Centers and Supplements, HBCU Research Infrastructure for Science and Engineering (HBCU-RISE), and Small Business Innovation Research (SBIR)

Diversity Collaboration Supplements

Program Solicitation

NSF 06-510 Replaces Document NSF 04-574



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

Letter of Intent Due Date(s) (required):

January 06, 2006

HBCU-RISE

February 03, 2006

CREST

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

March 03, 2006

HBCU-RISE

April 03, 2006

CREST

REVISIONS AND UPDATES

CREST center competitions are not held every year; the 2004 solicitation dealt only with CREST supplements and HBCU-RISE The current solicitation addresses CREST centers, CREST supplements, HBCU-RISE, and a new diversity component co-funded by NSF's SBIR/STTR program in the Directorate for Engineering.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (HBCU-RISE)

Synopsis of Program:

The Centers of Research Excellence in Science and Technology (CREST) program makes resources available to enhance the research capabilities of minority-serving institutions through the establishment of centers that effectively integrate education and research. CREST promotes the development of new knowledge, enhancements of the research productivity of individual faculty, and an expanded diverse student presence in STEM disciplines. Awards are offered as new centers, supplements to existing centers, proposals for the CREST Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) initiative, or supplements for diversity collaboration for projects co-funded with NSF's Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programs, which are administered by NSF's Directorate for Engineering.

Cognizant Program Officer(s):

- 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
- Toni Edquist, Program Assistant, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4649, email: tedquist@nsf.gov

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

• 47.076 --- Education and Human Resources

Eligibility Information

Organization Limit:

CREST

CREST proposals are invited from minority-serving institutions of higher education in the United States. This denotes institutions that have enrollments of 50% or more of members of minority groups underrepresented among those holding advanced degrees in science and engineering fields: Alaskan Natives, African Americans, American Indians, Hispanic Americans, and Native Pacific Islanders. Preference will be given to institutions with demonstrated strengths in NSF-supported fields, as evidenced by a developing capacity to offer doctoral degrees in one or more science, technology, engineering, or mathematics disciplines. Institutions must also demonstrate a willingness and capacity to serve as a resource center in one or more research areas, as well as possess a demonstrated commitment and track record in enrolling and graduating minority scientists and engineering disciplines or research areas where minorities are significantly underrepresented.

HBCU-RISE

HBCU-RISE proposals are invited from Historically Black Colleges and Universities that offer doctoral degrees in science, technology, engineering and mathematics disciplines.

- PI Eligibility Limit: Principal investigators for CREST and HBCU-RISE awards must be United States citizens or nationals, or permanent resident aliens of the United States. PIs must also be employed by a CREST or HBCU-RISE-eligible institution.
- Limit on Number of Proposals: Only one CREST center proposal may be submitted per eligible institution (see the Eligibility Information section of the Summary of Program Requirements for the definition of "eligible institution"). An institution may have only one active CREST award. Institutions that have had two prior CREST awards may not compete in the CREST centers competition until two years after the expiration date of the second award. At that time, new research teams from former awardee institutions may submit proposals in disciplinary areas that are completely different from those of the previous award(s). Only one HBCU-RISE proposal may be submitted per eligible institution (see the Eligibility Information section of the Summary of Program Requirements for the definition of "eligible institution"). An institution may have only one active HBCU-RISE award.

- Anticipated Type of Award: Standard or Continuing Grant or Cooperative Agreement
- Estimated Number of Awards: 13 to 21 - Up to 3 CREST center Cooperative Agreements, up to 5 CREST supplements, up to 5 HBCU-RISE standard grants, and up to 8 CREST SBIR/STTR supplements, pending the availability of funds
- Anticipated Funding Amount: \$9,700,000 \$3,000,000 for CREST centers (\$1,000,000 1st year commitments), \$500,000 for CREST supplements and \$5,000,000 for HBCU-RISE grants. Up to \$600,000 from CREST and \$600,000 from SBIR for co-funded SBIR/STTR supplements

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- Letters of Intent: Submission of Letters of Intent is required. Please see the full text of this solicitation for further information.
- Full Proposal Preparation Instructions: Standard GPG Guidelines apply.

B. Budgetary Information

- Cost Sharing Requirements: Cost Sharing is not required by NSF.
- Indirect Cost (F&A) Limitations: Not Applicable.
- Other Budgetary Limitations: Not Applicable.

C. Due Dates

• Letters of Intent (required):

January 06, 2006

HBCU-RISE

February 03, 2006 CREST

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

March 03, 2006 HBCU-RISE

April 03, 2006 CREST

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.

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I. INTRODUCTION

The Division of Human Resource Development (HRD) has primary responsibility within NSF for broadening participation by all individuals in science and engineering. HRD programs reflect NSF's commitment to developing the resources of the scientific and technological community as a whole and ensuring an adequately trained research and development workforce. To meet the challenges presented by the Nation's ever-increasing needs in science and technology, CREST and HBCU-RISE support efforts to strengthen the science and engineering research and education capabilities of minority-serving institutions. In doing so, these programs help to fulfill an important outcome goal of the NSF Strategic Plan (FY 2003-2008): A diverse, competitive, and globally engaged workforce of scientists, engineers, technologists and well-prepared citizens.

More broadly, HRD programs, including Gender in Science and Engineering, Research in Disabilities Education, 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. Managed synergistically, these programs enable successful transitions from associate and baccalaureate-level study to the attainment of masters and doctoral degrees and substantially increase the number of underrepresented minorities, women, and persons with disabilities well prepared for the science and engineering research, education, and workforce of the future.

II. PROGRAM DESCRIPTION

This solicitation requests proposals for: (1) new CREST centers; (2) supplements for partnerships applied to existing CREST awards; (3) HBCU Research Infrastructure for Science & Engineering (HBCU-RISE) proposals; and (4) supplements for diversity collaboration for projects co-funded with NSF's Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programs, which are administered by NSF's Directorate for Engineering.

1. **CREST centers.** CREST center proposals seek to effectively integrate education and research. In particular, CREST promotes the development of new knowledge, enhancements of research productivity by faculty, and increased diversity in science and engineering disciplines. CREST provides multi-year support for eligible minority-serving institutions that demonstrate a strong research and education base, a compelling vision for research infrastructure improvement, as well as a comprehensive plan with the necessary elements to achieve and sustain national competitiveness in a clearly defined and sharply focused area of science or engineering research. CREST center awards are typically 60-month Cooperative Agreements of up to \$5 million. These funds are used to support science and technology infrastructure improvements identified by the institution as being critical to its future research and development competitiveness.

CREST center proposals consists of two fundamental components: The center proposal, which includes discussion of the applicant's entire plan for improving the status of science and engineering research and

training and for increasing participation in science and engineering by a diverse student population. This overview should present a clear explanation of the proposed improvement plan from a scientific. administrative, and fiscal point of view. The center proposal must contain a Center Project Summary, which provides an overview of the center project and describes the synergy anticipated by the choice of subprojects; and up to 5, but not fewer than 3, subproject proposals each of which contains all the elements of a standard NSF research proposal but also contains a copy of the center project summary described in 1. above. Each subproject proposal must be complete and will be independently evaluated following the standard NSF merit review process and criteria. In addition, each subproject proposal contains a one-page Subproject Relevancy Statement summarizing the subproject's importance to the overall proposal plan, including synergy with the other subproject proposals, and showing how it supports the overall goals and objectives of the center proposal. The subproject proposals are inserted, successively, in the Special Information and Supplementary Documentation section of the center proposal. The center proposal should be prepared and submitted via NSF FastLane. CREST centers must serve as a resource center for increasing the research competitiveness of scientists and engineers affiliated with the center. Faculty at other institutions who participate in CREST-supported research and contribute to the achievement of CREST project objectives are eligible for funding through the CREST center with which they are affiliated. Each CREST center shall convene, at least annually, an external advisory group or committee. The advisors must include representatives from those served by the center (e.g., academic institutions, industry, state and local agencies, national laboratories) and reflect the diversity of participants inherent in the citizenry of the United States. Those with a financial, institutional, or collaborative connection to the center may not serve as members of the external advisory group. The function of the external advisory group is to provide guidance and advice to the center as well as to ensure that the center's activities are consistent with its vision, goals and objectives.

- 2. CREST supplements. CREST supplements support the establishment or strengthening of partnerships and collaborations between CREST centers and nationally recognized research centers in areas of mutual research interest and high priority for the CREST institution. As with CREST centers proposals, CREST supplements are designed to facilitate self-improvement. Responsibility for project development and execution rests with the proposing institution and the CREST project director. Support may be requested for activities that have a direct positive influence on the competitiveness of participating scientists and engineers and the quality of the institution's research and training. Supportable activities may include, but are not limited to: exploratory research projects; acquisition of materials, supplies, research equipment and instrumentation; hiring nationally competitive scientists and/or engineers; visiting scientists and engineers as short- or long-term consultants; faculty attendance at professional meetings and seminars; faculty sabbaticals and exchange programs; undergraduate and graduate research activities; development of outreach and other enhancement programs with neighboring institutions; and strengthening technical support personnel.
- 3. Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE). HBCU-RISE proposals support the development of research capability at HBCUs that offer doctoral degrees in science and engineering disciplines. Such activities include, but are not limited to: faculty release time, technical support for research, faculty professional development, acquisition or upgrading of research equipment, collaborative research efforts with partner universities and national laboratories. Supported projects must have a unifying research focus in one of the research areas supported by NSF, a direct connection to the long-term plans of the host department(s), the institutional mission, and plans for expanding institutional research capacity as well as increasing the production of doctoral students. HBCU-RISE funding may, for example, be used to support competitive levels of start-up funding for outstanding new faculty hires with research interests related to the project, or acquire key equipment and instruments, including high-performance computing and networking capabilities. HBCU-RISE support should not replace other available federal, state, or institutional resources and should add significant value to the existing institutional strategic plan. As with CREST proposals, each HBCU-RISE project shall convene, at least annually, an external advisory group or committee. The function of the external advisory group is to provide guidance and advice to the HBCU-RISE project and to ensure that the project's activities are consistent with its vision, goals and objectives. Potential members of the project's external advisory group should be identified in the proposal.
- 4. Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) supplemental funding for diversity collaborations. SBIR/STTR supplements seek to promote partnerships between academe and the small-business community. They are accepted by SBIR/STTR throughout the year, so no due date is listed in this solicitation. In particular, SBIR/STTR Phase II grantees may partner with CREST/HBCU-RISE institutions with the intent of developing the scientific or engineering underpinnings of the SBIR Phase II technology. As such, it is important that the SBIR/STTR supplemental project be related to the research areas for which the institution is receiving CREST/HBCU-RISE support.

Additional Information

Support may be requested for activities that positively impact the quality of research training and the research preparedness of graduate students in science and engineering. Multiple- investigator projects are encouraged. Collaborative efforts between universities, industry, other research universities or centers, and federal laboratories are encouraged. Projects

should be designed to enable awardee institutions to enhance the integration of education and research.

CREST centers or supplement proposals may be organized around the development of individual scientists or engineers, one or more science or engineering departments or equivalent units, or interdisciplinary and multidisciplinary research areas. It is expected, however, that the CREST target group(s) will possess the potential to achieve national research competitiveness over the five-year implementation period. In identifying the members of this target group, NSF expects that the proposing institution strongly encourages participation by underrepresented minorities, women, and persons with disabilities. Whether the proposed activity is considered competitive will be determined by merit review of the appropriateness and relevance of the improvement strategies to CREST program goals.

Project activities supported by NSF may also include cooperative efforts between the applicant institution and industry, federally funded laboratories, or other national, state, local, or regional research and development institutions. An institution's CREST request may include support for academic, state, for-profit, and non-profit organizations. It may also include individuals employed by such organizations both inside and outside the CREST institution. Cooperative programs among eligible institutions as well as cooperative programs between eligible institutions and other other entities are eligible for CREST support. CREST-supported projects must contribute to and support the achievement of CREST objectives outlined in the synopsis for this solicitation. CREST funding must add substantial, measurable value to the existing science and technology research capability in areas of high institutional priority and demonstrate strong potential to generate sustained non-CREST funding from federal, state, or private-sector sources. In addition, all activities carried out under a CREST award are subject to the restrictions concerning eligible science and engineering disciplines and activities detailed in the NSF Grant Proposal Guide.

In addition to progress reports required annually via NSF's FastLane system, awardees will be expected to contribute reports on project participants, publications, outreach efforts, patents, proposals, leveraged funding efforts and similar data to the CREST data collection system. Awardees may also expect site visits and reverse site visits by NSF-appointed evaluators per the particular terms of the award's Cooperative Agreement. Midpoint (30 month) and fifth-year (48 month) reviews of the awardees' progress are also typical. Each Center should describe an evaluation plan to track progress and strengthen cooperative efforts. In addition, each Center will be required to participate in a program level evaluation to assess outcomes and the program's contributions to advancing science and engineering research and education capabilities of minority-serving institutions.

III. ELIGIBILITY INFORMATION

The categories of proposers identified in the Grant Proposal Guide are eligible to submit proposals under this program announcement/solicitation.

Organization Limits. CREST - CREST proposals are invited from minority-serving institutions of higher education in the United States. This denotes institutions that have enrollments of 50% or more of members of minority groups underrepresented among those holding advanced degrees in science and engineering fields: Alaskan Natives, African Americans, American Indians, Hispanic Americans, and Native Pacific Islanders. Preference will be given to institutions with demonstrated strengths in NSF-supported fields, as evidenced by a developing capacity to offer doctoral degrees in one or more science, technology, engineering, or mathematics disciplines. Institutions must also demonstrate a willingness and capacity to serve as a resource center in one or more research areas, as well as possess a demonstrated commitment and track record in enrolling and graduating minority scientists and engineering disciplines or research areas where minorities are significantly underrepresented. **HBCU-RISE** - HBCU-RISE proposals are invited from Historically Black Colleges and Universities that offer doctoral degrees in science, technology, engineering science, technology, engineering and mathematics disciplines. SBIR /STTR - SBIR/STTR proposals are invited from CREST institutions.

PI Eligibility Limits. Principal investigators for CREST, HBCU-RISE and SBIR/STTR awards must be United States citizens or nationals, or permanent resident aliens of the United States. PIs must also be employed by a CREST, HBCU-RISE or SBIR/STTR-eligible institution.

Limit on Number of Proposals. Only one HBCU-RISE proposal may be submitted per eligible institution. An institution may have only one active HBCU-RISE award.

CREST award instruments, duration, and amounts vary among the CREST program components.

- Up to three **CREST centers** awards (new centers and renewals with their respective research subprojects) are anticipated in the current review cycle. CREST center awards are for 60 months at up to \$1,000,000 annually (i.e., a maximum of \$5,000,000). Center awards are made as Cooperative Agreements. The progress and plans of each center will be renewed by NSF annually, prior to approving continued NSF support. A CREST center nearing the completion of its initial five years of funding may submit a competing renewal proposal for an additional five years of support. The renewal proposal will undergo merit review alongside proposals for new CREST centers. Accordingly, the existing centers' achievements and future plans will be evaluated comprehensively relative to progress and direction and weighed against the competition for available program funds. Merit review will determine if the center is meeting its goals and objectives as originally proposed as well as the goals and objectives of the CREST program. Centers successful in passing this review will be renewed for another five years, commencing at the beginning of the sixth year. Renewed centers will continue to be monitored by NSF at least every 18 months. Centers that do not pass this review may have their level of funding reduced or may be terminated. Individual centers may not receive more than 10 years of CREST support.
- Up to five **CREST supplements** will be made for a maximum amount of \$100,000 per supplement, in amounts that vary with need and are subject to the availability of funds. A supplement will be an amendment to the existing Cooperative Agreement.
- Up to five HBCU-RISE awards will be made during this award cycle. Awards will not exceed \$1,000,000 during a
 three-year period. HBCU-RISE awards will be managed through standard grants. An institution may only have one
 active HBCU-RISE award.
- Up to eight CREST SBIR/STTR supplements will be made during this award cycle. Up to four of these awards will be for eligible CREST institutions and up to four of these awards will be for eligible HBCU-RISE institutions. A supplement will be an amendment to the existing Cooperative Agreement. SBIR/STTR award amounts will not exceed \$150,000 in NSF support.

The estimated CREST, HBCU-RISE and SBIR/STTR budgets, number of awards and average award size and duration are subject to the availability of funds.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Letters of Intent (required):

Letters of intent are required for CREST and HBCU-RISE full proposals but not supplement proposals. The CREST letter of intent should contain sufficient details of each subproject proposal to permit identification of appropriate technical reviewers for that subproject. The HBCU-RISE letter of intent should also provide sufficient detail about the proposed research to permit identification of appropriate technical reviewers. Letters should be submitted using the letters of intent module in FastLane.

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/publications/pub_summ.jsp?ods_key=gpg. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from pubs@nsf.gov.

Proposers are reminded to identify the program announcement/solicitation number (06-510) in the program announcement/ solicitation block on the NSF *Cover Sheet For Proposal to the National Science Foundation*. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

B. Budgetary Information

Cost Sharing:

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

C. Due Dates

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

Letters of Intent (required):

January 06, 2006 HBCU-RISE

February 03, 2006 CREST

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

March 03, 2006 HBCU-RISE

April 03, 2006 CREST

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 onepage 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.

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 are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC). 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/awards/managing/. Paper copies of these documents 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/publications/pub_summ.jsp?ods_key=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.

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
- Toni Edquist, Program Assistant, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4649, email: tedquist@nsf.gov

For questions related to the use of FastLane, contact:

 Toni Edquist, Program Assistant, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4649, email: tedquist@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 MyNSF News Service (http://www.nsf.gov/mynsf/) to be notified of new funding opportunities that become available.

Related Programs

- Historically Black Colleges and Universities Undergraduate Program (NSF-04-603)
- Louis Stokes Alliances for Minority Participation Program (NSF-03-520)
- Alliances for Graduate Education and the Professoriate (NSF-04-574)
- Engineering Research Centers (NSF-04-570)
- Partnerships for Innovation (NSF-04-556)
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