Louis Stokes Alliances for Minority Participation (LSAMP) Program

National Science Foundation
Division of Human Resource Development

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

March 23, 2003

October 15, 2003

Subsequent Years: October 15th

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Louis Stokes Alliances for Minority Participation (LSAMP) Program

Synopsis of Program:

This program is aimed at increasing the quality and quantity of students successfully completing science, technology, engineering and mathematics (STEM) baccalaureate degree programs, and increasing the number of students interested in, academically qualified for and matriculated into programs of graduate study. LSAMP supports sustained and comprehensive approaches that facilitate achievement of the long-term goal of increasing the number of students who earn doctorates in STEM fields, particularly those from populations underrepresented in STEM fields. The program goals are accomplished through the formation of alliances. Phase I awards place emphasis on aggregate baccalaureate production. Phase II awards augment the Phase I emphasis with attention to individual student retention and progression to baccalaureate degrees. Phase III awards augment the Phase I and Phase II with attention to aggregate student progression to graduate school entry.

Cognizant Program Officer(s):

- A. James Hicks, Program Director, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4668, fax: (703) 292-9019, email: ahicks@nsf.gov

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

- 47.076 --- Education and Human Resources

Eligibility Information

- **Organization Limit:** The program is limited to alliances of academic institutions which have exemplary records over several years of enrolling and retaining significant numbers of undergraduate students underrepresented in STEM disciplines. One institution must be designated as the lead institution for the project. A single institution may participate in only one alliance. Individual institutions and single departments are ineligible for support. Alliances are expected to involve two- and four-year higher education institutions, businesses and industries, national research laboratories, local, state, and Federal agencies.
- **PI Eligibility Limit:** In order to assure appropriate organizational commitment and managerial attention to the project, the P.I. must be either the Chief Executive Officer or the Chief Academic Officer of the lead Institution. Exceptions must be justified in the application, and approved by the cognizant Program Officer. It is expected that most projects will also have a Project Director to supervise the day-to-day operations of the project.
- **Limit on Number of Proposals:** None Specified.

Award Information

- **Anticipated Type of Award:** Cooperative Agreement for Phases I, II and III; or Standard Grant for support of education research projects on baccalaureate attainment in STEM by African Americans, Hispanics, Native Americans, and Pacific Islanders.
- **Estimated Number of Awards:** 8 - Up to 8 awards total for all 3 phases.
- **Anticipated Funding Amount:** $6,000,000 Approximately $6 million, pending availability of funds

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Full Proposal Preparation Instructions:** This solicitation contains information that deviates from the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full text of this solicitation for further information.

B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is required (Percentage).
- **Cost Sharing Level/Amount:** 100%
- **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):
  March 23, 2003
  October 15, 2003

  Subsequent Years: October 15th

Proposal Review Information

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

Award Administration Information

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

TABLE OF CONTENTS

I. INTRODUCTION

The Louis Stokes Alliances for Minority Participation (LSAMP) program is one of a sequence of four NSF programs which seek to build productive capacity and output within institutions with significant enrollments of minority populations underrepresented within science, technology, engineering, and mathematics (STEM) professionals. The other three NSF programs are Alliances for Graduate Education and the Professoriate (AGEP), Centers for Research Excellence in Science and Technology (CREST), and Historically Black Colleges and Universities Undergraduate Program (HBCU-UP). The ultimate goal of these efforts is to increase the number of minorities contributing to advancing the frontiers of research and education in STEM fields. LSAMP is a multi-disciplinary comprehensive program. It is designed to increase substantially the quality and quantity of students receiving baccalaureate degrees in STEM fields and well prepared for either doctoral study or professional practice in STEM fields normally supported by NSF. The LSAMP program was initially focused primarily on baccalaureate production. However, as the program has matured it has placed increased emphasis on the progression of individual students to baccalaureate degrees and entry into graduate programs of study. The LSAMP program encourages the formation of alliances among leaders throughout academia, government, industry, and other organizations. The

LSAMP program supports comprehensive attention to those processes and factors that promote baccalaureate attainment, preparation for graduate study, and preparation for successful careers by students within alliances. These alliances may include partners drawn from among two- and four-year higher education institutions, businesses and industries, national research laboratories, local, state, and Federal agencies.

While the LSAMP program supports activities that focus specifically on undergraduate STEM education, projects must also give consideration to the critical transition points in STEM education (i.e., high school-to-college; 2-year to 4-year college; undergraduate-to-workplace; undergraduate-to-graduate study; and graduate study-to-faculty career). The scope and scale of an LSAMP project (i.e., the number of transition points addressed) may vary among proposals, depending on project focus, needs, and goals.

Success of the LSAMP program has been measured by its ability to cause a significant increase in the number of students, particularly those drawn from populations which are currently underserved in science and engineering fields, who graduate with baccalaureate degrees in STEM fields. With the components contained within this announcement, the program's metrics will expand to include individual student persistence to baccalaureate attainment, and entry of students into programs of graduate study.

II. PROGRAM DESCRIPTION

LSAMP Program activities must produce a demonstrable "near-term" increase in STEM graduates and the promise of long-term change in the production of new Ph.D.s and their entrance into productive faculty or research careers. The strategy for implementing these projects must be clear and focused.

Alliances must be structured to address two interrelated requirements:

- First, the design of the alliance must be based on sound understanding of programmatic approaches known to be successful in meeting well-defined needs, must be cost effective, and must involve undergraduates in faculty research.

- Second, the proposed plan must be comprehensive and longitudinal, since fragmentary and isolated efforts are inevitably inadequate responses to the acknowledged scope and scale of the problem being addressed by the LSAMP program.

Successful programmatic approaches include, but are not limited to, (1) devoting careful attention to management and administrative collaboration among participating organizations so as to ensure long-term continuation of LSAMP or similar activities beyond the term of NSF financial support; and (2) developing specific evaluation plans and procedures for assessing qualitative and quantitative changes including the definition of a baseline of pre-LSAMP data which will be used to compare post-LSAMP minority retention, progression, and graduation rates in STEM fields.

Comprehensive and longitudinal plans are reflected in (1) the establishment of alliances with members drawn from among community colleges, colleges and universities, school systems, Federal/state/local government agencies, major national laboratories and centers, industry, private foundations, and STEM professional organizations, as necessary to achieve the proposed LSAMP objectives; (2) incorporation of academic, curricular, and co-curricular enrichment activities designed to improve instructional performance as well as increase the motivation, performance, and progression of talented students within undergraduate degree programs and in preparation for graduate degree programs; and (3) provide direct student support as necessary to enable students to attend academic year and summer enrichment activities without unnecessary loss of income.

The LSAMP Program provides latitude to proposers in designing projects to achieve the stated LSAMP goals. The structure and content of proposed projects should be governed by differences in the institutional and organizational capabilities of alliance members, strategies for the formation of the alliance, and characteristics of specific localities. Project specifics may encompass a wide variety of activities. The project activities must form a feasible, logical, and comprehensive effort focused upon improving the undergraduate educational experience. While the primary focus of LSAMP is at the undergraduate level, projects must include activities that affect student advancement through one or more of the critical decision points during STEM education: a) the transition between high school and college, b) 2- and 4-year college, c) undergraduate and the workplace, d) undergraduate and graduate school, and graduate school and faculty. These activities allow the LSAMP program to build linkages between the various sectors of the STEM community and the educational process to increase the flow of students and their advancement rate.

The activities above are merely illustrative of the range of activities that are possible under the LSAMP Program. [SEE SECTION IX,

"OTHER PROGRAMS OF INTEREST"]

The LSAMP PROPOSAL REVIEW AND EVALUATION Section of this solicitation specifies that proposals will be evaluated on their potential to increase minority participation in STEM disciplines. NSF strongly encourages potential awardees to permit participation by all students in LSAMP activities.

The following are specific requirements for support under various phases of the LSAMP program. First time applicants must apply for Phase I. Phase II applicants must have received a Phase I award or been a partner in a Phase I award. Phase III applicants must have received a Phase II award or been a partner in a Phase II award.

A. PHASE I

Phase I awards place emphasis on baccalaureate production.

Alliances competing for Phase I support must define their current baseline production of baccalaureate recipients in STEM fields and commit to a significant increase in B.S. Degree production in STEM fields within the five year award period. Applicants should make a compelling case for the level of increase they define as significant.

B. PHASE II

Phase II awards augment the Phase I emphases by addressing individual student retention and progression to baccalaureate degrees.

Alliances completing a Phase I project may apply for Phase II support if they: a) commit to a significant increase in B.S. degree production levels beyond the Phase I goal, (the Phase I goal will be adjusted if the baseline cohort is changed through additions or reductions in the Phase I alliance membership), and b) submit a clear plan of action to significantly increase individual, not simply aggregate, STEM student retention and progression toward B.S. degree attainment in Phase II. Applicants should make a compelling case for the levels of increase they define as significant.

Additionally, in order to be supported under Phase II, alliances must obtain a significant portion of their Phase I B.S. Degree production goal, or if the Phase I B.S. Degree production goal has not been attained, submit a clear plan for attainment of the Phase I goal, and demonstrate progress toward institutionalization of LSAMP strategies and techniques for increased STEM baccalaureate production.

C. PHASE III

Phase III awards augment the Phase I and Phase II emphases with attention to aggregate student progression to graduate school entry.

A Phase III award represents a capstone effort to finalize institutionalization of achievements developed over the preceeding ten years and to finalize construction of permanent pathways to graduate study for baccalaureate recipients at participating institutions. Entities seeking further support opportunities may be considered and are referred to the Alliances for Graduate Education and the Professoriate (AGEP) program.

Alliances completing a Phase II project may apply for Phase III support if they: a) define a baseline level of and commit to a significant increase in the number of their previous, current and future baccalaureate recipients entering either a STEM graduate program or a graduate program in teacher education, and b) sustain the B.S. Degree production levels and individual student retention and progression rates specified as Phase II goals (the Phase II goals will be adjusted if the baseline cohort is changed through additions or reductions in the Phase II alliance membership). Applicants should make a compelling case for the levels of increase they define as significant.

Phase III support of up to $100,000 annually (one- and two-year awards) is available for support of educational research projects on minority baccalaureate attainment in STEM by African Americans, Hispanics, Native Americans, and Pacific Islanders. The proposals for LSAMP educational research projects should be based in a research design that incorporates appropriate and proven methodologies and strategies to (1) identify the research questions, (2) implement the collection and analysis of data, and (3) interpret the resulting measures and findings generated by the study. The results should provide convincing evidence of factors (including departmental/institutional) facilitating undergraduate access to STEM careers, including baccalaureate degree attainment and persistence to STEM graduate study by members of traditionally underrepresented racial/ethnic groups. Results should provide educators with practical and successful strategies to promote broader adoption or adaptation of the recommended factors within their educational systems (departments, institutions, alliances).

These educational research studies should reflect explicit cognizance of the broad variety of institutions of higher education involved and should address the unique challenges and opportunities posed by that variety. Outcomes of the proposed research should be developed with the intent to inform the education community, including faculty, administrators, policymakers, and parents, enabling them to guide better the future development of learning experiences, and foster the retention, and academic success of diverse students in STEM.

Note that broader research opportunities in student learning and student academic success are eligible for support under the Research on Learning and Education (ROLE), NSF 02-023.

Additionally, in order to be supported under Phase III, alliances must obtain a significant portion of the Phase II B.S. Degree production and individual student retention goals, or if the Phase II B.S. Degree production and individual student retention goals have not been attained, submit a clear plan for attainment of the Phase II goals, and demonstrate institutionalization of LSAMP strategies and techniques for increased STEM baccalaureate production in the absence of further NSF funding.

III. ELIGIBILITY INFORMATION

It is recognized that single organizations have unique strengths and weaknesses in addressing issues related to STEM education and the workforce. The LSAMP program requires coalitions that capitalize on the strength of each partner to develop different resources and new approaches. Such coalitions are expected to involve community colleges, colleges and universities, state/local governments, industry, private foundations, STEM professional organizations, and other Federal agencies as necessary to achieve program objectives. In all cases, however, true partnerships must be created that are characterized by joint planning and resource commitments, as well as close cooperation among participating organizations and their personnel.

Prospective applicants may discuss their proposal preparation with NSF program staff prior to proposal submission.

IV. AWARD INFORMATION

The level of support provided under the LSAMP Program will depend upon the number, scope, and quality of proposals submitted, as well as availability of funds. The NSF funded part of the project will not normally exceed $1,000,000 per year. NSF expects to make approximately 8 new awards in this fiscal year.

Cost sharing in the amount of 100% of the total amount funded by NSF is required. Cost sharing must be from non-Federal sources.

The LSAMP Program will be managed through Cooperative Agreements that will initially be made for up to 5 years. The progress and plans of each funded project will be assessed annually, prior to receiving approval for continued NSF support. The initial five-year award is potentially renewable. The LSAMP program will ensure that each project is funded in a cost-efficient manner by adjusting the funding levels as proposed below:

PHASE I Projects

- $700,000 or more for projects that award 500 or more B.S. degrees annually;

- $500,000 to $700,000 for projects that award between 300 and 500 B.S. degrees annually; and

- Less than $500,000 for projects that award 300 or less B.S. degrees annually.

PHASE II Projects

- $700,000 or more for projects that currently award 700 or more B.S. degrees annually;

- $500,000 to $700,000 range or more for projects that award between 500 and 700 B.S. degrees annually; and

- Less than $500,000 for projects that award fewer than 500 B.S. degrees annually.

PHASE III Projects

- $500,000 or more with approval for projects that award 1,000 or more B.S. degrees annually;

- $300,000 to $500,000 or more with approval for projects that currently award between 700 and 1,000 B.S. degrees annually; and

- Less than $300,000 or more with approval for projects that currently award fewer than 700 B.S. degrees annually.

- Additionally, up to $100,000 annually for educational research projects on baccalaureate attainment in STEM by African Americans, Hispanics, Native Americans, and Pacific Islanders on factors (including departmental/institutional) that promote retention in STEM fields, baccalaureate attainment, and persistence to graduate study by members of traditionally underrepresented minority populations.

Under Phases I, II and III, some types of student support are allowable. Requested financial support should be clearly justified along with established recruitment, selection and accountability criteria. Allowable student support is limited to financial support for employing team building principles (e.g., mentoring, collaborative learning experiences, small group clustering in academic sections, structured work-study groups), individual skill development (e.g., participation in special seminars and colloquia), involvement in research (e.g., stipends or salary for academic-year or summer research programs, and related personal career counseling and mentoring), preparation for graduate school application and success, and other activities designed to enhance student experiences and student/faculty/mentor interaction.

The LSAMP Program at NSF may provide supplements to enable direct support for students to attend summer enrichment activities and to participate in other activities throughout the academic year. Please note that student support can only be provided to U.S. citizens, nationals, and permanent U.S. residents.

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.

Proposals that do not strictly adhere to the specified page limitations (given below) will be ineligible for consideration and will be returned without review. The proposals should be prepared and submitted in accordance with specific guidelines provided in this document and the general guidelines provided in the Grant Proposal Guide. Specifically, the proposal should include the following:

1. Cover Sheet for Proposals with Institutional Certifications: Proposals should specify "LSAMP" at the beginning of the title and list the solicitation number in the appropriate box. Select Louis Stokes Alliances for Minority Participation (LSAMP) as the appropriate NSF program, and Division of Human Resource Development (HRD) as the NSF division to be entered on the proposal cover sheet.

2. Project Summary: Provide a brief (one page or less) description of the project, clearly stating objectives and strategies to be employed.

3. Project Description: The narrative (not to exceed 15 single-spaced typed pages in standard font size of 10 to 12 points) presents most of the information that determines whether an award will be made. All pages must be numbered at the bottom with 2.5 cm. margins at the top, bottom, and on each side.

   Proposals must specify project objectives, planned outcomes, project monitoring guidelines, how outcomes will be measured, and plans to disseminate results. The effect on the quality of STEM education should be clearly stated. Proposers should keep in mind that the most relevant indicators of success are the number of participants that are making satisfactory progress towards obtaining a B.S. degree in STEM, the rates of retention and progression for individual students, and the number of participants entering graduate STEM programs. A detailed description of the comprehensive evaluation and assessment activities must be included in the program description section of the proposal. Specific elements within the proposal should include, in the order indicated, the following:

- Project Approach and Impact: Describe activities to be supported under the project in a clear and concise fashion. Indicate the project design and the logic underlying it. Describe how the project will permanently change participating organizations and indicate it's potential for export to other organizations. Indicate the number and characteristics of students that will be affected by the proposed project. In tabular form, provide statistics by participating institutions indicating the disaggregated numbers and percentages for STEM (1) enrollment (undergraduate and graduate) of minorities and (2) the STEM degrees (undergraduate and graduate) awarded to students. If members of your alliance participate or participated in other NSF-supported training programs or programs designed to promote enhanced access and participation in higher education, please indicate how LSAMP will provide added value and complement these on-going or previous activities.

- Alliance Partners and Key Project Personnel: Identify major project participants. Characterize the capabilities and roles played by each. Address the role of research faculty in the alliance. Provide evidence of commitment of major alliance partners, indicating the level of involvement of each participant. Discuss the qualifications of all key project personnel.

- Management Plan: Describe methods for communicating, coordinating, and managing activities throughout the alliance. As part of the management plan, each LSAMP project will be required to establish a Governing Board composed of Presidents or Provosts/Vice President of Academic Affairs of partner institutions to oversee general project operation and ensure that objectives are achieved. The board should also have representatives from collaborating organizations, leaders in STEM research and education, and appropriate state/local officials. The purpose of the board is to provide global perspective, direction, and assistance in broadening the base of support for LSAMP objectives among academic, industrial, governmental, and other sectors of society. The project director should report directly to the Governing Board on alliance issues and concerns.

- Grantee Contributions to Project: In order to assure commitment to the project and in order to initiate long-term self-sustainability within projects, the LSAMP Program encourages leveraging of Federal support by Alliances during the life of the project. Leveraged contributions to the LSAMP projects should be described in detail. The source of these funds should be described.

- Evaluation Activities: Describe database elements and evaluation activities that will be used to monitor annual progress under the project and discuss the personnel involved. NSF program staff will consult with the project director at the time of award regarding the coordination of project evaluation activities. Cooperation will be an important factor in assuring the success of

this effort. Each proposed project must include a methodologically sound and realistic evaluation plan that states the objectives or critical evaluation questions, the personnel needed to perform the evaluation tasks, what processes will be used to collect and analyze the information, and a time line for these activities. Evaluation activities must take place at least annually. The evaluation section of the proposal must describe how the information collected and analyzed will be used for monitoring the progress of the project (e.g., databases and annual report) and for providing evaluation information. The proposed budget should include the costs of evaluation and monitoring activities as a separate line item. Projects will be required to submit data via the AMP MARS data system. The data format and content are available at http://www.qrc.com/nsf/ehr/amp/start.htm.

- Dissemination Activities: Indicate your plans for disseminating project innovations and for fostering adaptation of project activities that could be implemented in other institutions.

- Prior Support: If the prospective PI or Co-PI(s) received support for related NSF activities within the past five years, a brief description of project(s) and outcome(s) must be provided in sufficient detail to enable reviewers to assess the value of results achieved. The PI or Co-PI should identify the appropriate NSF award number, amount, period of support, title, summary of results, and list of publications and formal presentations that acknowledge the NSF award. Descriptions of prior NSF support should be limited to five pages and must be included as part of the 15-page limit.

4. Biographical Sketches: Biographical sketches of key project personnel (each no more than two pages in length) should highlight relevant experience in recruiting, academic and career mentoring, and knowledge of research methodologies, higher education, minority participation in STEM disciplines, graduation and workforce entry, etc. Up to 10 major relevant publications may be listed for each of the key personnel.

5. Timeline for Major Project Benchmarks (1 page maximum). Upload this timeline as a file into Supplementary Docs in Fastlane.

6. The budget should be prepared using the three column Budget Form (HRD 1030) available in FastLane. A budget should be prepared for each year of support requested, and a cumulative budget for all years of support requested. Senior personnel administrative cost should not exceed 25% of the total budget. The LSAMP program is not intended to be a scholarship or fellowship program. Annual and cumulative signed budgets and justifications should be included for each proposed subaward.

Cost of entertainment, amusement, diversion and social activities and any costs directly associated with such costs (such as tickets to shows or sports events, meals, lodging, rental, transportation and gratuities) are not allowable. Expenses of awardee employees who are not on travel status, serving as hosts, or otherwise participating at meals that are primarily social occasions involving speakers or consultants are not allowable. In addition, costs of ceremonies and incidental costs related to things such as bar charges and personal telephone calls of participants or guests are not allowable.

Annual budgets should include cost for principal investigator to attend a two-day project directors meeting at NSF. Students receiving support must be citizens, nationals, or permanent residents of the U.S. Limited funds intended to partially defray the costs of research by students may be requested.

Special recognition of participating students is encouraged, and may be proposed as allowable costs, but should be fully justified. Fees for speakers also may be proposed, but should be fully justified.

Proposers are reminded to identify the program announcement/solicitation number (03-520) 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 at a level of 100 percent of the requested total amount of NSF funds is required for all proposals submitted in response to this announcement/solicitation. The proposed cost sharing must be shown on line M on the proposal budget. Documentation of the availability of cost sharing must be included in the proposal.

Only items which would be allowable under the applicable cost principles, if charged to the project, may be included in the awardee's contribution to cost sharing. Contributions may be made from any non-Federal source, including non-Federal grants or contracts, and may be cash or in kind (see OMB Circular A-110, Section 23). It should be noted that contributions counted as cost sharing toward projects of another Federal agency may not be counted towards meeting the specific cost sharing requirements of the NSF award.

All cost sharing amounts are subject to audit. Failure to provide the level of cost sharing reflected in the approved award budget may result in termination of the NSF award, disallowance of award costs and/or refund of award funds to NSF.

Other Budgetary Limitations:

Direct support of faculty research is not available through the program. Award size will be based on the number of degrees to be awarded.

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):

March 23, 2003

October 15, 2003

Subsequent Years: October 15th

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 judgements.

What is the intellectual merit of the proposed activity?
How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative 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.

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.

Special Award Conditions:

Awards will be made via a cooperative agreement which will specify the conditions for the conduct of supported projects mutually agreed upon by the awardee institution and the National Science Foundation.

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.

Projects will be required to submit data via the AMP MARS data system. The data format and content are available at http://www.qrc.com/nsf/ehr/amp/start.htm

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:

- A. James Hicks, Program Director, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-4668, fax: (703) 292-9019, email: ahicks@nsf.gov

For questions related to the use of FastLane, contact:

- Victoria A. Smoot, Financial Operation Specialist, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-8640, fax: (703) 292-9019, email: vsmoot@nsf.gov

- Gloria Strothers, Lead Program Assistant, Directorate for Education & Human Resources, Division of Human Resource Development, 815 N, telephone: (703) 292-8632, 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) to be notified of new funding opportunities that become available.

The LSAMP Program is among those that target underserved populations in science, engineering, mathematics, and technology and that promote innovation in education for all students. Other related programs include the following: Alliances for Graduate Education and the Professoriate (AGEP), Centers of Research Excellence in Science and Technology (CREST); Historically Black Colleges and Universities - Undergraduate Program (HBCU-UP); and Integrated Graduate Education and Research Traineeship (IGERT). LSAMP also promotes instructional and curricular improvements. Other related programs include the following: Course, Curriculum, and Laboratory Improvement (CCLI), Combined Research and Curriculum Development (CRCD), and CISE Educational Infrastructure (EI). The Research Opportunities in Learning and Education (ROLE) program supports educational research.

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** (NSF Information Center)**:**	(703) 292-5111
● **TDD (for the hearing-impaired):**	(703) 292-5090 or (800) 281-8749
● **To Order Publications or Forms:**	
Send an e-mail to:	pubs@nsf.gov
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, Information Dissemination Branch, Division of Administrative Services, National Science Foundation, Arlington, VA 22230.

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