

Urban Long-Term Research Area (ULTRA) Exploratory Awards (ULTRA-Ex)

PROGRAM SOLICITATION NSF 09-551



National Science Foundation

Directorate for Social, Behavioral & Economic Sciences
Division of Behavioral and Cognitive Sciences
Division of Social and Economic Sciences

Directorate for Biological Sciences
Division of Environmental Biology



USDA Forest Service

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

July 07, 2009

REVISION NOTES

Please be advised that the *NSF Proposal & Award Policies & Procedures Guide* (PAPP) includes revised guidelines to implement the mentoring provisions of the America COMPETES Act (ACA) (Pub. L. No. 110-69, Aug. 9, 2007.) As specified in the ACA, each proposal that requests funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals. Proposals that do not comply with this requirement will be returned without review (see the PAPP Guide Part I: *Grant Proposal Guide* Chapter II for further information about the implementation of this new requirement).

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

Urban Long-Term Research Area (ULTRA) Exploratory Awards (ULTRA-Ex)

Synopsis of Program:

The Urban Long-Term Research Areas: Exploratory Research Projects (ULTRA-Ex) competition will provide support to enable teams of scientists and practitioners to conduct interdisciplinary research on the dynamic interactions between people and natural ecosystems in urban settings in ways that will advance both fundamental and applied knowledge.

Cognizant Program Officer(s):

- Thomas J. Baerwald, telephone: (703) 292-7301, email: tbaerwal@nsf.gov
- Henry L. Gholz, telephone: (703) 292-7185, email: hgholz@nsf.gov
- Todd A. Crowl, telephone: (703) 292-7870, email: tcrowl@nsf.gov

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

- 10.652 --- Forestry Research
- 47.074 --- Biological Sciences
- 47.075 --- Social Behavioral and Economic Sciences

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 16 A total of 16 awards, with each receiving \$150,000 per year for two years, are expected.

Anticipated Funding Amount: \$4,800,000

Eligibility Information

Organization Limit:

Proposals may only be submitted by the following:

- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.
- Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.

PI Limit:

Employees of the U.S. Forest Service and other federal agencies may participate as PIs or co-PIs of proposals if permitted by the organization submitting the proposal, but any support for activities at the federal agency must be provided through subawards. A limited amount of funding may be used to support Forest Service researcher salaries using Forest Service-contributed funds. The amount requested for Forest Service personnel should not exceed \$50,000 for any ULTRA exploratory award. Salary support cannot be provided for other federal agency employees.

Limit on Number of Proposals per Organization:

None Specified

Limit on Number of Proposals per PI: 3

If an individual is listed as a PI or co-PI on four or more proposals, all of those proposals will be returned without review. (An individual may be involved as a member of the senior personnel or participate in other ways on more than three proposals, but an individual may serve as an administrative PI or Co-PI on a maximum of three proposals.)

Proposal Preparation and Submission Instructions

A. Proposal Preparation Instructions

- **Letters of Intent:** Not Applicable
- **Preliminary Proposal Submission:** Not Applicable
- **Full Proposal Preparation Instructions:** This solicitation contains information that supplements the standard NSF Proposal and Award Policies and Procedures Guide, Part I: 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 under this solicitation.
- **Indirect Cost (F&A) Limitations:** Not Applicable
- **Other Budgetary Limitations:** Not Applicable

C. Due Dates

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

July 07, 2009

Proposal Review Information Criteria

Merit Review Criteria: National Science Board approved criteria. Additional merit review considerations apply. Please see the full text of this solicitation for further information.

Award Administration Information

Award Conditions: Standard NSF award conditions apply.

Reporting Requirements: Standard NSF reporting requirements apply.

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I. INTRODUCTION

The National Science Foundation and the U.S. Forest Service invite proposals to enable interdisciplinary teams of scientists and practitioners to conduct research on the dynamic interactions between people and natural ecosystems in urban settings in ways that will advance both fundamental and applied knowledge. Because of the highly integrated character of the coupled human and natural ecosystems that will be studied, these teams will require the involvement of researchers from the social and behavioral, ecological, and technical sciences. Up to 16 awards of up to two-years duration and up to \$300,000 per award are expected to be made.

Each Urban Long-Term Research Areas exploratory research (ULTRA-Ex) project will be expected to contribute to the broader base of scientific knowledge regarding human-ecosystem interactions and to benefit user communities. Teams of social and behavioral scientists, ecological scientists, and technical scientists as well as members of local communities should focus on one or a few targeted research activities that will enable the team to work together more effectively and conduct research that will yield both basic and practical knowledge. Primary products of ULTRA-Ex projects are expected to be publications and presentations for scholarly and practitioner audiences that disseminate research results, especially publications in peer-reviewed journals. ULTRA-Ex projects should enable research teams to develop more cohesiveness in anticipation of future competitions to establish large-scale Urban Long-Term Research Areas (ULTRA), but such competitions will be open to all interested research teams, regardless of whether they have received an ULTRA-Ex project award.

II. PROGRAM DESCRIPTION

About 80 percent of the people in the U.S. reside in urban areas. Between 1990 and 2000, urban land in the U.S. increased in area by roughly the combined size of Vermont and New Hampshire. Over the next 50 years, urban areas are projected to expand by another 39 million hectares (97 million acres), an area greater than the size of Montana. This urban growth will have significant effects on the health and well-being of America's population and ecosystems. Together with global climate change, the sustainability of urban communities and urban environments pose some of the greatest challenges to the long-term environmental quality of the nation.

The dynamic interaction among people and natural ecosystems has been a topic of considerable interest to both the National Science Foundation and the U.S. Forest Service. NSF has supported the Long-Term Ecological Research (LTER) program for three decades, with 26 projects currently existing, including two urban sites in Phoenix and Baltimore. Over this time, the U.S. Forest Service has collaborated in supporting seven of the LTERs, including Baltimore. Recent strategic planning by the LTER community has highlighted the need for greater integration of the social and ecological sciences across the LTER network, as evidenced in its decadal plan and the strategic research initiative titled "Integrative Science for Society and the Environment." LTER planning efforts, the success of the urban LTERs, and the success of the Dynamics of Coupled Natural and Human Systems Program (also co-funded and coordinated by NSF and the Forest Service) have led NSF and Forest Service leaders to jointly explore possibilities for development of a network of large-scale Urban Long-Term Research Area (ULTRA) projects.

If fully developed and implemented, individual ULTRA projects would function like current urban LTER projects. Collectively, ULTRAs would engage in research that leads to products and concepts that benefit society, and they would enhance fundamental theory about human and biophysical system dynamics as well as human-ecosystem interactions. Special emphasis would be placed on the integration of research in the ecological and social sciences, education, and the application of scientific knowledge. Long-term monitoring and ongoing research that enhances knowledge about the specific study area and that contributes to comparative cross-site research in the broader LTER network also would be emphasized.

Before establishing a network of ULTRAs, NSF and the Forest Service invite interdisciplinary teams of scientists and practitioners to submit proposals to conduct exploratory research that will identify and investigate topics and approaches that can advance both fundamental and applied knowledge regarding people and urban ecosystems. Because of the highly integrated character of the

coupled human and natural ecosystems that will be studied, teams should involve researchers from the social and behavioral, ecological sciences, and technical sciences. Teams supported with ULTRA-Ex project awards should include considerable local participation, including city or metropolitan planning offices and organizations related to management of natural resources. Priority will be given to those proposals that show promise of integrating the efforts of different jurisdictions to address local and regional environmental issues.

ULTRA-Ex project awards will support research teams to conduct one or a limited number of related projects that draw on and show promise of enhancing fundamental theory with respect to both human and biophysical systems as well as human-natural system interactions. Research on those topics should also generate knowledge about human-natural system interactions that can be used by individuals, groups, governments, and other organizations for maintenance and enhancement of environmental quality, including the development of management and planning tools. Primary products of ULTRA-Ex projects are expected to be publications and presentations for scholarly and practitioner audiences that disseminate research results, especially publications in peer-reviewed journals.

U.S. Forest Service personnel will be eligible to participate fully as senior personnel in ULTRA-Ex projects, and they may serve as principal investigators or co-principal investigators on proposals. The amount requested for salaries for Forest Service personnel should not exceed \$50,000 for any ULTRA-Ex project award.

Up to 16 ULTRA-Ex project awards are anticipated in FY 2009. For each ULTRA-Ex project award, up to \$150,000 will be provided annually for a maximum project award total of \$300,000, pending availability of funding. The study area for an ULTRA-Ex project may range in scale from an urban area (possibly including its exurban areas) to multiple metropolitan areas.

Review criteria will include the intellectual merit and broader impacts of the proposed project. Other review criteria will be the nature and scope of the partnerships, and the distribution of study areas in the United States by geographic location, size, age, and climatic zone. Preference will be given to teams that involve both Forest Service personnel and researchers from academic and/or other organizations. All funded projects must be of high quality with respect to both intellectual merit and broader impacts.

ULTRA-Ex projects should enable research teams to develop more cohesiveness in anticipation of future competitions to establish large-scale Urban Long-Term Research Areas (ULTRA), but such competitions will be open to all interested research teams, regardless of whether they have received an ULTRA-Ex project award.

III. AWARD INFORMATION

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: A total of 16 awards, with each receiving \$150,000 per year for two years, are expected.

Anticipated Funding Amount: \$4,800,000

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

IV. ELIGIBILITY INFORMATION

Organization Limit:

Proposals may only be submitted by the following:

- Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.
- Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.

PI Limit:

Employees of the U.S. Forest Service and other federal agencies may participate as PIs or co-PIs of proposals if permitted by the organization submitting the proposal, but any support for activities at the federal agency must be provided through subawards. A limited amount of funding may be used to support Forest Service researcher salaries using Forest Service-contributed funds. The amount requested for Forest Service personnel should not exceed \$50,000 for any ULTRA exploratory award. Salary support cannot be provided for other federal agency employees.

Limit on Number of Proposals per Organization:

None Specified

Limit on Number of Proposals per PI: 3

If an individual is listed as a PI or co-PI on four or more proposals, all of those proposals will be returned without review. (An individual may be involved as a member of the senior personnel or participate in other ways on more than three proposals, but an individual may serve as an administrative PI or Co-PI on a maximum of three proposals.)

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Full Proposal Instructions: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the guidelines specified 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-PUBS (7827) or by e-mail from pubs@nsf.gov.

Proposals submitted for this competition should clearly specify all relevant parts of the proposed project. With respect to the proposed research, the proposal should outline the theoretical foundations of the project as based in relevant literature. It should specify the questions on which the research will focus, the research methods that will be used, the expertise that different researchers will bring to different facets of the project, and how and where results will be disseminated. The proposal also should outline how practitioners, stakeholders, and/or other individuals and groups will be involved in the project and how research results will be made available for practical use.

This program solicitation requests material about the personnel involved in the project. Please use the following definitions to provide the corresponding information.

- **Principal Investigators (including both PIs and Co-PIs)** -- Individuals who would assume responsibility for an award resulting from this competition, would manage the award, and are listed on the cover sheet of the proposal.
- **Senior Personnel** -- All Principal Investigators, as well as any named other senior personnel who will receive salary support, as well as non-salaried senior investigators who will play lead roles in the conduct of the project. This group may include active participants in the research team from outside the U.S.
- **Project Participants** -- Every person involved with the research project, including students.

Proposal Cover Sheet

Work on the Cover Sheet first. Check that the Awardee and Performing Organizations are correct. Highlight the Program Solicitation Number and click on the "Select" button. Your proposal will automatically be assigned to the correct directorate and division on the Cover Sheet. Prepare the remainder of the Cover Sheet.

Project Description

All project descriptions are limited to 15 pages in length. Proposers may organize the different components of the project description as they wish, but they should make clear what are the theoretical foundations and expected theoretical contributions of the proposed work, how research will be conducted in scientifically sound ways, how education and training will be conducted, what the project may seek to do to broaden participation of underrepresented groups in scientific research, what products are expected to result from this work, and how the results will be disseminated in both scholarly and practical settings.

Results from Prior NSF Support must be addressed within the Project Description for all principal investigators and co-investigators who have received NSF funding in the last five years. (This section may be up to five pages in length.)

Biographical Sketches

A biographical sketch with a 2-page limit must be provided for each investigator and each person identified as senior personnel. Follow all guidelines for preparation of biographical sketches as specified in GPG.

Current and Pending Support

Each person identified as a principal investigator or as senior personnel must submit a current and pending support form. This proposal is considered a pending support activity.

Supplementary Documentation

Items 1 and 2 below are required to be included in this section for all proposals. Items 3, 4, and 5 should be included here if needed.

1. Provide a list in a single, alphabetized table with the full names and institutional affiliations of all people in conflict of interest with any of the senior personnel (PI, Co-PIs, and any named personnel whose salary is requested in the project budgets). Conflicts to be identified are: (1) PhD thesis advisors or advisees, (2) postdoctoral advisors or advisees, (3) collaborators or co-authors for the past 48 months, and (4) any other individuals or institutions with which the investigator has financial ties (please specify type). For further clarification of conflicts of interests, please refer to the NSF Award and Administration Guide, Chapter IV.A.
2. Provide a description of the project's data management and access plan as a maximum 1-page supplementary document. This information should be clearly identified by the subheading "Data Management and Access." NSF realizes that individual cases may differ widely and recognizes that any absolute timeline or rigid set of rules is not possible. However, plans should address some or all of the following issues:
 - The types of data and samples to be produced in the project;
 - The standards for data format and metadata content that will be used (where existing standards are absent or inadequate, this should be pointed out for the benefit of the program and the reviewing community);
 - Policies for access including provisions for appropriate protection of privacy, confidentiality or intellectual property rights;
 - Policies for re-use, distribution, or the production of derivatives; and
 - Plans for archiving data and samples and preservation of access.

The data management and access plan will be subject to reviewer, panel, and program evaluation. Successful applicants will be expected to address data management and access in annual and final project reports and within the Results of Prior Research section when they submit subsequent proposals to NSF.

3. Include in this section a description of the mentoring activities that will be provided for any postdoctoral researchers who would be supported by an award resulting from this proposal, as required by provisions of the America COMPETES Act and outlined in the *NSF Grant Proposal Guide*.

4. Include in this section letters of commitment from any entity that is an integral part of the proposed project, such as the involvement of an international collaborator or permission to access sites, materials, or data for research or other associated project activities. Generic letters of endorsement are not allowed, however.
5. If you wish to do so, you may include in this section IRB certifications associated with the use of human subjects or IACUC certifications associated with the use of animal subjects.

Unless authorized here or in the Grant Proposal Guide, no other materials should be included in this section. Survey or interview protocols are not permitted in this section, nor are reprints of articles previously published by the investigators. Proposals that include materials in this section that belong in the project description may be returned without review.

Appendices

No appendices are permitted.

Proposals Involving Multiple Institutions

Proposals involving multiple organizations may be submitted in one of two ways: (1) as a single proposal with one organization serving as the lead organization and with support to other organizations provided through subawards, or (2) as separate submissions from eligible organizations. See Chapter II, D.3 of the GPG for instructions regarding the preparation of collaborative proposals and carefully follow on-line instructions regarding their preparation.

Please note that any funding for a unit of the U.S. Forest Service or any other federal agency must be provided through a subaward from an organization eligible to submit a proposal for this competition.

Proposals Involving Collaborators at Foreign Organizations

Proposers are reminded they must provide biographical sketches of all senior project personnel, including those at foreign institutions. In addition, as supplementary documentation, proposals involving foreign collaborators must provide letters of commitment from the foreign counterpart organizations (if the collaboration is at an organizational level) and/or from the collaborating individuals (if collaborations do not involve the organizations with which those individuals are associated). Please note that although eligibility for this competition is restricted to U.S. organizations, as described in the GPG, collaborations with foreign organizations may be considered. Any funding for non-U.S. organizations must be made through subawards. Those subawards to non-U.S. organizations may not include any indirect costs.

Human Subjects

If the project involves human subjects, the Institutional Review Board (IRB) of the submitting organization must certify that the proposed project is in compliance with the Federal Government's "Common Rule" for the protection of human subjects. If IRB approval has been obtained and the date of approval is listed on the cover sheet, no other certification is required. If IRB approval is still pending, submit certification of IRB approval in electronic form as soon as approval is obtained to the cognizant program officer. (The name of this program officer will be listed in the Proposal Status module of FastLane.) Delays in obtaining IRB certification may result in NSF being unable to make an award. For more information regarding the protection of human subjects, consult <http://www.nsf.gov/bfa/dias/policy/human.jsp>.

Pre-Submission Checklist

Proposals must be in compliance with the GPG and special requirements in the solicitation in order to be considered for review. Proposals not in compliance with these requirements will be returned without review. Please refer to the following checklist to address some of the items required in all proposals:

- Font and margin requirements
- Page numbers on pages
- Project summary that includes a description of both Intellectual Merit and Broader Impacts
- Project description that is 15 pages or less
- Biographical Sketches (including collaborators and advisors/advisees) for all senior personnel
- Current and Pending Support Forms for all senior personnel
- Conflict of Interest spreadsheet submitted in the Supplementary Documentation section
- Data Management and Access Plan submitted in the Supplementary Documentation section
- Discussion of mentoring of post-doctoral researchers supported through an NSF award in the Supplementary Documentation section (if appropriate)

Proposers are reminded to identify the program solicitation number (NSF 09-551) in the program 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 under this solicitation.

C. Due Dates

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

July 07, 2009

D. FastLane Requirements

Proposers are required to prepare and submit all proposals for this program solicitation through use of the NSF FastLane system. Detailed instructions regarding the technical aspects of 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 solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

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. Further instructions regarding this process are available on the FastLane Website at: <https://www.fastlane.nsf.gov/fastlane.jsp>.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program where they will be reviewed if they meet NSF proposal preparation requirements. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program Officer, and usually by three to ten other persons outside NSF who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with the oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal.

A. NSF Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. 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 the reviewer 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, original, or potentially transformative 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?

Examples illustrating activities likely to demonstrate broader impacts are available electronically on the NSF website at: <http://www.nsf.gov/pubs/gpf/broaderimpacts.pdf>.

NSF staff also will give careful consideration to the following in making funding decisions:

Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

Additional Review Criteria:

In addition to the standing NSF merit evaluation criteria, those evaluating proposals submitted in response to this solicitation will be asked to consider the following points related to this specific competition:

- The likelihood that the proposed project will conduct research that will identify and investigate topics and approaches that can advance both fundamental and applied knowledge regarding people and urban ecosystems.
- The likelihood that the proposed project will draw on and enhance fundamental theory with respect to both human and biophysical systems as well as human-natural system interactions
- The likelihood that the proposed project will identify and pursue topics that will permit knowledge about human-natural system interactions to be used by individuals, groups, governments, and other organizations for maintenance and enhancement of urban ecosystems, including the development of management and planning tools.
- The likelihood that the proposed project will yield products that will benefit the broader research and user communities.
- The likelihood that the proposed project will lead to effective interdisciplinary collaborations across the social and behavioral sciences, ecological sciences, and technical sciences.
- The likelihood that the proposed project will result in successful interaction among researchers and the

practitioners, stakeholders, and other individuals and groups who can contribute to and use the research results.

B. Review and Selection Process

Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review 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.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for 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 deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director accepts the Program Officer's 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 Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

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 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.B. 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 (GC-1); * or Research Terms and Conditions * and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreements also are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization via e-mail.

*These documents may be accessed electronically on NSF's Website at http://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF. 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 and other important information on the administration of NSF awards is contained in the NSF *Award & Administration Guide* (AAG) Chapter II, available electronically on the NSF Website at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=aag.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period. (Some programs or awards require more frequent project reports). Within 90 days after expiration of a grant, the PI also is required to submit a final project report.

Failure to provide the required annual or final project reports will delay NSF review and processing of any future funding increments as well as any pending proposals for that PI. 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. Such reports provide information on activities and findings, project participants (individual and organizational) 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. Submission of the report via FastLane constitutes certification by the PI that the contents of the report are accurate and complete.

VIII. AGENCY CONTACTS

General inquiries regarding this program should be made to:

- Thomas J. Baerwald, telephone: (703) 292-7301, email: tbaerwal@nsf.gov
- Henry L. Gholz, telephone: (703) 292-7185, email: hgholz@nsf.gov
- Todd A. Crowl, telephone: (703) 292-7870, email: tcrowl@nsf.gov

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188; e-mail: fastlane@nsf.gov.

IX. OTHER INFORMATION

The NSF Website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this Website by potential proposers is strongly encouraged. In addition, National Science Foundation Update is a free e-mail subscription service designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF Regional Grants Conferences. Subscribers are informed through e-mail when new publications are issued that match their identified interests. Users can subscribe to this service by clicking the "Get NSF Updates by Email" link on the [NSF web site](#).

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this new mechanism. Further information on Grants.gov may be obtained at <http://www.grants.gov>.

ABOUT THE NATIONAL SCIENCE FOUNDATION

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