ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE)

PROGRAM SOLICITATION
NSF 14-573

REPLACES DOCUMENT(S):
NSF 12-584

National Science Foundation

Directorate for Education & Human Resources
   Division of Human Resource Development

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Office of Integrative Activities

Letter of Intent Due Date(s) *(required)* (due by 5 p.m. submitter's local time):

August 11, 2014

   Partnerships for Learning and Adaptation Networks: Institutions of Higher Education (PLAN IHE)

August 20, 2014

   Partnerships for Learning and Adaptation Networks: STEM Disciplines (PLAN D)

October 05, 2015

   Institutional Transformation Catalyst (IT Catalyst)

November 05, 2015

   Institutional Transformation (IT)

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

September 22, 2014

   Partnerships for Learning and Adaptation Networks: Institutions of Higher Education (PLAN IHE)

October 03, 2014

   Partnerships for Learning and Adaptation Networks: STEM Disciplines (PLAN D)

November 03, 2015

   Institutional Transformation Catalyst (IT Catalyst)

January 20, 2016

   Institutional Transformation (IT)

IMPORTANT INFORMATION AND REVISION NOTES

Common Guidelines for Education Research and Development: Proposals received under this solicitation should refer, where appropriate, to a newly issued publication jointly developed by National Science Foundation and the Institute of Education Sciences in the U.S. Department of Education entitled, *Common Guidelines for Education Research and Development*. The *Guidelines* describe six types of research studies that can generate evidence about how to increase student learning. While ADVANCE does not solicit research and development proposals about student learning, ADVANCE does solicit research and development proposals about learning environments. Research types include those that generate the most fundamental understanding related to education and learning; examinations of associations between variables; iterative design and testing of strategies or interventions; and assessments of the impact of a fully developed intervention on an education outcome. For each research type, there is a description

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of the purpose and the expected empirical and/or theoretical justifications, types of project outcomes, and quality of evidence.

- The *Guidelines* publication can be found on the NSF website with the number NSF 13-126 (http://www.nsf.gov/pubs/2013/nsf13126/nsf13126.pdf). A set of FAQs regarding the *Guidelines* is available with the number NSF 13-127 (http://www.nsf.gov/pubs/2013/nsf13127/nsf13127.pdf). Grant proposal writers and PIs are encouraged to familiarize themselves with both documents and use the information therein to help in the preparation of proposals to NSF.

Any proposal submitted in response to this solicitation should be submitted in accordance with the revised *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 16-1), which is effective for proposals submitted, or due, on or after January 25, 2016.

SUMMARY OF PROGRAM REQUIREMENTS

General Information

Program Title:

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

Synopsis of Program:

The goals of the ADVANCE program are (1) to develop systemic approaches to increase the representation and advancement of women in academic STEM careers; (2) to develop innovative and sustainable ways to promote gender equity in the STEM academic workforce; and (3) to contribute to the development of a more diverse science and engineering workforce. ADVANCE also has as its goal to contribute to and inform the general knowledge base on gender equity in the academic STEM disciplines. There are three tracks with distinct purposes. The Institutional Transformation (IT) track is meant to produce large-scale comprehensive change and serve as a locus for research on gender equity and institutional transformation for academic STEM. The Institutional Transformation Catalyst (IT Catalyst) track is meant either to conduct self-assessment or to implement unique strategies – either adapted from those found effective in the IT track or ones designed to be responsive to the unique environments of eligible institutions – and evaluate their effectiveness. The Partnerships for Learning and Adaptation Networks (PLAN) track is meant to provide a larger scale environment for adapting, implementing and creating knowledge about the effectiveness of a particular strategy for change within a context of networked adaptation and learning. PLAN is focused on adaptation/implementation and learning either in particular STEM disciplines (PLAN D) or across institutions of higher education (PLAN IHE).

ADVANCE projects support institutional transformation in STEM. STEM includes but is not limited to Arctic and Antarctic sciences, biological sciences, computer and information sciences, engineering, geosciences, mathematics, physical sciences, the learning sciences, and social, behavioral and economic sciences. Institutional Transformation and IT Catalyst awards are expected to include all STEM disciplines at the institution submitting the proposal. PLAN awards may include all of STEM or a subset or one discipline.

The following types of institutions are strongly encouraged to apply to the ADVANCE program:

For All Project Types: Community colleges, primarily undergraduate institutions, minority-serving institutions (e.g. Tribal Colleges and Universities, Historically Black Colleges and Universities, Hispanic-Serving Institutions, Native Hawaiian Serving Institutions, Alaska Native Institutions, Predominantly Black Institutions and Non-tribal, Native American Serving Institutions), women's colleges, and institutions primarily serving persons with disabilities are encouraged to apply. It is anticipated that there may be significant differences in the issues facing faculty in these institutions, compared to faculty in other types of institutions, which will warrant development of unique strategies and/or adaptation of proven strategies in a unique way to achieve ADVANCE Program goals.

ADVANCE projects are viewed as team research and, as such, the team of principal investigators is expected to be multidisciplinary and representative of the theoretical, methodological and contextual expertise necessary to conceptualize, implement, and evaluate a successful project.

ADVANCE does not support activities to increase or retain the number of women entering into or persisting in STEM undergraduate or doctoral degree programs; rather the program focuses on ensuring that women faculty consider academia as a viable and attractive career option. As such, no student training initiatives/activities should be proposed.

ADVANCE funds, in general, cannot be used to support dependent care costs. However, costs incurred by the awardee organization under employee morale and welfare for dependent-care expenses (daycare facilities or other child/elder care arrangements) may be allowed, provided these types of expenses are charged through the application of fringe benefits or indirect costs (also known as Facilities & Administrative Costs). Any such charges must be made in accordance with established awardee institutional policy as approved by the cognizant agency and consistently applied to both Federal and non-Federal sponsors. For more information on the allowability of dependent care costs, visit the following NSF website: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=clbfaqs.

Special populations of women, for the purposes of the ADVANCE Program, includes women of diverse characteristics and backgrounds including, but not limited to: race, ethnicity, disability status and sexual orientation.

Cognizant Program Officer(s):

Please note that the following information is current at the time of publishing. See program website for any updates to the points of contact.

- Jessie DeAro, Program Director, telephone: (703) 292-5350, email: ADVANCE@nsf.gov

- Dana Britton, Program Officer, telephone: (703) 292-5178, email: ADVANCE@nsf.gov

- Cynthia R. Douglas, Program Specialist, 815N, telephone: (703) 292-5175, fax: 703 292-9018, email: ADVANCE@nsf.gov

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

- 47.041 --- Engineering
- 47.049 --- Mathematical and Physical Sciences
- 47.050 --- Geosciences
- 47.070 --- Computer and Information Science and Engineering
- 47.074 --- Biological Sciences
- 47.075 --- Social Behavioral and Economic Sciences
- 47.076 --- Education and Human Resources
- 47.079 --- Office of International Science and Engineering
- 47.083 --- Office of Integrative Activities (OIA)

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant or Cooperative Agreement

Estimated Number of Awards: 20

The total number of awards to be made under this solicitation is estimated to be up to 20. NSF expects to make: approximately five (5) Institutional Transformation five-year awards, at various award sizes; up to five (5) IT-Catalyst awards with durations of up to three years and total budgets of not more than $250,000 each; and up to ten (10) PLAN awards, of various durations, not exceeding a maximum of $750,000 for 5 years.

Anticipated Funding Amount: $11,000,000

Pending availability of funds, NSF anticipates having up to $11,000,000 available over a two-year fiscal year period FY 2015-FY2016 for support of the ADVANCE portfolio. Up to $6,000,000 will be available for the FY2015 competition and approximately $5,000,000 will be available for proposals due during the FY2016 competition.

Eligibility Information

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Please see the additional eligibility information in Section IV.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization: 1

One proposal per eligible organization for Institutional Transformation and Institutional Transformation Catalyst Awards.

No limit for PLAN IHE and PLAN D proposals.

See additional eligibility information.

Limit on Number of Proposals per PI or Co-PI:

There are no restrictions or limits.

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.

- **Preliminary Proposal Submission:** Not required

- **Full Proposals:**

    - Full Proposals submitted via FastLane: NSF Proposal and Award Policies and Procedures Guide, Part I: Grant Proposal Guide (GPG) Guidelines apply. 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.
    - Full Proposals submitted via Grants.gov: NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov Guidelines apply (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=grantsgovguide)

B. Budgetary Information

- **Cost Sharing Requirements:**

    Inclusion of voluntary committed cost sharing is prohibited.

- **Indirect Cost (F&A) Limitations:**

    Not Applicable

- **Other Budgetary Limitations:**

    Not Applicable

C. Due Dates

- **Letter of Intent Due Date(s)** *(required)* (due by 5 p.m. submitter's local time):

    August 11, 2014

    > Partnerships for Learning and Adaptation Networks: Institutions of Higher Education (PLAN IHE)

    August 20, 2014

    > Partnerships for Learning and Adaptation Networks: STEM Disciplines (PLAN D)

    October 05, 2015

    > Institutional Transformation Catalyst (IT Catalyst)

    November 05, 2015

    > Institutional Transformation (IT)

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

    September 22, 2014

    > Partnerships for Learning and Adaptation Networks: Institutions of Higher Education (PLAN IHE)

    October 03, 2014

    > Partnerships for Learning and Adaptation Networks: STEM Disciplines (PLAN D)

    November 03, 2015

    > Institutional Transformation Catalyst (IT Catalyst)

    January 20, 2016

    > Institutional Transformation (IT)

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:

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.

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I. INTRODUCTION

The full participation of women and the utilization of their talent is required for sustained US global competitiveness and innovation across all STEM fields (including, but not limited to Arctic and Antarctic sciences, biological sciences, computer and information sciences, engineering, geosciences, mathematics, physical sciences, the learning sciences, and social, behavioral and economic sciences). Persistent underrepresentation of women faculty, especially in leadership positions, affects students' critically important relationships with mentors, participation as members of research and education teams, and self-identification as potential researchers (Trower and Chait, 2002) as well as scientific productivity.

The ADVANCE program provides support to address these and other challenges to increase the participation and advancement of women in academic faculty and leadership positions. The ADVANCE Program will make strategic investments in the development and implementation of institutional transformation strategies and knowledge building activities with the aim of building evidence-based strategies about gender-based institutional transformation and strategies to increase the representation of women in the academic STEM disciplines and environments.

II. PROGRAM DESCRIPTION

1. **Institutional Transformation (IT):** five-year, comprehensive, institution-wide, transformational projects.

   Project Scope: IT awards are expected to include innovative and systemic organizational approaches framed with clearly stated and fully integrated theories of change or conceptual frameworks in order to increase the participation and advancement of women in STEM academic careers. IT projects are expected to be designed to achieve the transformation of all departments or schools of STEM fields within the institution and to produce evidence-based replicable strategies. Additionally, proposals that involve activities targeted toward special populations of women faculty must include current institutional data on this group, disaggregated by multiple characteristics (e.g., race, ethnicity, disability status, sexual orientation, etc.), as appropriate, in addition to gender. The proposed strategies must be accompanied by a rigorous scientific project related to the goals of the ADVANCE project which may include policy research.

   Project Activities: IT awards provide maximum flexibility to proposing institutions to define and implement systemic organizational approaches to increase the participation of women STEM faculty members; to promote their retention and advancement into the senior and leadership ranks; to address unconscious bias and subtle discrimination that leads to underrepresentation in STEM and leadership positions; to develop activities associated with career-life balance strategies; and to implement the changes necessary to institutionalize those approaches through changes to institutional policies, procedures and practices. The proposed strategies must be based on and justified by relevant social science research. Both men and women should be involved with the project implementation in order to maximally achieve the program goals. IT awards should create positive, sustainable, and permanent change in academic climates by transforming institutional policies and practices.

   Because of the uniqueness of strategies to be implemented for effective organizational change at any particular institution, **each Institutional Transformation project can include only one institution.**

2. **Institutional Transformation Catalyst:** up to three year projects.

   Project Scope: The IT Catalyst track is meant to develop and implement unique strategies – either adapted from those found effective in the IT track or ones designed to be responsive to the unique environments of eligible institutions – and evaluate the effectiveness of those strategies. The target institutions are those that provide unique contexts (1) to learn from adapting effective strategies from other ADVANCE projects and/or (2) to learn from developing a coherent thematic set of activities meant to address a documented institutional problem related to gender equity in STEM. IT Catalyst programs should aim to transform all departments or schools of STEM fields within the institution and to produce evidence-based replicable strategies.

   Project Activities: A wide range of activities may be undertaken as part of an IT Catalyst project. These activities should involve all STEM sciences and be designed to catalyze change on the campus that will promote gender equity in STEM, recruitment and retention activities to promote enhanced representation and advancement of women on that campus, or significant change in the policy environment for faculty.

   Because of the uniqueness of strategies to be implemented for effective organizational change at any particular institution, **each IT Catalyst project can include only one institution.**

3. **Partnerships for Learning and Adaptation Networks (PLAN):** up to five-year projects that support the ADVANCE program goals focused on creating a community of adapters of a particular activity aimed at increasing the representation of women in STEM, promoting women in STEM leadership, or creating sustainable institutional transformation to promote the advancement of women in STEM. Programs aimed at changing the institutional context for women from under-represented groups are especially encouraged. PLAN proposals may focus on Institutions of Higher Education (PLAN IHE) or STEM Disciplines (PLAN D). PLAN is intended to promote knowledge-building about ADVANCE activities and thus include a detailed knowledge building protocol to identify and document the effectiveness of the activity for achieving desired outcomes in particular institutional and disciplinary contexts (see full proposal guidelines below for more information on the knowledge-building component).

Network Members: Letters of support are required from all partners.

Project Scope: PLAN projects can focus on all STEM disciplines, several disciplines, or only one discipline. Projects that have national systemic impact across a discipline or a set of related disciplines are particularly encouraged. Proposals that involve activities targeted toward special populations of women faculty are encouraged, in which case, the project description must include current institutional or disciplinary data on this group, disaggregated by multiple characteristics (e.g., race, ethnicity, disability status, sexual orientation), as appropriate, in addition to gender.

Partnerships for Learning and Adaptation Networks are designed to promote implementation of previously effective ADVANCE programs or testing of innovative strategies and to build the knowledge base of how to promote the advancement of women and gender equity in the academy. Information on previously effective programs may be found in the literature and is available through the ADVANCE community.

PLAN proposals may focus on Institutions of Higher Education (PLAN IHEs) or STEM Disciplines (PLAN D). PLAN IHE projects may be submitted by a group of institutions of higher education and state systems of higher education while PLAN D projects must be submitted by a lead institution or organization on behalf of a discipline.

Project Activities: A wide range of activities can be undertaken as part of a PLAN project but there should be one main activity for adaptation/implementation into different institutional contexts. Previous or current funding from ADVANCE is not a prerequisite for submitting a PLAN proposal. It is expected that the proposed PLAN activity and related knowledge building will be informed by education, evaluation or social, economic, and behavioral science literature as appropriate, as well as the results of related ADVANCE projects or other non-ADVANCE projects (national and international). The portion of the project focused on knowledge building must be led and conceptualized by individuals with appropriate expertise in learning, policy analysis, and/or evaluation depending upon what is being adapted/implemented through a network.

III. AWARD INFORMATION

Anticipated Type of Award: Continuing Grant or Cooperative Agreement or Standard Grant

Estimated Number of Awards: 20

Contingent upon the availability of funding, the total number of awards to be made under this solicitation is estimated to be 20. NSF expects to make: Approximately five (5) Institutional Transformation five-year awards, at various award sizes; up to five (5) IT-Catalyst awards with durations of up to three years and total budgets of not more than $250,000 each; and up to ten (10) PLAN awards, of various durations, not exceeding a maximum of $750,000 for 5 years.

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

Proposals may only be submitted by the following:

- Please see the additional eligibility information in Section IV.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization: 1

One proposal per eligible organization for Institutional Transformation and Institutional Transformation Catalyst Awards.

No limit for PLAN IHE and PLAN D proposals.

See additional eligibility information.

Limit on Number of Proposals per PI or Co-PI:

There are no restrictions or limits.

Additional Eligibility Info:

Track	Eligible	Not Eligible	Limit on Number of Proposals
IT Catalyst	Institutions that qualify for Department of Education Title III and Title V status, non-profit community colleges, designated	Institutions of higher education that have received an NSF ADVANCE IT, PAID, PLAN or previous IT Catalyst award are not eligible to	One per eligible institution.

	minority serving institutions, (e.g. Tribal Colleges and Universities, Historically Black Colleges and Universities, Hispanic-Serving Institutions, Native Hawaiian Serving Institutions, and Alaska Native Serving Institutions, Predominantly Black Institutions, Non-Tribal, Native American-Serving Institutions) .	apply for an IT Catalyst award.	
Institutional Transformation	Non-profit academic institutions of higher education with educational programs in a field supported by NSF that are in the US, its Territories, Commonwealths and Freely Associated States. Organizations that received an IT Catalyst (formerly IT Start), PAID or PLAN award are eligible.	Institutions of higher education that have received an NSF ADVANCE Institutional Transformation award.	One per eligible institution.
PLAN D	Same as Institutional Transformation, IT Catalyst, PLUS professional societies.		No limit.
PLAN IHE	Same as Institutional Transformation and IT Catalyst.	Professional Societies.	No limit.

V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

A. Proposal Preparation Instructions

Letters of Intent *(required)*:

Letters of intent are required for all ADVANCE proposals. Only one letter of intent for Institutional Transformation (IT) or an IT-Catalyst proposal can be submitted from an institution of higher education (IHE). A separate letter of intent for each different PLAN proposal is required even if submitted by the same IHE, organization or principal investigator. The letters of intent will be used for planning the review of proposals. Letters of intent must clearly indicate the specific track for which the proposers are applying. Eligibility to submit a full proposal is assumed with submission of a letter of intent by the deadline date. No formal invitation to submit a full proposal will be issued after the letter of intent has been received. The ADVANCE Program Office will only make

contact with submitting institutions if the letter of intent is deemed non-responsive to this solicitation.

Letters of Intent for all ADVANCE tracks must include:

Project Synopsis (2500 character maximum): Provide a description of the proposed project and the ADVANCE track for which the proposal will seek funding. NSF will use this to determine if the proposal is appropriate for submission and if the proposal will need specialized expert review.

Other Comments Input Text Area: List senior project personnel with a brief description of their proposed roles. List partner institutions and organizations, if any, with a brief description of each partner's involvement in the project. Other information such as known conflicts and areas of specialized expertise pertinent for the review process can also be included.

IT Catalyst Letters of Intent: Letters of Intent must include a statement certifying that the submitting institution is in compliance with organizational limits stipulated in this solicitation (see Eligibility Information).

Letter of Intent Preparation Instructions:

When submitting a Letter of Intent through FastLane in response to this Program Solicitation please note the conditions outlined below:

- Submission by an Authorized Organizational Representative (AOR) is not required when submitting Letters of Intent.

- Submission of multiple Letters of Intent is allowed for both PLAN D and PLAN IHE.

Full Proposal Preparation Instructions: Proposers may opt to submit proposals in response to this Program Solicitation via Grants.gov or via the NSF FastLane system.

- Full proposals submitted via FastLane: Proposals submitted in response to this program 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 nsfpubs@nsf.gov. Proposers are reminded to identify this program solicitation number 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.

- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov. The complete text of the NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: (http://www.nsf.gov/publications/pub_summ.jsp?ods_key=grantsgovguide). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper copies of the Grants.gov Application Guide also may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from nsfpubs@nsf.gov.

In determining which method to utilize in the electronic preparation and submission of the proposal, please note the following:

Collaborative Proposals. All collaborative proposals submitted as separate submissions from multiple organizations must be submitted via the NSF FastLane system. Chapter II, Section D.5 of the Grant Proposal Guide provides additional information on collaborative proposals.

See Chapter II.C.2 of the GPG for guidance on the required sections of a full research proposal submitted to NSF. Please note that the proposal preparation instructions provided in this program solicitation may deviate from the GPG instructions.

1. **Institutional Transformation (IT)**

   Institutional Context and Data

   Contextual information on the proposing institution, including a brief institutional profile, is important to explain the potential impact of the proposed project and provide justification for the specific activities outlined in the proposal. This information should include a description of current and past activities and initiatives that are related to the proposed project and how these activities will be incorporated into the proposed project initiatives. Although funding for IT projects cannot be requested to replace existing funding for ongoing activities at the institution, the IT project should coordinate with related existing activities; details on the coordination must be provided and letters of commitment may be appropriate. Data should provide the reviewers with a clear understanding of the current status of the proposing institution, which will allow the readers to evaluate the need for, potential impact of, and feasibility of the proposed project objectives and goals.

   Comprehensive institutional data on faculty are required in the project description of IT proposals and not as supplementary documents. Proposals should present data on the status of all STEM women faculty and compare such data to national statistics when possible. Proposals that involve activities targeted toward special populations of women faculty must include current institutional data on this group, disaggregated by multiple characteristics (i.e., race, ethnicity, disability status, sexual orientation, etc.), as appropriate, in addition to gender. It is suggested that proposers review the "ADVANCE Indicators Toolkit" for guidance on the types of data that should be included. The toolkit is available at the ADVANCE portal website at http://www.portal.advance.vt.edu. The toolkit data are not required.

   Institutional Commitment and Sustainability

   Institutional commitment from key administrative leadership to the proposed project activities and institutional transformation is vital for successful projects and must be demonstrated in the proposal (see additional ADVANCE merit review criteria). Letters of commitment from key administrators and partners are required with IT proposals and should be submitted as supplementary documents. Institutional support is also demonstrated through commitment to project sustainability. Proposals must include detailed plans to ensure sustainability of the successful efforts past the term of the award.

   Activities Description

   Institutional Transformation proposals must clearly state the theory of change or conceptual framework for the proposed project, identify relevant research findings, and build on existing research and practice. Proposed activities should be linked to the theory or framework about gender equity and institutional transformation. The proposed approach(es) for *innovative* and systemic institutional transformation to increase the participation and advancement of women in academic STEM

careers must be fully described.

IT proposals are required to include a five-page supplementary document that describes, in detail, the scientific research project. Research that investigates novel aspects of the proposal is especially encouraged. It should be clear in the proposal, which team members, and/or consultants will undertake the research and their relevant qualifications and skills in areas such as learning, social, behavioral and economic sciences or policy analysis. The supplemental document must include information relevant to the proposed study, such as: 1) the disciplinary and conceptual framework for the project; 2) a discussion of the theory or theories grounding the research and the testable hypotheses; 3) the proposed methods to test the hypotheses; 4) the expected findings; and 5) to what extent the results and data will be disaggregated for multiple characteristics such as race, ethnicity, sexual orientation and disability, in addition to gender.

Communication Strategy

One of the objectives of the NSF ADVANCE program is to contribute to the national knowledge base about institutional transformation and organizational change. Therefore, the communication of results and diffusion of knowledge gained about institutional transformation to organizations and institutions that can implement reforms based on what has been learned is an essential part of an ADVANCE project.

The proposal must include a detailed communication strategy that at a minimum includes an ADVANCE Program website and demonstrates that the proposer is aware of appropriate channels for sharing results from the project, such as specific peer-reviewed journals and publications, engagement activities, web sites and professional association conferences. Simply making materials, tools, research, and practices available to others is not an effective communication strategy.

Project Management

Institutional Transformation proposals must include a management plan and timeline including anticipated milestones. The plan should also detail how project activities will be organized and implemented. The timeline should include the project's major activities and milestones (including project evaluation) and identify the individual(s) responsible for completing each activity. A project organizational chart that illustrates how the project fits into the institution's hierarchy may be included.

The roles, responsibilities and level of effort on the project must be clearly described for the institutional transformation team (PIs and other key personnel, including those for whom no funding is requested). The institutional transformation team must include appropriate STEM expertise.

IT projects are required to have an Internal Steering Committee or Internal Advisory Committee to oversee project implementation, resolve project issues, and ensure that the project is on track for meeting project goals. Ideally, the Internal Steering/Advisory Committee is not involved in the implementation of ADVANCE activities but includes the necessary knowledge to develop the activities.

IT projects are required to have an External Advisory Committee, with members who can advise the institutional transformation team on the implementation of the project and progress toward project goals. Members could include experts in areas relevant to the project activities and leaders from other institutions of higher education or industry. The External Advisory Committee role is distinct from the external evaluation of the project.

Project Evaluation

Each project is required to include a formative and summative evaluation plan. The detailed evaluation plan should refer to the objectives, goals, and baseline data presented within the description of the proposed project activities. The formative evaluation should include benchmarks and indicators of progress that demonstrate the proposers' understanding of the essential quantitative and qualitative indicators for assessing the project's implementation processes. The summative evaluation should assess the impact of the project activities indicating the extent to which overall and individual project goals were achieved, and should also identify any unexpected results. The collection and reporting of project-related data and participant's evaluations of activities alone are not sufficient for project evaluation.

IT projects are required to have both an internal and external evaluation component because of the size and complexity of the project; the proposal must include an evaluation plan outline. An individual at the institution, who is not involved in the day-to-day implementation of the project, may do the internal evaluation. The internal and external evaluation components must be well coordinated in order to minimize data collection and duplicative work. The external evaluation component must be done by an external individual who is not an employee of the institution and has not been involved in the implementation of the project. The external evaluator must be a qualified evaluator that works with the program to develop an impact analysis. The focus should be on illuminating the impact of the particular activities proposed.

Supplementary Documents

Only the following documents may be submitted as Supplementary Documents in IT proposals: data management plan (required); postdoctoral fellow mentoring plan, as appropriate (required); letters of commitment including from key administrative leadership; external evaluator curriculum vitas; and the five-page supplementary document devoted to the description of the social science study's theoretical foundation and methodologies (required).

2. **IT Catalyst**

Institutional Context and Data

Contextual information on the proposing institution is important for the reviewers to understand the potential impact of and the need for the project. This information should include a description of current and past activities and initiatives that are related to the proposed project, with a description of how these activities will be incorporated into the proposed IT Catalyst activities.

Comprehensive institutional data on faculty are not expected in IT Catalyst proposals, since data gathering may be a proposed activity in the IT Catalyst project. However, basic data on faculty should be included in order to demonstrate the need and potential impact of the proposed project. Proposals that involve activities targeted toward special populations of women faculty must include current institutional data on this group, disaggregated by multiple characteristics (i.e., race, ethnicity, disability status, sexual orientation, etc.), as appropriate, in addition to gender.

Institutional Commitment

Institutional commitment from key administrative leadership to the proposed project activities and institutional transformation is vital for successful projects and must be demonstrated in the proposal (see additional ADVANCE merit review criteria). Letters of commitment from key administrators and partners are required with IT Catalyst proposals and should be

submitted as supplementary documents. Institutional commitment should also be made clear in the content of the project description; however, detailed financial descriptions are prohibited.

Project Activities Description

A wide range of institutional transformation activities may be undertaken as part of an IT Catalyst project. Appropriate activities include, but are not limited to, assessment of unique institutional climate and the development of a plan to address the results of the assessment, institutional policy assessment and revision, and the contextualized adaptation and implementation of effective activities at other institutions. Both men and women should be involved with the project implementation in order to achieve the program goals. Campus visits to other institutions that have utilized similar activities are encouraged as a means to assess and contextualize those activities to the uniqueness of the campus. The description should include details of each of the proposed activities and how the activities are likely to catalyze change.

Project Management

IT Catalyst proposals must include a management plan and timeline that detail how project activities will be organized and implemented. The timeline should include the major project activities and benchmarks (including project evaluation) and identify the individual(s) responsible for completing each activity.

IT Catalyst projects are encouraged to incorporate an Internal Steering Committee or Internal Advisory Committee to oversee the project implementation, resolve project issues, and ensure that the project is on track for meeting its goals. Ideally, the Internal Steering/Advisory Committee is not involved in the implementation of ADVANCE activities.

IT Catalyst projects may also elect to include an External Advisory Committee composed of members who will advise the project team on the implementation of the project and progress toward project goals. Members might include experts in areas relevant to the project activities, representatives of key stakeholder groups, past implementers of related ADVANCE activities, and leaders from other organizations and institutions of higher education.

Project Evaluation

The evaluation of the IT Catalyst project must focus on evaluation of the catalytic activity. The evaluation should measure the impact of the activities and progress toward the goals outlined in the proposal. Evaluation of the IT-Catalyst project does not need to be done by an external evaluator if it can be demonstrated that an institutional office or qualified individual on campus can provide an objective internal evaluation that is focused on the impact of the activities. **The collection and reporting of project-related data and participants' evaluations of activities alone are not sufficient for project evaluation.** Additional information about project evaluation is available at the following website: http://www.nsf.gov/pubs/2002/nsf02057/start.htm.

Supplementary Documents

Only the following documents may be submitted as Supplementary Documents in IT Catalyst proposals: data management plan (required); postdoctoral fellow mentoring plan, as appropriate (required); letters of commitment; and, external evaluator curriculum vitas.

3. **Partnerships for Learning and Adaptation Networks (PLAN)**

Context and Data

Contextual information on the proposing institutions and disciplines is important to demonstrate the potential impact of the proposed project. This information should include a description of current and past activities and initiatives that are related to the proposed project and how these activities will be incorporated into the proposed project initiatives, including how they inform the proposed activities. Although funding for PLAN projects cannot be requested to replace existing funding for ongoing activities, the PLAN project should coordinate with any existing activities; details on the coordination must be provided and letters of commitment may be appropriate.

Relevant data to support the justification for the need for the proposed project is required in PLAN proposals as well as a detailed justification for the set of networked institutions or disciplines. Project-related data should be provided for all network members for PLAN IHEs or data specific to the discipline for PLAN D. The data should provide the reviewers a clear understanding of the current status of the proposing institution(s) and/or organization(s) or discipline, which will allow the reviewers to evaluate the impact and feasibility of the proposed project objectives and goals. Proposals that involve activities targeted toward special populations of women faculty must include current institutional data on this group, disaggregated by multiple characteristics (i.e., race, ethnicity, disability status, sexual orientation, etc.), as appropriate, in addition to gender.

Commitment and Sustainability

Commitment from key stakeholders to the proposed PLAN project is vital for successful implementation and sustainability (see additional ADVANCE merit review criteria). Letters of commitment from the institutional and organizational leadership of network members (e.g., president, provost, executive director) are required for proposals and letters of support from other decision-making bodies such as advisory boards may be appropriate to include in PLAN D proposals. Letters of commitment and support should be submitted as supplementary documents. However, detailed financial descriptions are prohibited.

Institutional support is also demonstrated through commitment to project sustainability. Proposals must include detailed plans to ensure sustainability of the successful efforts past the term of the award (see additional ADVANCE merit review criteria).

Activities Description

A wide range of activities can be undertaken as part of a PLAN project, but the project should be focused on one activity or a set of coherent activities. The requested budget should be appropriately scaled to the potential impact, size and complexity of the proposal.

Since knowledge-building is a core component of the PLAN track, proposals must include a detailed protocol to assess what works, why and in what context and for what populations. This knowledge-building section must be fully integrated with the adaptation and implementation of the ADVANCE activity or innovative program. In the ideal, the assessment design will include plans for iterative implementation of improvements to the proposed activities should the knowledge-building suggest changes for greater effectiveness of project impacts. The overall goal of the knowledge-building is to enable broad scale replication and adaptation.

Project Management

PLAN proposals must include a management plan and timeline that detail how project activities will be organized, implemented, analyzed, and reformulated for improved adaptation. The knowledge-building portion of the project must be outlined and integrated into the project management. The timeline should include the major activities (including project evaluation) and projected benchmarks and identify the individual(s) that will be responsible for completing each activity. The project responsibilities and level of effort on the project must be clearly described for all key personnel, including those for whom funding is not requested.

PLAN projects may incorporate a Steering or Advisory Committee to oversee the project implementation, resolve project issues, and ensure that the project is on track for meeting project goals. The composition will depend on the design of the project - members could include STEM faculty, institutional staff who provide faculty services that are included in the project, representatives of offices that will provide information or other resources to the project, or individuals with appropriate analytical expertise.

Both the PLAN team and the advisory committee members should include, but not be limited to, an appropriate mix of STEM experts in areas relevant to the project activities, and include representatives of key stakeholder groups and leaders from other organizations and institutions of higher education. In addition, the team should include appropriate evaluation experts.

Project Evaluation

It is required that each project include a formative and summative evaluation plan developed and implemented by an external evaluator with appropriate expertise. The evaluation plan should refer to the objectives, goals, and baseline data already presented within the description of the proposed project activities. The formative evaluation should include benchmarks and indicators of progress that demonstrate the proposers' understanding of the essential quantitative and qualitative indicators for assessing the project's implementation processes. The summative evaluation should assess the impact of the project activities and whether the project achieved the overall project goals as well as identify any unexpected results. The assessment protocol, if appropriately designed, may suffice as summative evaluation. **The collection and reporting of project-related data and participants' evaluations of activities alone are not sufficient for project evaluation.** Project evaluation should include an impact analysis. Additional information about project evaluation is available at the following website: http://www.nsf.gov/pubs/2002/nsf02057/start.htm.

Supplementary Documents

Only the following documents may be submitted as Supplementary Documents in PLAN proposals: data management plan (required); postdoctoral fellow mentoring plan, as appropriate (required); letters of commitment from all network members; and, external evaluator curriculum vitas.

B. Budgetary Information

Cost Sharing:

Inclusion of voluntary committed cost sharing is prohibited.

C. Due Dates

- **Letter of Intent Due Date(s)** *(required)* (due by 5 p.m. submitter's local time):

    August 11, 2014

        Partnerships for Learning and Adaptation Networks: Institutions of Higher Education (PLAN IHE)

    August 20, 2014

        Partnerships for Learning and Adaptation Networks: STEM Disciplines (PLAN D)

    October 05, 2015

        Institutional Transformation Catalyst (IT Catalyst)

    November 05, 2015

        Institutional Transformation (IT)

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

    September 22, 2014

        Partnerships for Learning and Adaptation Networks: Institutions of Higher Education (PLAN IHE)

    October 03, 2014

        Partnerships for Learning and Adaptation Networks: STEM Disciplines (PLAN D)

    November 03, 2015

        Institutional Transformation Catalyst (IT Catalyst)

    January 20, 2016

        Institutional Transformation (IT)

D. FastLane/Grants.gov Requirements

For Proposals Submitted Via FastLane:

To prepare and submit a proposal via FastLane, see detailed technical instructions 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 solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

For Proposals Submitted Via Grants.gov:

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for any federal grant on the Grants.gov website. Comprehensive information about using Grants.gov is available on the Grants.gov Applicant Resources webpage: http://www.grants.gov/web/grants/applicants.html. In addition, the NSF Grants.gov Application Guide (see link in Section V.A) provides instructions regarding the technical preparation of proposals via Grants.gov. For Grants.gov user support, contact the Grants.gov Contact Center at 1-800-518-4726 or by email: support@grants.gov. The Grants.gov Contact Center answers general technical questions related to the use of Grants.gov. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this solicitation.

Submitting the Proposal: Once all documents have been completed, the Authorized Organizational Representative (AOR) must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The AOR must then sign and submit the application to Grants.gov. The completed application will be transferred to the NSF FastLane system for further processing.

Proposers that submitted via FastLane are strongly encouraged to use FastLane to verify the status of their submission to NSF. For proposers that submitted via Grants.gov, until an application has been received and validated by NSF, the Authorized Organizational Representative may check the status of an application on Grants.gov. After proposers have received an e-mail notification from NSF, Research.gov should be used to check the status of an application.

VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

Proposals received by NSF are assigned to the appropriate NSF program for acknowledgement and, if they meet NSF requirements, for review. 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 either as *ad hoc* reviewers, panelists, or both, who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with 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. In addition, Program Officers may obtain comments from site visits before recommending final action on proposals. Senior NSF staff further review recommendations for awards. A flowchart that depicts the entire NSF proposal and award process (and associated timeline) is included in the GPG as Exhibit III-1.

A comprehensive description of the Foundation's merit review process is available on the NSF website at: http://www.nsf.gov/bfa/dias/policy/merit_review/.

Proposers should also be aware of core strategies that are essential to the fulfillment of NSF's mission, as articulated in *Investing in Science, Engineering, and Education for the Nation's Future: NSF Strategic Plan for 2014-2018*. These strategies are integrated in the program planning and implementation process, of which proposal review is one part. NSF's mission is particularly well-implemented through the integration of research and education and broadening participation in NSF programs, projects, and activities.

One of the strategic objectives in support of NSF's mission is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions must recruit, train, and prepare a diverse STEM workforce to advance the frontiers of science and participate in the U.S. technology-based economy. NSF's contribution to the national innovation ecosystem is to provide cutting-edge research under the guidance of the Nation's most creative scientists and engineers. NSF also supports development of a strong science, technology, engineering, and mathematics (STEM) workforce by investing in building the knowledge that informs improvements in STEM teaching and learning.

NSF's mission calls for the broadening of opportunities and expanding participation of groups, institutions, and geographic regions that are underrepresented in STEM disciplines, which 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.

A. Merit Review Principles and Criteria

The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.

1. Merit Review Principles

These principles are to be given due diligence by PIs and organizations when preparing proposals and managing projects, by reviewers when reading and evaluating proposals, and by NSF program staff when determining whether or not to recommend

proposals for funding and while overseeing awards. Given that NSF is the primary federal agency charged with nurturing and supporting excellence in basic research and education, the following three principles apply:

- All NSF projects should be of the highest quality and have the potential to advance, if not transform, the frontiers of knowledge.
- NSF projects, in the aggregate, should contribute more broadly to achieving societal goals. These "Broader Impacts" may be accomplished through the research itself, through activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified.
- Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects. If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these activities may best be done at a higher, more aggregated, level than the individual project.

With respect to the third principle, even if assessment of Broader Impacts outcomes for particular projects is done at an aggregated level, PIs are expected to be accountable for carrying out the activities described in the funded project. Thus, individual projects should include clearly stated goals, specific descriptions of the activities that the PI intends to do, and a plan in place to document the outputs of those activities.

These three merit review principles provide the basis for the merit review criteria, as well as a context within which the users of the criteria can better understand their intent.

2. Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two merit review criteria are listed below. **Both** criteria are to be given **full consideration** during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria. (GPG Chapter II.C.2.d.i. contains additional information for use by proposers in development of the Project Description section of the proposal.) Reviewers are strongly encouraged to review the criteria, including GPG Chapter II.C.2.d.i., prior to the review of a proposal.

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to
   a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
   b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to achievement of societally relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the United States; and enhanced infrastructure for research and education.

Proposers are reminded that reviewers will also be asked to review the Data Management Plan and the Postdoctoral Researcher Mentoring Plan, as appropriate.

Additional Solicitation Specific Review Criteria

The ADVANCE additional merit review criteria include:

Institutional Transformation

- How significant will the contribution of the study of the proposed innovative components and other IT activities be to the institutional transformation knowledge base?
- How strong are the indicators of institutional readiness for institutional transformation and commitment to the project activities and goals?
- How well are the proposed activities linked to the institutional context and data?
- How well is the relevant literature (from evaluation, education, behavioral, social and economic sciences, as appropriate) inform the design of the proposed innovative components and other IT activities?
- If women from special populations are included, how likely are the proposed activities to target their unique circumstances?
- Are mechanisms planned that ensure long-term sustainability beyond the duration of the funded project?
- Is the current proposal devoid of significant budgetary overlap with previous ADVANCE PAID or PLAN funding (if appropriate)?

IT Catalyst:

- How strong are the indicators of institutional commitment to the project activities and goals?

If women from special populations are included, how likely are the proposed activities to target their unique circumstances?

- How likely is this project to catalyze sustained institutional transformation at the institution?
- Are mechanisms and strategies included that ensure long-term sustainability beyond the duration of the funded project?

Partnerships for Learning and Adaptation Networks:

- How well did the proposer demonstrate the effectiveness and/or lessons learned of the strategies and methods chosen to be adapted?
- How well did the proposer establish the significance of adapting the strategies and methods to the proposed context(s)?
- How well did the relevant literature (from evaluation, education, behavioral, social and economic sciences, as appropriate) inform the design of the PLAN activity and knowledge-building?
- If women from special populations are included, how likely are the proposed activities to target their unique circumstances?
- Are mechanisms planned and explained that ensure long-term sustainability beyond the duration of the funded project?
- Are the resources maximally shared between/among partnering institutions?
- Is there adequate representation of all partner institutions in the leadership of the project?
- Is adequate attention paid to the unique institutional characteristics of all partner institutions; are these nuances addressed in the proposed strategies to be implemented?
- Is there balance between the adaptation and learning components to maximize the potential for adding to the knowledge base?
- For PLAN D proposals, what is the likelihood of replication with other disciplines?

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 evaluate proposals using two National Science Board approved merit review criteria and, if applicable, additional program specific criteria. A summary rating and accompanying narrative will generally be completed and submitted by each reviewer and/or panel. 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 strives to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. Large or particularly complex proposals or proposals from new awardees may require additional review and processing time. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director acts upon the Program Officer's recommendation.

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. After an administrative review has occurred, Grants and Agreements Officers perform 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.

Once an award or declination decision has been made, Principal Investigators are provided feedback about their proposals. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers or any reviewer-identifying information, 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.

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 notice, 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 notice; (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 notice. 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.

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.

Special Award Conditions:

Institutional Transformation awards will be made as cooperative agreements. Among other special award conditions (described below), there will be a minimum of two site visits held: at least one toward the end of the first year and at least one during the third year of Institutional Transformation awards. The purpose of the site visit review is to provide technical assistance (especially during the first year site visit) and to conduct an in depth evaluation of performance, assess progress toward goals; provide advice and recommendations for enhancing project performance, and to determine continuation of support for the project.

Some PLAN Awards may be made as continuing grants or cooperative agreements if NSF determines that the project warrants special award conditions.

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 no later than 90 days prior to the end of the current budget period. (Some programs or awards require submission of more frequent project reports). No later than 120 days following expiration of a grant, the PI also is required to submit a final project report, and a project outcomes report for the general public.

Failure to provide the required annual or final project reports, or the project outcomes report, will delay NSF review and processing of any future funding increments as well as any pending proposals for all identified PIs and co-PIs on a given award. 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 Research.gov, for preparation and submission of annual and final project reports. Such reports provide information on accomplishments, project participants (individual and organizational), publications, and other specific products and impacts of the project. Submission of the report via Research.gov constitutes certification by the PI that the contents of the report are accurate and complete. The project outcomes report also must be prepared and submitted using Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. This report will be posted on the NSF website exactly as it is submitted by the PI.

More comprehensive information on NSF Reporting Requirements 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.

Institutional Transformation awardees will be required to submit at minimum a mid-term report and possibly two additional quarterly interim reports in addition to the standard NSF reporting requirements. This reporting requirement will be included in the cooperative agreement that is binding between the awardee institution and the NSF. PLAN and IT Catalyst awardees will have the standard NSF reporting requirements unless awarded as continuing grants or cooperative agreements and additional reporting is considered to be required by the National Science Foundation.

Institutional Transformation awardees are required to (1) submit the annual Evaluation of the project; and (2) provide project data via an online project management system. Final reports will not be approved before a final summative evaluative is posted for the project. PIs may be requested to provide additional project data for program analysis and evaluation that will be detailed in the award letter.

VIII. AGENCY CONTACTS

Please note that the program contact information is current at the time of publishing. See program website for any updates to the points of contact.

General inquiries regarding this program should be made to:

- Jessie DeAro, Program Director, telephone: (703) 292-5350, email: ADVANCE@nsf.gov

- Dana Britton, Program Officer, telephone: (703) 292-5178, email: ADVANCE@nsf.gov

- Cynthia R. Douglas, Program Specialist, 815N, telephone: (703) 292-5175, fax: 703 292-9018, email: ADVANCE@nsf.gov

For questions related to the use of FastLane, contact:

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

For questions relating to Grants.gov contact:

- Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; e-mail: support@grants.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, "NSF Update" is an information-delivery system 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 Grants Conferences. Subscribers are informed through e-mail or the user's Web browser each time new publications are issued that match their identified interests. "NSF Update" also is available on NSF's website.

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

Background Information:

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