**Significant Changes to the GPG to Implement the Recommendations of the National Science Board’s Report entitled, “**[***National Science Foundation’s Merit Review Criteria: Review and Revisions***](http://www.nsf.gov/nsb/publications/2011/nsb1211.pdf)**”**

 **Chapter II, Introduction**, has been supplemented with information regarding the Foundation’s core strategies from the NSF 2011-2016 Strategic Plan. Similar language regarding integration of research and education and integrating diversity previously appeared in Chapter III.A. The language was moved and updated to align with NSF’s current strategic plan. The purpose of this change is to help eliminate internal and external confusion regarding whether these two core strategies are additional review criteria, while at the same time, reiterating their importance.

 **Chapter II.C.1.e, Proposal Certifications**, has been updated to include a new Organizational Support Certification to address Section 526 of the *America COMPETES Reauthorization Act (ACRA) of 2010.*

 **Chapter II.C.2.b, Project Summary**, has been revised to omit language regarding the inclusion of separate headings to address the two merit review criteria. In lieu of this approach, FastLane has been modified to display three separate text boxes in which proposers must provide an Overview and address the “Intellectual Merit’ and “Broader Impacts” of the proposed activity. Because FastLane will enable the criteria to be separately addressed (still within one page), proposers will no longer need to include separate headings. Proposals that do not separately address the overview and both merit review criteria within the one-page Project Summary will be not be accepted or will be returned without review.

 *If you plan to submit your proposal prior to January 14, 2013, you must upload the summary in the new format that would be found in FastLane after January 14th. The project summary must not exceed one page and 4600 characters.*

 *The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity.The overview includes a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed. The statement on intellectual merit should describe the potential of the proposed activity to advance knowledge. The statement on broader impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes. The Project Summary should be written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal.*

**Chapter II.C.2.d, Project Description**, has been revised to implement changes related to the Content and Results from Prior NSF Support sections recommended by the National Science Board (NSB). The Content instructions were updated to provide contextual information about proposal preparation and to include revised language related to broader impacts of the proposed activities from the *ACRA* and the Board’s report. In the past, the Project Description needed to include a description of broader impacts as an integral part of the narrative. The Project Description must now contain, as a separate section within the narrative, a discussion of the broader impacts of the proposed activities. This section also was updated to indicate that Intellectual Merit and Broader Impact activities must be described in two separate sections in the summary of Results from Prior NSF Support.

 *The Project Description must now include Broader Impacts, as a separate section, that includes the following information: objectives for the period of the proposed work and expected significance; relation to longer-term goals of the PI's project; and relation to the present state of knowledge in the field, to work in progress by PI under other support and to work in progress elsewhere.*

 *The Project Description must contain, as a separate section within the narrative, a discussion of the broader impacts of 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 the 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.*

 *Plans for data management and sharing of the products of research, including preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products should be described in the Special Information and Supplementary Documentation section of the proposal (see GPG Chapter II.C.2.j. for additional instructions for preparation of this section).*

 *PIs are cautioned that the Project Description must be self-contained and that URLs that provide information related to the proposal should not be used because 1) the information could circumvent page limitations, 2) the reviewers are under no obligation to view the sites, and 3) the sites could be altered or abolished between the time of submission and the time of review.*

 **Chapter III, NSF Proposal Processing and Review,** has been revised to insert language in the introduction to Chapter III, regarding NSF core strategies. The purpose of this change is to reiterate the importance of integration of research and education and broadening participation as core strategies, as outlined in NSF’s strategic plan.

 **Chapter III.A, Review Criteria**, has been renamed Merit Review Principles and Criteria and revised to incorporate recommendations from the NSB. New language has been added on merit review principles, and revised merit review criteria language was inserted. Language regarding evaluation of mentoring plans for postdoctoral researchers has been moved from the GPG Chapter III to the Postdoctoral Mentoring Plan instructions in Chapter II.C.2.j. References to the document containing examples illustrating activities likely to demonstrate broader impacts have been deleted. This was done to eliminate confusion over the document, which was often viewed as a prescriptive list of additional requirements instead of illustrative examples.

**Other Significant Changes to the GPG**

 **Chapter I.G.3, Requirements Relating to Data Universal Numbering System (DUNS) Numbers and Registration in the Central Contractor Registration (CCR)**, has been updated to replace the CCR with the System for Award Management. In July 2012, the Central Contractor Registration (CCR) system was discontinued. CCR was migrated into the new System for Award Management (SAM). For further information about the conversion to SAM and how it impacts the proposer community, see: [https://www.sam.gov/portal/public/SAM/.](http://www.sam.gov/portal/public/SAM/) Clarifying language also has been added to this section regarding subawardees.

 **Chapter II.C.1.e, Proposal Certifications**, has been updated to include additional certifications on tax obligations/liability and felony conviction to be submitted by the Authorized Organizational Representative upon certification of the proposal. These certifications were added to implement provisions included in the *Commerce, Justice, and Related Agencies Appropriations Act of 2012*.

 **Chapter II.C.2.f(i)(c), Biographical Sketch(es)**, has been revised to rename the “Publications” section to “Products” and amend terminology and instructions accordingly. This change makes clear that products may include, but are not limited to, publications, data sets, software, patents, and copyrights.

 ***Do not submit*** *personal information such as* ***home*** *address;* ***home*** *telephone, fax, or cell phone numbers;* ***home*** *e-mail address; date of birth; citizenship; drivers’ license numbers; marital status; personal hobbies; and the like. Such personal information is irrelevant to the merits of the proposal. If such information is included, NSF will make every effort to prevent unauthorized access to such material, but the Foundation is not responsible or in any way liable for the release of such material. (See also GPG Chapter III.G).*

***(a) Professional Preparation***

*A list of the individual’s undergraduate and graduate education and postdoctoral training as indicated below:*

*Undergraduate Institution(s) Major Degree & Year*

*Graduate Institution(s) Major Degree & Year*

*Postdoctoral Institution(s) Area Inclusive Dates (years)*

***(b) Appointments***

*A list, in reverse chronological order, of all the individual’s academic/professional appointments beginning with the current appointment.*

***(c) Products***

*A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of 10 will be used in the review of the proposal. Each product must include full citation information including (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website and Uniform Resource Locator (URL) or other Persistent Identifier.*

***(d) Synergistic Activities***

*A list of up to five examples that demonstrate the broader impact of the individual’s professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples could include, among others: innovations in teaching and training (e.g., development of curricular materials and pedagogical methods); contributions to the science of learning; development and/or refinement of research tools; computation methodologies, and algorithms for problem-solving; development of databases to support research and education; broadening the participation of groups underrepresented in science, mathematics, engineering and technology; and service to the scientific and engineering community outside of the individual’s immediate organization.*

***(e) Collaborators & Other Affiliations***

***Collaborators and Co-Editors.*** *A list of all persons in alphabetical order (including their current organizational affiliations) who are currently, or who have been collaborators or co-authors with the individual on a project, book, article, report, abstract or paper during the 48 months preceding the submission of the proposal. Also include those individuals who are currently or have been co-editors of a journal, compendium, or conference proceedings during the 24 months preceding the submission of the proposal. If there are no collaborators or co-editors to report, this should be so indicated.*

***Graduate Advisors and Postdoctoral Sponsors.*** *A list of the names of the individual’s own graduate advisor(s) and principal postdoctoral sponsor(s), and their current organizational affiliations.*

***Thesis Advisor and Postgraduate-Scholar Sponsor.*** *A list of all persons (including their organizational affiliations), with whom the individual has had an association as thesis advisor, or with whom the individual has had an association within the last five years as a postgraduate-scholar sponsor. The total number of graduate students advised and postdoctoral scholars sponsored also must be identified. The information in section (e) above of the biographical sketch is used to help identify potential conflicts or bias in the selection of reviewers. See GPG Exhibit II-2 for additional information on potential reviewer conflicts.*

 **Chapter II.C.2.g(viii), Indirect Costs**, has been modified to clarify that, except as noted in GPG II.C.2.g(v) and II.D.9 or in an NSF program solicitation, the applicable indirect cost rate(s) negotiated by the organization with the cognizant negotiating agency must be used in computing indirect costs (F&A) for a proposal. The section now provides a hyperlink to instructions for preparing an indirect cost rate proposal. A statement also has been added that foreign grantees are not eligible for indirect cost rate recovery unless the foreign grantee has a previously negotiated rate agreement with a U.S. Federal agency that has a practice of negotiating rates with foreign entities. In consideration of these changes, the section of the GPG entitled, “Exceptions to Basic Policy” has been deleted.

 **Chapter II.C.2.i, Facilities, Equipment and Other Resources**, has been supplemented to indicate that an aggregated description of the internal and external resources that are, or will be available to the project (both physical and personnel) should be provided. A new format for submission of the Facilities, Equipment and Other Resources information will be available in FastLane when the PAPPG becomes effective in January 2013. The new format will assist proposers in complying with the NSF cost sharing policy.

**Clarifications and Other Changes to the GPG**

**Overall document** has been modified to incorporate minor editorial changes throughout the document to either clarify or enhance the intended meaning of a sentence or section.

**Chapter I.G.1, Electronic Requirements**, has been revised to omit special instructions for proposals containing high resolution graphics.

**Chapter II, Introduction**, has been modified regarding the period of time after which an organization is considered a “new awardee”. Organizations that have not had an active NSF award within the last five years (formerly two years) should be prepared to submit basic organization and management information and certifications.

**Chapter II.C.2, Sections of the Proposal** and **Chapter IV.B, Proposals Not Accepted or Returned Without Review**, have been augmented to indicate that a proposal not accepted is defined as FastLane will not permit submission of the proposal.

**Chapter II.C.2.d, Project Description**, has been revised to clarify that, in the Results from **Prior NSF Support section “prior” NSF support includes current NSF funding. This section also** was updated to indicate that information should be included irrespective of whether or not the support was directly related to the proposal, or whether or not salary support was provided.

 *If any PI or co-PI identified on the project has received NSF funding (including any current funding) in the past five years, information on the award(s) is required, irrespective of whether the support was directly related to the proposal or not. Funding includes not just salary support, but any funding awarded by NSF. Each PI and co-PI who has received more than one award (excluding amendments) must report on the award most closely related to the proposal. The following information must be provided:*

 *(a) the NSF award number, amount and period of support;*

 *(b) the title of the project;*

 *(c) a summary of the results of the completed work, including accomplishments, described in two separate sections, related to the Intellectual Merit and Broader Impact activities supported by the award;*

 *(d) publications resulting from the NSF award;*

 *(e) evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management Plan; and*

 *(f) if the proposal is for renewed support, a description of the relation of the completed work to the proposed work.*

 *Reviewers will be asked to comment on the quality of the prior work described in this section of the proposal. Please note that the proposal may contain up to five pages to describe the results. Results may be summarized in fewer than five pages, which would give the balance of the 15 pages for the Project Description.*

**Chapter II.C.2.e, References Cited**, has been updated to specify that if there are no references cited, a statement to that effect should be included in this section of the proposal and uploaded into FastLane.

 *Reference information is required. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication.*

**Chapter II.C.2.g(i)(c), Budget**, has been updated to describe a new functionality in FastLane regarding senior personnel and the budget. *If no person months and no salary are being requested for senior personnel, they should be removed from Section A of the budget.* This change was made for consistency with NSF’s cost sharing policy.

 *The names of the PI(s), faculty, and other senior personnel and the estimated number of full-time-equivalent person-months for which NSF funding is requested and the total amount of salaries requested per year must be listed. For consistency with the NSF cost sharing policy, if person months will be requested for senior personnel, a corresponding salary amount must be entered on the budget. If no person months and no salary are being requested for senior personnel, they should be removed from section A of the budget. Their name(s) will remain on the Cover Sheet and the individual(s) role on the project should be described in the Facilities, Equipment and other Resources section of the proposal.*

**Chapter II.C.2.g(v), Participant Support**, has been augmented with language explaining that an allowance for indirect costs associated with participant support costs may be established or negotiated in advance when circumstances indicate that the grantee could be expected to incur significant expenses in administering participant payments (moved from Indirect Costs).

**Chapter II.C.2.g(vi)(e), Subawards**, has been amended to state that foreign subawardees are not eligible for indirect cost recovery unless the subawardee has a previously negotiated rate agreement with a U.S. Federal agency that has a practice of negotiating rates with foreign entities.

**Chapter II.C.2.i, Facilities, Equipment and Other Resources**, has been updated to specify that if there are no facilities, equipment and other resources information, a statement to that effect should be included in this section of the proposal and uploaded into FastLane.

**Chapter II.C.2.j, Special Information and Supplementary Documentation**, has been updated to include language regarding evaluation of postdoctoral mentoring plans (moved from Chapter III).

**Chapter II.D.6, Proposals Involving Vertebrate Animals**, has been supplemented to include guidance on review of wildlife research protocols. Also, instructions have been clarified for submission of IACUC approval information.

**Chapter II.D.8, Proposals for Conferences, Symposia, and Workshops**, was supplemented to clarify what information should be included in different sections of the proposal.

**Chapter II.D.13, Projects Requiring High-Performance Computing Resources**, **Large Amounts of Data Storage, or Advanced Visualization Resources**, has been updated to replace language on the TeraGrid project, which has become the XSEDE project.

**Exhibit II-1, Proposal Preparation Checklist**, has been modified to conform to the

*Grant Proposal Guide* revisions.

**ADDITIONAL INFORMATION:**

**Voluntary Committed Cost Sharing**

Inclusion of voluntary committed cost sharing is prohibited and Line M on the proposal budget will not be available for use by the proposer. In order for NSF, and its reviewers, to assess the scope of a proposed project, all organizational resources necessary for, and available to a project, must be described in the Facilities, Equipment and Other Resources section of the proposal (see GPG Chapter II.C.2.i for further information). NSF Program Officers may not impose or encourage cost sharing unless such requirements are explicitly included in the program solicitation.

**Mandatory Cost Sharing**

Mandatory cost sharing will only be required for NSF programs when explicitly authorized by the NSF Director, the National Science Board, or legislation. A listing of programs that contain mandatory cost sharing is available on the NSF website at: http://www.nsf.gov/bfa/dias/policy/. In those rare instances, cost sharing requirements will be clearly identified in the solicitation and must be included on Line M of the proposed budget. Such cost sharing will be an eligibility, rather than a review criterion. Proposers are advised not to exceed the mandatory cost sharing level or amount specified in the solicitation. When mandatory cost sharing is included on Line M, and accepted by the Foundation, the commitment of funds becomes legally binding and is subject to audit. When applicable, the estimated value of any in-kind contributions also should be included on Line M. An explanation of the source, nature, amount and availability of any proposed cost sharing must be provided in the budget justification32. It should be noted that contributions derived from other Federal funds or counted as cost sharing toward projects of another Federal agency may not be counted towards meeting the specific cost sharing requirements of the NSF award. Failure to provide the level of cost sharing required by the NSF solicitation and reflected in the approved award budget may result in termination of the NSF award, disallowance of award costs and/or refund of award funds to NSF by the awardee.