

THE NATIONAL SCIENCE FOUNDATION

PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE

Part II - Award & Administration Guide



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AWARD & ADMINISTRATION GUIDE

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Chapter I: NSF Awards

The Award and Administration Guide (AAG) (Part II of the NSF Proposal & Award Policies & Procedures Guide) sets forth NSF policies regarding the award and administration of grants and cooperative agreements and in conjunction with the award terms and conditions, implements 2 CFR § 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. If the AAG is silent on a specific area covered by 2 CFR § 200, the requirements specified in 2 CFR § 200 must be followed. This Guide also implements other Public Laws, Executive Orders (E.O.) and other directives insofar as they apply to grants, and is issued pursuant to the authority of Section 11(a) of the NSF Act (42 USC §1870). This Guide does not apply to NSF contracts.

The types of activities funded by NSF and the purposes of NSF funding vary. Consequently, the degree of NSF responsibility for, and management control of, such activities also varies. NSF traditionally uses grants for fundamental research and other support activities.

A. Acceptance of Assistance Agreements

Awardees are free to accept or reject the grant or cooperative agreement as awarded. Normally, a request to drawdown NSF funds constitutes acceptance, however, in limited circumstances, NSF may require formal acceptance of an award. If an awardee chooses not to accept an award, then a written request should be sent to the cognizant NSF Program Officer to withdraw (or terminate) the award.

B. Award Instrument

1. Composition of an NSF Award

Composition of an NSF award includes:

- a. the award notice, including any special conditions applicable to the award and any numbered amendments thereto;
- b. general federal award information as required by 2 CFR § 200.210:
- c. the budget, which indicates the amounts, by categories of expense, on which NSF has based its support;
- d. the applicable NSF general conditions referenced in the award notice (see AAG Chapter I.C for listing);
- e. the proposal referenced in the award notice; and
- f. any NSF program announcement, program solicitation or other documents or special requirements incorporated by reference in the award notice.

2. Award Transmission

NSF transmits award notices to organizations via e-mail. In addition to the e-mail notification, awardees and Principal Investigators also may access NSF award notices via use of NSF's electronic systems. Sponsored Projects Offices are able to view, print and/or download NSF award notices for their organizations. Pls also may access their award notices via FastLane.

C. NSF Award Conditions

Each NSF award notice specifically identifies certain conditions that are applicable to, and become part of, that award. The award conditions are available electronically on NSF's website at: http://www.nsf.gov/awards/managing/. When these conditions reference a particular *Award and Administration Guide* section, that section becomes part of the award requirements through incorporation by reference.

D. NSF Grant Periods

1. Definitions

- a. START DATE is the date specified in the grant notice on or after which, except for fixed amount awards, expenditures may be charged to the grant. With the exception of PI transfers, the start date used by NSF is either the 1st or the 15th day of the month. If no start date is specified, then the date of the grant notice is the start date. (See, however, AAG Chapter V.A.2.b.)
- b. END DATE is the date specified in the grant notice after which expenditures may not be charged against the grant except to satisfy obligations to pay allowable project costs committed on or before that date. The end date is the last day of a month.
- c. AWARD DATE is the date when the NSF award is signed by the cognizant NSF Grants and Agreements Officer.
- d. GRANT PERIOD is the period of time between the start date and the end date of an NSF grant shown as the duration.

2. Significance of Grant Period

- a. Except in fixed amount awards, an NSF grant gives authority to the grantee to commit and expend funds for allowable costs (see AAG Chapter V) in support of the project up to the grant amount specified in the grant notice at any time during the grant period.
- b. Except as provided in AAG Chapter V.A.2.b or Chapter V.A.2.c, expenditures may not be charged prior to the start date or subsequent to the end date under an NSF cost reimbursement grant.

3. Changes in a Grant Period

a. Start Date

Once an award is made, the start date cannot be changed; however, grantees have the authority to incur preaward costs as outlined in AAG Chapter V.A.2.b.

b. End Date

The end date may be changed as a result of approval of a request for continued support of a continuing grant, for a no-cost grant extension, or by approval of a request for supplemental support. When appropriate, the NSF Grants and Agreements Officer will issue an amendment to the grant.

c. No-Cost Extension

(i) Grantee-Approved Extension. Grantees may authorize a one-time extension of the end date of the grant of up to 12 months if additional time beyond the established end date is required to assure adequate completion of the original scope of work within the funds already made available. This one-time extension may not be exercised merely for the purpose of using the unliquidated balances. Grantees are not authorized to extend an award that contains a zero balance. The grantee shall notify NSF, providing supporting reasons for the extension and the revised period of performance, at least ten calendar days prior to the end date specified in the grant to ensure accuracy of NSF's grant data. All grantee-approved extension notifications must be signed and submitted by the Authorized Organizational Representative (AOR) via use of NSF's electronic systems. For grantee-approved extensions, no amendment will be issued. The revised end date can be viewed via NSF's electronic systems.

¹ NSF has developed a matrix that lists NSF's electronic capabilities, and whether they can be found in FastLane, Research.gov or both. This matrix will be updated as appropriate, independent of the *Proposal & Award Policies & Procedures Guide* revision cycle. The current version is located at: http://www.nsf.gov/bfa/dias/policy/estatus_matrix.pdf.

(ii) NSF-Approved Extension

- (a) If additional time beyond the extension provided by the grantee is required and exceptional circumstances warrant, a formal request must be signed and submitted by the AOR via use of NSF's electronic systems. The request must be submitted to NSF at least 45 days prior to the end date of the grant. Requests submitted after the end date of the grant must include a strong justification as to why it was not submitted earlier. The request must explain the need for the extension and include an estimate of the unobligated funds remaining and a plan for their use. As indicated above, that unobligated funds may remain at the end of the grant is not in itself sufficient justification for an extension. The plan must adhere to the previously approved objectives of the project.
- (b) The first no-cost extension request will be subject to the approval of the cognizant NSF Program Officer. The grantee and the PI will be electronically notified of the disposition of this request by the cognizant NSF Program Officer. The second no-cost extension will be subject to the approval of an NSF Grants and Agreements Officer, and, if approved, will be in the form of an amendment to the grant specifying a new end date. Grantees are cautioned not to make new commitments or incur new expenditures after the end date in anticipation of a no-cost extension.

d. Two-Year Extensions for Special Creativity

A Program Officer may recommend the extension of funding for certain research grants beyond the initial period for which the grant was awarded for a period of up to two years. The objective of such extensions is to offer the most creative investigators an extended opportunity to attack adventurous, "high-risk" opportunities in the same general research area, but not necessarily covered by the original/current award. Awards eligible for such an extension are generally continuing grants. Special Creativity Extensions are normally initiated by the NSF Program Officer based on progress during the first two years of the grant; Pls will be informed of such action a year in advance of the end date of the grant. In response to the Program Officer's recommendation, the required information must be signed and submitted by the AOR via use of NSF's electronic systems.

E. Additional Funding Support

1. Types of Additional Funding Support

Additional funding of a project beyond the original grant period will be in the form of renewed support, continued support or supplemental support. A description of each of these additional funding mechanisms is provided below.

2. Renewed Support

Renewed support is defined as additional funding for a support period subsequent to that provided by the original grant. Renewals to grants, if any, will be in the form of a new grant with a new grant number. Costs incurred under the old grant cannot be transferred to the new grant. Residual funds remaining in the old grant cannot be transferred to the new grant.

Instructions for preparation of renewal proposals are contained in GPG Chapters II and V.

3. Support under Continuing Grants

- a. Funding increments for projects being supported under continuing grants receive high priority within NSF and normally are not considered in competition with proposals for new grants or for grants for renewed support.
- b. Unless otherwise provided for in the original grant notice, each increment of a continuing grant will be funded at the level indicated in the original award notice without a formal request, subject to NSF's judgment of satisfactory progress, availability of funds, and receipt and approval of the required annual report. NSF makes every attempt to honor continuing grant commitments. In order to adjust to changes in the general level of funds for a particular field of science or engineering or to major new opportunities in that field, however, NSF may

reduce continuing grant increments below the levels indicated in original grant notices. This requires full written justification by program staff and management review and approval. In the absence of major unanticipated fiscal year constraints, reductions are rare. Continuing grant increments will be released by the cognizant NSF Program Officer upon approval of the annual report. The Sponsored Projects Office and PI will be notified by the cognizant NSF Program Officer of NSF's approval via email.

c. In order to obtain a committed funding increment and ensure continuity of funding, an annual project report must be submitted by the PI electronically via use of Research.gov at least three months before the end of the period currently being funded. (See AAG Chapter II.D for additional information on submission of project reports.)

4. Supplemental Support

- a. In unusual circumstances, small amounts of supplemental funding and up to six months of additional support may be requested to assure adequate completion of the original scope of work. Such requests for supplemental funding support must be signed and submitted by the AOR via use of NSF's electronic systems at least two months prior to the need for the additional funds and must be adequately justified. Program Officers may make decisions regarding whether or not to recommend a small supplement without merit review of the supplemental request. Requests for larger supplements may require external merit review.
- b. A request for supplemental support must be submitted electronically via FastLane and must include:
- (i) A summary of the proposed work:
- (ii) A justification of the need for the supplemental funds; and
- (iii) A budget and budget justification, highlighting the use by budget category of the additional funding as distinguished from the original funding provided in those categories of cost. AORs are required to electronically sign the supplemental funding request via the Authorized Organizational Representative Functions in FastLane.
- c. NSF will not approve requests for supplemental support for such purposes as defraying the costs of increases in salaries, wages or staff benefits or for additional indirect cost reimbursement, whether caused by a change in the indirect cost rate or by changes in direct cost expenditures which affect the indirect cost base. (See AAG Chapter V.A.2.a.)
- d. If approved, the NSF Grants and Agreements Officer will amend the grant to provide additional funding for the current support period. The amendment notice will specify both the amount of supplemental funding and the cumulative amount awarded through the end date, which normally will remain unchanged.
- e. Special NSF programs such as Research Experiences for Undergraduates may provide their funding through supplements to other NSF grants. In such instances, the guidance in this section may not be applicable.
- f. If supplemental funding is requested to support a postdoctoral researcher and the original proposal did not include a mentoring plan, then the supplemental funding request must include the requisite mentoring plan, as described in GPG Chapter II.C.2.j. The plan should be uploaded to the "Other Supplementary Documents" section of the FastLane Supplemental Funding Request module. The PI must report on the mentoring activities provided to the individual in annual and final project reports.

Chapter II: Grant Administration

A. Monitoring Project Performance

1. Grantee Responsibilities

- a. A grantee has full responsibility for the conduct of the project or activity supported under an NSF grant and for the results achieved. The grantee should monitor the performance of the project to assure adherence to performance goals, time schedules or other requirements as appropriate to the project or the terms and conditions of the grant. In order to carry out these responsibilities, each grantee organization shall agree to comply with the applicable Federal requirements for grants and to the prudent management of all expenditures and actions affecting the grant. Documentation for each expenditure or action affecting the grant shall reflect appropriate organizational reviews or approvals, which should be made in advance of the action. Organizational reviews are intended to help assure that expenditures are allowable, necessary and reasonable for the conduct of the project, and that the proposed action:
- (i) is consistent with grant terms and conditions;
- (ii) is consistent with NSF and grantee policies;
- (iii) represents effective utilization of resources; and
- (iv) does not constitute changes in objectives or scope.
- b. Notwithstanding these responsibilities, NSF continues to encourage communication between NSF Program Officers and PI/PDs on the progress of projects supported by NSF as well as on project changes.
- c. NSF, through authorized representatives, has the right, at all reasonable times, to make site visits to review project accomplishments, grantee management control systems and administration and management of the grant and to provide technical assistance as may be required. If any site visit is made by the Foundation on the premises of the grantee or a subrecipient under a grant, the grantee shall provide and shall require its subrecipients to provide all reasonable facilities and assistance for the safety and convenience of the NSF representatives.

2. Grantee Notifications to NSF and Requests for NSF Approval

AAG Exhibit II-1 provides a listing of program-related grantee notifications to, and requests for approval from, the National Science Foundation. The listing also includes cost-related notifications to, and requests for approval from NSF as specified in the *Grant Proposal Guide* and in AAG Chapter V. While the listing is not intended to be all-inclusive, it does highlight the most frequent areas where specific notifications and requests for approval are required.

All notifications and requests contained in AAG Exhibit II-1, and described below, must be submitted via use of NSF's electronic systems. With the exception of significant changes in methods or procedures and significant changes, delays or events of unusual interest, all notifications and requests must be signed and submitted by the Authorized Organization Representative (AOR) via use of NSF's electronic systems.

B. Changes in Project Direction or Management

- 1. Changes in Objectives, Scope or Methods/Procedures
- a. Changes in Objectives or Scope

The objectives or scope of the project may not be changed without prior NSF approval. Such change requests must be signed and submitted by the AOR via use of NSF's electronic systems. If approved by NSF, the Grants and Agreements Officer will amend the grant.

Prior written NSF approval also is required for changes to the Facilities, Equipment, and Other Resources section of the approved proposal that would constitute changes in objectives or scope (see GPG Chapter II.C.2.i for further information).

b. Significant Changes in Methods or Procedures

NSF believes that the PI/PD and co-PI/co-PD, operating within the established policies of the grantee organization, should feel free to pursue interesting and important leads that may arise during the conduct of a research (or other grant-supported) project or to adopt an alternative approach which appears to be a more promising means of achieving the objectives of the project. Significant changes in methods or procedures should be reported to appropriate grantee official(s). The PI/PD also must notify NSF via use of NSF's electronic systems.

c. Significant Changes, Delays or Events of Unusual Interest

In the event there are problems, delays or adverse conditions that will materially impact the ability to attain the objectives of the project or to meet such time schedules as may have been proposed, the PI/PD should notify the appropriate grantee official(s). The PI/PD also must notify NSF via use of NSF's electronic systems.

NSF should be informed of any events of unusual interest that occur during the course of the project. Reports, communications or photographs should be submitted via the interim report capability in Research.gov.

2. Changes in PI/PD, co-PI/co-PD or Person-Months Devoted to the Project

The NSF decision to support a proposed project is based to a considerable extent upon its evaluation of the proposed PI/PD and any identified co-PI/co-PD's knowledge of the field of study and his/her capabilities to conduct the project in an efficient and productive manner. This is reflected in the NSF merit review criteria (see GPG Chapter III). The named PI/PD (and co-PI/co-PD) should be continuously responsible for the conduct of the project and be closely involved with the effort.

If the PI/PD or co-PI/co-PD plans to, or becomes aware that he/she will: (i) devote substantially less effort to the project than anticipated in the approved proposal; (ii) sever his/her connection with the grantee organization; or (iii) otherwise relinquish active direction of the project, he/she shall advise the appropriate official at the grantee organization, who shall initiate action appropriate to the situation under the guidelines that follow.

a. Long-Term Disengagement of PI/PD or co-PI/co-PD

- (i) In the event the PI/PD or co-PI/co-PD will be disengaged from the project for a period greater than three months (e.g. sabbatical leave) but intends to return, arrangements for oversight of the project must be signed and submitted by the AOR via use of NSF's electronic systems. This information must be provided at least 30 days before departure or as soon as practicable after the prospective disengagement is known. The cognizant NSF Program Officer will provide written approval to the grantee if the arrangements are satisfactory, but no formal amendment to the grant will be made. If the arrangements are not satisfactory to NSF, the grant may be terminated as prescribed in AAG Chapter VII.A.
- (ii) In the event the PI/PD or co-PI/co-PD will temporarily be working for NSF as an IPA (Intergovernmental Personnel Act employee) or VSEE (Visiting Scientist, Engineer or Educator), the appropriate officials at the grantee organization **must** contact the cognizant NSF Program Officer for procedural guidance regarding any existing grants or pending proposals of the PI/PD or co-PI/PD.

b. Changes in Person-Months Devoted to the Project

If the PI/PD or co-PI/co-PD will devote substantially less time to the project than anticipated in the approved proposal, (defined in the applicable grant terms and conditions as a reduction of 25% or more in time) he/she should consult with the appropriate officials of the grantee organization. Requests for changes to the personmonths devoted to the project must be signed and submitted by the AOR via use of NSF's electronic systems. If the grantee organization or NSF determines that the reduction of effort will substantially impair the successful

execution of the project, the NSF Program Officer will consult the NSF Grants and Agreements Officer. The NSF Grants and Agreements Officer may:

- (i) request the grantee to nominate a replacement PI/PD or co-PI/co-PD acceptable to the NSF Program Officer;
- (ii) initiate the termination procedures described in AAG Chapter VII.A.; or
- (iii) negotiate an appropriate modification to the grant.

c. Withdrawal of PI/PD or co-PI/co-PD

In the event the PI/PD or co-PI/co-PD severs his/her connection with the grantee organization or otherwise relinquishes active direction of the project, the AOR must sign and submit a notification of the withdrawal of the PI/PD or co-PI/co-PD via use of NSF's electronic systems. The grantee also must:

- (i) initiate transfer of the grant as described in AAG Chapter II.B.2.e;
- (ii) nominate a substitute as described in AAG Chapter II.B.2.d; or
- (iii) initiate grant closeout procedures through submission of final reports as described in AAG Chapter II.D.2.

d. Substitute PI/PD or co-PI/co-PD

In the event the grantee desires to continue the project with a substitute PI/PD or co-PI/co-PD, the AOR must sign and submit the request via use of NSF's electronic systems. The substitute PI/PD's or co-PI/co-PD's name, qualifications, and current and pending support for research from all sources must also be included in the request. The contact information for the substitute PI/PD or co-PI/co-PD also should be included. If approved by NSF, the Grants and Agreements Officer will amend the grant. If not approved, NSF may take steps, pursuant to AAG Chapter VII.A to suspend or terminate the grant.

e. Disposition of a Grant When a PI/PD Transfers from One Organization to Another Organization

- (i) Policy. When a PI/PD plans to leave an organization during the course of a grant, the organization has the prerogative to nominate a substitute PI/PD or request that the grant be terminated and closed out. In those cases where the PI/PD's original and new organizations agree, NSF will facilitate a transfer of the grant and the assignment of remaining unobligated funds to the PI/PD's new organization. This should normally be done with a tripartite agreement (involving NSF, the PI/PD's original organization and new organization), or by a subaward arrangement between the PI/PD's original and new organizations, subject to NSF's consent. (See AAG Chapter II.B.3)
- (ii) Procedures. When a PI/PD plans to leave an organization during the course of a grant, the PI/PD or the Sponsored Projects Office, or equivalent, shall notify the cognizant NSF Program Officer. If the project is to continue with the original organization, the cognizant NSF Program Officer should advise the grantee to nominate a substitute PI/PD (see AAG Chapter II.B.2.d). If the project is to be continued at the PI/PD's new organization, and if NSF and both organizations agree, formal notification of the impending transfer can be electronically initiated by either the PI/PD or the PI/PD's organization. The amount transferred has to be equal to or less than the unobligated balance. The request shall include a:
- (a) brief summary of progress to date;
- (b) description of work yet to be accomplished;
- (c) completed on-line transfer request, including total disbursements and unpaid obligations to date (transfer amount will be automatically calculated, based on the amount entered in total disbursements). The original organization is responsible for including in the total estimated disbursements, any anticipated costs yet to be incurred against the original grant;

- (d) detailed line item budget for the transfer amount and any outstanding continuing grant increments; and
- (e) If funding is requested to support a postdoctoral researcher, then the request must include the requisite mentoring plan as described in GPG Chapter II.C.2.j. The plan must be uploaded to the "Other Supplementary Documents" section of Fastlane. The PI must report on the mentoring activities provided to the individual(s) in annual and final project reports.

The original organization concurs with the transfer of the award by electronically forwarding the request to the new organization.

The new organization completes the request by providing a detailed budget for the transfer amount agreed to by both organizations. The AOR of the new organization must sign and submit the request via use of NSF's electronic systems. Submission of the request constitutes agreement by the new organization to assume responsibility for completion of the project effort and to administer the grant (as originally awarded) from the transfer date to completion in accordance with any special terms and conditions and the applicable general terms and conditions that normally govern NSF grants made to the new organization. Special terms and conditions, as appropriate, cited in the original award will convey to the new grantee organization.

NSF will assign a proposal number at the time of submission. This proposal number will become the new grant number when the transfer is approved by an NSF Grants and Agreements Officer.

- (iii) Fund Transfer. Upon receipt of the above material, NSF will review the request and, if approved, deduct the specified transfer amount from the original grant and re-establish it under a new grant number at the new organization. Award notification by the NSF Grants and Agreements Officer will constitute NSF approval of the grant transfer. The award notification also will specify the applicable basic terms and conditions that govern the grant.
- (iv) Upon transfer of the grant to the new organization, any monetary discrepancies must be resolved between the original and the new grantee. NSF will not intervene in any disputes between the two organizations regarding the transferred amount.
- (v) Equipment Transfers. Equipment purchased with NSF funds for use in a specific project should remain available for use for the duration of the project. PI/PDs who are in the midst of projects that included funding for equipment and who will continue the project at a new organization with NSF support, should arrange with their original organization to have the equipment transferred with them. Shipping costs for such equipment may be charged to the original or transferred grant as an allowable cost. Budgets should not include funds to "buy" equipment that had been previously obtained with Federal funds.
- (vi) Possible Alternatives to the Transfer Process. When the amount of time and funds remaining in a project are modest, and if both the original and new organizations are in agreement, the original organization may issue a subaward to the new organization for completion of the project. This and other possible alternatives should be discussed with the NSF Grants and Agreements Officer.

3. Subawarding, Transferring or Contracting Out Part of an NSF Award (Subaward)

Excluding the purchase of items such as commercially available materials and supplies, equipment or general support services allowable under the grant, no part of an NSF award may be subawarded, transferred, or contracted out to another organization without prior NSF authorization. The intent to enter into such arrangements should be disclosed in the proposal.

If it becomes necessary to subaward, transfer or contract out part of an NSF award after a grant has been made, the grantee shall submit, at a minimum:

- a. a clear description of the work to be performed by each subrecipient;
- b. a separate budget for each subaward; and

c. If funding is requested to support a postdoctoral researcher, and the original proposal did not include a mentoring plan, then the request must include the requisite mentoring plan as described in GPG Chapter II.C.2.j. The plan must be uploaded to the "Other Supplementary Documents" section of Fastlane. The PI must report on the mentoring activities provided to the individual(s) in annual and final project reports.

The request must be signed and submitted by the AOR via use of NSF's electronic systems, and NSF authorization will be indicated by an amendment to the grant signed by the Grants and Agreements Officer. The NSF grant terms and conditions will identify which articles flow-down to subrecipients.

Procurements under NSF grants are subject to AAG Chapter V.C as well as 2 CFR § 200.317-326.

C. Cost Sharing

1. General

The National Science Board issued a report entitled "Investing in the Future: NSF Cost Sharing Policies for a Robust Federal Research Enterprise" (NSB 09-20), which contained eight recommendations for NSF regarding cost sharing. In implementation of the Board's recommendations, NSF's revised guidance² (see GPG Chapter II.C.2.g(xi)) is as follows:

- inclusion of voluntary committed cost sharing is prohibited. It should be noted that foregoing full indirect cost rate recovery is considered voluntary committed cost sharing; and
- when mandatory cost sharing is included on Line M and accepted by NSF, the commitment of funds becomes legally binding and is subject to audit. Failure to provide the level of cost sharing required by the NSF solicitation and reflected in the NSF 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.

2. Mandatory Cost Sharing Commitments

2 CFR § 200.306 prescribes criteria and procedures for the allowability of cash and in-kind contributions.

Grantees should be aware that mandatory cost sharing commitments are subject to audit. Audit findings involving cost sharing have pertained to: a) failure to keep adequate source documentation for claimed cost sharing; b) unclear valuation of in-kind donated contributions; c) lack of support for cost sharing contributions by subrecipients; and d) failure to complete annual certifications for awards with mandatory cost sharing requirements. Additional guidance on cost sharing may be obtained at http://www.nsf.gov/bfa/dias/caar/costrev.jsp.

3. Mandatory Cost Sharing Records and Reports

a. Grantee Records

Grantees shall maintain records of all project costs that are claimed by the grantee to meet mandatory cost sharing requirements specified in an NSF program solicitation. Records for cost share contributed to NSF awards must be compliant with the requirements of 2 CFR § 200.306, and are subject to audit.

b. Grantee Reports

The amount of mandatory cost sharing must be documented (on an annual and final basis), certified by the Authorized Organizational Representative, and reported to the NSF Program Officer via use of NSF's electronic systems. Such notifications must be submitted no later than 90 days prior to the end of the current budget period to meet the annual notification requirement, and no later than 120 days following the expiration of the award to meet the final notification requirement. The cost share notification is considered due during the 90 or

² See NSF's Revised Cost Sharing Policy Statement for the Foundation's overarching policies on cost sharing.

120 day period respectively. The notification becomes overdue the day after the respective 90 or 120 day period ends.

c. Changes to the Cost Sharing Amount Specified on Line M of the NSF Award Budget

Should the grantee become aware that it may be unable to provide the cost sharing of at least the amount identified on Line M of the NSF award budget, it must immediately provide written notification to the Grants and Agreements Officer of the situation; and either: indicate steps it plans to take to secure replacement cost sharing; or indicate the plans it has to either continue or phase out the project in the absence of the approved level of cost sharing.

Should NSF agree to the organization's proposed plans, the NSF Grants and Agreements Officer will modify the award accordingly, including, if appropriate, reducing the amount of NSF support. Should the organization's plans be unacceptable to NSF, the award may be subject to termination. NSF modifications to proposed cost sharing revisions are made on a case-by-case basis.

Failure by the organization to notify NSF, in accordance with the paragraph above, may result in the disallowance of some or all of the costs charged to the award; the subsequent recovery by NSF of some or all of the NSF funds provided under the award; possible termination of the award; and may constitute a violation of the terms of the award so serious as to provide grounds for subsequent suspension or debarment.

D. Technical Reporting Requirements

NSF requires project reports for all assistance awards. Information from these reports is used in annual reports to Congress to demonstrate the Foundation's performance as mandated by the Government Performance and Results Act (GPRA) of 1993. These reports also provide NSF program officers and administrative offices with information on the progress of supported projects and the way these funds are used. Information in these reports may be made available to the general public through the Freedom of Information Act (FOIA). These reports are fully consistent and implement the Research Performance Progress Report (RPPR), which is the government-wide standard for use with research and research-related activities. Except where another format is approved by the Office of Management and Budget (OMB) for use by an NSF program, this means that the "where practicable" requirement specified in 2 CFR § 200.301 is not required as the RPPR does not relate financial information to performance data.

1. Annual Project Reports

Annual Project Reports should address progress in all activities of the project, including any activities intended to address the Broader Impacts criterion that are not intrinsic to the research. These reports are not cumulative, and should be written specifically for the most recently completed budget period. Unless otherwise specified in the award, annual project reports should be submitted electronically no later than 90 days prior to the end of the current budget period to allow adequate time for the cognizant Program Officer to review and approve the report. As reflected in the Project Report System, the report is considered due during the 90 day period. The report becomes overdue the day after the 90 day period ends. Failure to submit timely reports will delay processing of additional funding and administrative actions, including, but not limited to, no cost extensions. In the case of continuing grants, failure to submit timely reports may delay processing of funding increments. See also AAG Chapter I.E.3.

Annual project reports may not be required for fellowship awards. Specific reporting requirements for fellowships are established in the applicable program solicitation and award conditions.

For multi-year standard grants, PIs are required to submit annual reports as outlined above. In the case of cooperative agreements, the annual report is required before NSF approves any future funding increments.

Continuing grants also are subject to the same policies regarding report submission as outlined above. For continuing grants that have a duration of 18 months or more per increment, two annual reports are required. A report must be submitted for the first 12 months of the project, and then another report for the remaining months of the increment. Continuing grants which include an increment of 24 months will require an annual report for each 12 month period.

2. Final Project Report

The Final Project Report should address progress in all activities of the project, including any activities intended to address the Broader Impacts criterion that are not intrinsic to the research. This report is not cumulative; it is the last annual report of the project, and should be written specifically for the most recently completed budget period. Unless otherwise specified in the award, the final project report should be submitted electronically no later than 120 days following expiration of the grant. As reflected in the Project Report System, the report is considered due during the 120 day period. The report becomes overdue the day after the 120 day period ends. In addition, the grantee also shall provide to the cognizant NSF Program Officer, within 120 days following the expiration of the grant:

- any unique reports or other end items specified in the award, including any reporting requirements set forth in any NSF brochure, guide, solicitation, etc., referenced in the award as being directly related to either the award or the administration of the award.
- a final cost share notification documented and certified by the Authorized Organizational Representative for awards where there is mandatory cost sharing established for the program.

Final project reports may not be required for institutional graduate research fellowships. However, final project reporting requirements for individual fellowships are established in the applicable program solicitation.

3. Project Outcomes Report for the General Public

No later than 120 days following expiration of the grant, a project outcomes report for the general public must be submitted electronically. 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 electronically by NSF **exactly as it is submitted** and will be accompanied by the following disclaimer:

"This Project Outcomes Report for the General Public is displayed verbatim as submitted by the Principal Investigator (PI) for this award. Any opinions, findings, and conclusions or recommendations expressed in this Report are those of the PI and do not necessarily reflect the views of the National Science Foundation; NSF has not approved or endorsed its content."

Grantees are to ensure that the report does not contain any confidential, proprietary business information; unpublished conclusions or data that might compromise the ability to publish results in the research literature; or invention disclosures that might adversely affect the patent rights or those of the organization, in a subject invention under the award. Project Outcomes Reports are not to contain any personally identifiable information such as home contact information, individual demographic data or individually identifiable information collected from human research participants.

Section Contents:

- a. Describe the project outcomes or findings that address the intellectual merit and broader impacts of the work as defined in the NSF merit review criteria. This description should be a brief (generally, two to three paragraphs) summary of the project's results that is written for the lay reader. Principal Investigators are strongly encouraged to avoid use of jargon, terms of art, or acronyms.
- b. NSF will automatically include all publications associated with the award that are reported in annual and final reports. Other products that have resulted from the award may also be listed. Examples of other products include collections, data sets, software, as well as educational materials.
- c. Information regarding anticipated publication of project results, as well as any other information that would be of interest to the public also may be included in this section.

4. Compliance with Technical Reporting Requirements

Pls must submit final technical reports within the time period specified. Failure to provide these reports on a timely basis will delay NSF review and processing of pending proposals for all identified Pls and co-Pls on a given award.

5. Grant Closeout

Grant closeout is the process by which NSF determines that all applicable administrative actions and all required work of the grant have been completed. Grants will be financially closed out on the first day of each month for all awards with end dates of 120 or more days prior to the financial closeout day. See also AAG Chapter I.D.3.c for additional information on No Cost Extensions. The close out amount will be based on the costs recorded at that time. See also AAG Chapter III.E.5 for additional information on Post Closeout Adjustments. Grants are administratively closed after receipt of the Final Project Report and after determination that any other administrative requirements in the grant have been met. In the event a final audit has not been performed prior to the closeout of the grant, NSF reserves the right to recover appropriate amounts after fully considering the recommendations on disallowed costs resulting from the final audit.

E. Record Retention and Audit

- 1. Financial records, supporting documents, statistical records and all other records pertinent to the NSF grant must be retained by the grantee for a period of three years from award financial closeout described in AAG Chapter III.E.3, except as noted in 2 CFR § 200.333.
- 2. It is the responsibility of grantees that are States, Local Governments or Non-Profit Organizations to arrange for the conduct of audits as required by 2 CFR § 200, Subpart F. They shall provide copies of the reports of these audits to the Federal Audit Clearinghouse (see 2 CFR § 200.512(b)). Any Federal audit deemed necessary by NSF shall build upon the results of such audit(s).
- 3. All awards issued by NSF meet the definition of "Research and Development" (R&D) at 2 CFR § 200.87. As such, auditees should identify NSF awards as part of the R&D cluster on the Schedule of Expenditures of Federal Awards (SEFA). The auditor should test NSF awards for compliance as instructed in Part V, Clusters of Programs. NSF recognizes that some awards may have another classification for purposes of indirect costs. The auditor is not required to report the disconnect (i.e., the award is classified as R&D for audit purposes but non-research for indirect cost rate purposes), unless the auditee is charging indirect costs at a rate other than the rate(s) specified in the award document(s).

Exhibit II-1: CONSOLIDATED LISTING OF PROGRAM- AND COST-RELATED GRANTEE NOTIFICATIONS TO, AND REQUESTS FOR APPROVAL FROM, THE NATIONAL SCIENCE FOUNDATION*

All notifications to, and requests for approval from, the National Science Foundation must be submitted electronically via use of NSF's electronic systems. With the exception of significant changes in methods/procedures and significant changes, delays or events of unusual interest, all notifications and requests must be signed and submitted by the AOR via use of NSF's electronic systems. Questions related to the electronic processing of these notifications and requests should be forwarded to the Help Desk by phone at: 1-800-673-6188 or by e-mail to: fastlane@nsf.gov.

Type of Grantee Notification AAG Citation

•	Grantee-Approved No-Cost Extension	I.D.3.c(i)	
•	Significant Changes in Methods or Procedures	II.B.1.b	
•	Significant Changes/Delays or Events of Unusual Interest (Other than Changes in Objectives or Scope)	II.B.1.c	
•	Annual and Final Cost Share Notification by Recipient	II.D.5	
•	Conflicts of Interest that cannot be satisfactorily managed, reduced or eliminated and research that proceeds without the imposition of conditions or restrictions when a conflict of interest exists	IV.A	

Ту	pe of Grantee Request**	GPG	AAG	Direct questions to:
•	Subawarding, Transferring or Contracting Out Part of an NSF Award	II.C.2.g.(vi)(e)	II.B.3	Grants Office
•	First NSF-Approved No-Cost Extension		I.D.3.c(ii)(a)	Program Office
•	Second NSF-Approved No-Cost Extension		I.D.3.c(ii)(b)	Grants Office
•	Change in Objectives or Scope		II.B.1.a	Program Office***
•	Long-Term Disengagement of the PI/PD or co-PI/co-PD		II.B.2.a	Program Office***
•	Change in Person-Months Devoted to the Project		II.B.2.b	Grants Office, if necessary
•	Withdrawal of PI/PD or co-PI/co-PD		II.B.2.c	Program Office***
•	Substitute PI/PD or co-PI/co-PD		II.B.2.d	Program Office***
•	PI/PD or co-PI/co-PD Transfer from One Organization			
	to Another		II.B.2.e	Grants Office
•	Pre-award Costs in Excess of 90 Days		V.A.2.b	Grants Office
•	Salaries of Administrative or Clerical Staff	II.C.2.g(i)(b)		Program Office***
•	Travel Costs for Dependents	II.C.2.g(iv)(a)		Grants Office
•	Rearrangements/Alterations in excess of \$25,000			
	(Construction)		V.C.1	Grants Office
•	Reallocation of Funds for Participant	II.C.2.g(v)		Program Office
	Support Costs			

Ty	pe of Grantee Request**	GPG	AAG	Direct questions to:
•	Additional categories of participant support costs other than those described in 2 CFR § 200.75 (such as incentives, gifts, souvenirs, t-shirts and/or memorabilia)	II.C.2.g(v)		Grants Office
•	Change to cost sharing commitments reflected on Line M of the NSF award budget		II.C	Grants Office
•	Request for Supplemental Support		I.E.4	Program Office***

Notes: *This listing of Notifications and Requests for Approval is not intended to be all-inclusive. **See also the relevant article in the applicable NSF grant terms and conditions. ***Final action by Grants and Agreements Officer, when warranted.

Chapter III - Financial Requirements and Payments

The acceptance of an award from NSF creates a legal duty on the part of the grantee organization to use the funds or property made available in accordance with the terms and conditions of the award. Payments may be made in advance of work performed or as a reimbursement for work performed and/or costs incurred by the grantee. Payments, however, may not be made in advance of an award being signed by an NSF Grants and Agreements Officer for the project period. NSF has a reversionary interest in the unused balance of advance payments, in any funds improperly applied (whether or not received as an advance payment), and in property acquired through the award, to which NSF specifically either retains title or reserves the right to require title transfer.

While the provisions of this Chapter cover all NSF assistance awards (i.e., grants and cooperative agreements), the term "grantee" is used throughout. Graduate fellowship awards to domestic colleges and universities are included, but fellowships awarded to individuals and contracts are excluded. All categories of grantees (academic, non-academic, profit and non-profit) are covered by this chapter. The procedures in this chapter apply primarily to the comptroller's office or business office.

A. Standards for Financial Management

NSF grantees are required to have financial management systems that meet the requirements of 2 CFR § 200.302.

B. Definitions

The following definitions are either not included elsewhere in the *Award & Administration Guide* or are repeated in this Chapter because of their special applicability.

- 1. ADVANCE PAYMENT means a payment that NSF makes by any appropriate payment mechanism, including a predetermined payment schedule, before the grantee disburses the funds for program purposes.
- 2. BUSINESS OFFICER means the financial official of the grantee organization who has primary responsibility for the accountability for, and reporting on, NSF award funds.
- 3. CASH ON HAND means a grantee organization's cash position relative to the funds received from NSF minus the costs incurred for the award.
- 4. DISBURSEMENTS/OUTLAYS/EXPENDITURES means charges made by the grantee to a project or program for which an NSF award was received.
- 5. FINANCIAL FUNCTIONS means the NSF systems and services used by grantees to transmit financial information to NSF. Grantees must access Financial Functions through Research.gov. The primary Financial Functions used by grantees are:
- Award Cash Management Service (ACM\$) means NSF's award payment process under which
 grantees provide award level detail at the time of the payment request. ACM\$ has replaced the
 reporting of expenditures on the Federal Financial Report (FFR) and the Cash Request Function.
- Federal Financial Report History means the electronic version of the standard "Federal Financial Report". Used by grantees prior to ACM\$ implementation to report the financial activity of NSF awards on a quarterly basis.

- 6. GRANTEE means the organization or other entity that receives a grant and assumes legal and financial responsibility and accountability both for the awarded funds and for the performance of the grant-supported activity. NSF grants are normally made to organizations rather than to individual Principal Investigator/Project Director(s). Categories of eligible proposers may be found in GPG Chapter I.E.
- 7. NSF OBLIGATIONS means funds authorized by an NSF Grants and Agreements Officer for a specific NSF award creating a balance payable to a grantee.
- 8. GRANTEE OBLIGATIONS means orders placed for property and services, contracts and subawards made, and similar transactions during a given period that require payment by the grantee during the same or a future period.
- 9. PAYMENTS means the funds transferred from NSF to the grantee by electronic funds transfer (Automated Clearing House (ACH)) and on some rare occasions by check or by wire for same day electronic funds transfer or international payments.
- 10. UNLIQUIDATED OBLIGATIONS for grantee financial reports prepared on a cash basis, means obligations incurred by the grantee that have not been paid (liquidated). For grantee reports prepared on an accrual expenditure basis, means obligations incurred by the grantee for which an expenditure has not been recorded.
- 11. UNOBLIGATED BALANCE means the amount of funds under an NSF award that the grantee has not obligated. The amount is computed by subtracting the cumulative amount of the grantee's unliquidated obligations and expenditures of funds under the NSF award from the cumulative amount of the funds that NSF has authorized the grantee to obligate.

C. Payment Requirements

1. Requesting Payments

NSF grantees, except for some Special Payment grantees (see AAG Chapter III.C.4), and some foreign grantees, are required to request payments electronically through the Award Cash Management Service (ACM\$). Under ACM\$, grantees must provide award level detail at the time of the payment request.

Certain Special Payment grantees and foreign grantees without access to a US bank are required to request funds by submitting a "Request for Advance or Reimbursement Form", (SF 270) (see AAG Exhibit III-1), to NSF either through mail, email or by fax.

2. Payment Policies

The purpose of this section is to prescribe the timing of advances and the procedures to be observed to assure that cash payments occur only when essential to meet the needs of a grantee for its actual disbursements.

a. Timing of Payments. Advance payments to grantees must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the grantee in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the grantee for direct program or project costs and the proportionate share of any allowable indirect costs. When making a payment request, grantees must certify that all disbursements have been made, or will be made within three days of the receipt of the payment in accordance with the terms and conditions of the award.

- b. Payments to Subrecipients and Contractors. Payments made by NSF grantees to subrecipients and contractors shall conform to the same standards of timing and amount as apply to payments by NSF to its grantees.
- c. Withholding payments. NSF reserves the right, upon written notice, to withhold future payments after a specified date if the recipient:
- (i) fails to comply with the terms and conditions of an NSF award, including the reporting requirements; or
- (ii) is indebted to the US Government.

Payments will be released to the grantee upon subsequent compliance.

d. Safeguarding Funds. In no case will NSF funds be commingled with the personal funds of, or be used for personal purposes by, any officer, employee, or agent of the grantee; nor will any of these funds be deposited in personal bank accounts for disbursement by personal check.

3. Request for Advance

- a. Grantees may submit requests for payments as often as they like and are authorized to receive payments from NSF in advance of costs incurred provided that the following conditions exist:
- (i) Funds for the project period have been obligated by a Grants and Agreements Officer in the form of an electronically signed grant;
- (ii) The grantee has established written procedures that will minimize the time elapsing between the transfer of funds from the US Treasury and their disbursement by the grantee; and
- (iii) The grantee's financial management system meets the standards for fund control and accountability prescribed in 2 CFR § 200.302.
- b. Grantees shall maintain advances of NSF funds in interest bearing accounts as specified in AAG Chapter III.D.3.

4. Special Payment Grantees

When grantees do not meet the conditions specified in AAG Chapter III.C.3 above, or when otherwise considered appropriate, NSF may restrict their capability to request funds through ACM\$ or they may be required to request funds by using a Request for Advance or Reimbursement (SF 270) form. For a copy of the form, see AAG Exhibit III-1. The cognizant NSF Grants and Agreements Officer is responsible for establishing the documentation requirements for special payment grantees. Documentation may be submitted by email, by fax to 703-292-9142, or through the mail to:

National Science Foundation Division of Grants & Agreements Room 480 4201 Wilson Blvd Arlington, VA 22230

5. Working Capital Advance

In those cases where the reimbursement method described in AAG Chapter III.C.4 is not feasible, arrangements may be made whereby NSF projects are financed on a working capital advance basis. On this basis, funds may be advanced to the grantee to cover estimated disbursement needs for a given initial period. Thereafter, the grantee would be reimbursed for the amount of its actual cash disbursements. The amount of the initial advance shall be geared to the reimbursement cycle so that after the initial period, the advance approximately equals the average amount of the grantees' unreimbursed program disbursements.

6. Grantee Banking Information for Payments

The System for Award Management (SAM) is the NSF system of record for organizational financial information. Once a grant is awarded, failure to maintain current and complete financial information within SAM could prevent the grantee from receiving funds.

D. Cash Refunds and Credits to NSF

1. Final Unobligated Balance

NSF has a reversionary interest in the unobligated balance of an award upon the end date or completion of the award. Based on final payment amounts submitted through ACM\$, the final unobligated balance will be computed by NSF and deobligated from the award amount.

2. Erroneous Payments

Advances or reimbursements made in error must be refunded to the National Science Foundation. Excess funds should be promptly refunded electronically or by check. Electronic remittances should be submitted through Pay.gov at https://pay.gov/paygov/forms/formInstance.html?agencyFormId=10506005. Checks shall be mailed to NSF, Attn. Cashier, 4201 Wilson Boulevard, Arlington, VA 22230. Contact the NSF Division of Financial Management at (703) 292-8280 for additional information.

The only exception to the requirement for prompt refunding is when the funds involved will be disbursed immediately. This exception for prompt refunding should not be construed as approval by NSF for a grantee to maintain excessive funds on hand.

3. Interest Earned on Advance Payments

The following provisions implement the applicable portions of 2 CFR § 200.305 on interest income.

Grantees shall maintain advances of NSF funds in interest bearing accounts, unless any of the following apply:

- a. The grantee receives less than \$120,000 in Federal awards per year;
- b. The best reasonably available interest bearing account would not be expected to earn interest in excess of \$500 per year on Federal cash balances;
- c. The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources; or
- d. A foreign government or banking system prohibits or precludes interest bearing accounts.

Grantees may retain interest earned amounts up to \$500 per year for administrative expenses. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either Automated Clearing House (ACH) network or a Fedwire Funds Service payment. Remittances must include pertinent information of the payee and nature of payment in the memo area (often referred to as "addenda records" by Financial Institutions) as that will assist in the timely posting of interested earned on federal funds. The remittance must be submitted as follows:

(i) For ACH Returns:

Routing Number: 051036706

Account number: 303000

Bank Name and Location: Credit Gateway—ACH Receiver St. Paul, MN

(ii) For Fedwire Returns*:

Routing Number: 021030004

Account Number: 75010501

Bank Name and Location: Federal Reserve Bank Treas NYC/Funds Transfer Division New York,

NY

(* Please note organization initiating payment is likely to incur a charge from your Financial

Institution for this type of payment)

(iii) For International ACH Returns:

Beneficiary Account: Federal Reserve Bank of New York/ITS (FRBNY/ITS)

Bank: Citibank N.A. (New York)

Swift Code: CITIUS33

Account Number: 36838868

Bank Address: 388 Greenwich Street, New York, NY 10013 USA

Payment Details (Line 70): Agency

Name (abbreviated when possible) and ALC Agency POC: Michelle Haney, (301) 492-5065

(iv) For recipients that do not have electronic remittance capability, please make check** payable to: "The Department of Health and Human Services."

Mail Check to Treasury approved lockbox:

HHS Program Support Center, P.O. Box 530231, Atlanta, GA 30353-0231

(** Please allow 4-6 weeks for processing of a payment by check to be applied to the appropriate PMS account)

(v) Any additional information/instructions may be found on the PMS Web site at http://www.dpm.psc.gov/.

4. Program Income

a. Background

The following provisions implement the applicable portions of 2 CFR § 200.307 on program income.

b. Definition

PROGRAM INCOME means gross income earned by the grantee that is directly generated by a supported activity or earned as a result of the grant during the period of performance. Program income includes, but is not limited to, income from fees for services performed, the use of rental or real or personal property acquired under the grant, the sale of commodities or items fabricated under the grant, license fees and royalties on patents and copyrights, and principal and interest on loans made with grant funds. Interest earned on advances of Federal funds is not program income. Except as otherwise provided in Federal statutes, regulations, or the terms and conditions of the grant, program income does not include rebates, credits, discounts, and interest earned on any of them.

Note: Registration fees collected under NSF-supported conferences are considered program income.

c. NSF Policy

(i) Standard Treatment

Unless otherwise specified in the grant, program income received or accruing to the grantee during the period of the grant is to be retained by the grantee, added to the funds committed to the project by NSF, and thus used to further project objectives. The grantee has no obligation to NSF with respect to program income received beyond the period of the grant. The grantee also shall have no obligation to NSF with respect to program income earned from license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions produced under an award. However, Patent and Trademark Amendments (35 USC 18) shall apply to inventions made under an award.

Efforts should be made to avoid having unexpended program income remaining at award expiration. Program Income earned during the project period should be expended prior to requesting reimbursement against the award. In the event a grantee has unexpended program income remaining at award expiration, it must be remitted to NSF by crediting costs otherwise chargeable against the award. If it is not possible to record the credit via ACM\$, the excess program income must be remitted to NSF electronically or by check payable to the National Science Foundation. (See section D.2 above for further information.)

(ii) Special Treatment

In exceptional circumstances, the NSF Grants and Agreements Officer, in collaboration with Program Officers and other appropriate NSF offices, may approve use of a special grant provision to restrict or eliminate a grantee's control of income earned through NSF-supported activities if it determines that this would best serve the purposes of a particular program or grant. The special provisions may require treatment of the program income via use of the deductive method, the Federal share of program income be kept in a separate account, or reported on and/or remitted for such periods as may be reasonable under the circumstances.

If, in accordance with the award terms and conditions program income is designated for deductive treatment, it must be remitted to NSF by crediting costs otherwise chargeable against the award.

Program Income in excess of the award will be remitted to NSF electronically or by check payable to the National Science Foundation.

(iii) Program Income Reporting Requirements

On an annual basis, grantee organizations are required to submit a Program Income Reporting Worksheet to NSF in order to report program income earned/expended for any of their awards during the previous twelve months or to validate that they did not earn/expend program income for any of their awards during the applicable period.

- (a) The Program Income Reporting Worksheet utilizes the standard, Office of Management and Budget (OMB)-approved government-wide data elements from the Program Income section of the Federal Financial Report (SF 425).
- (b) The Program Income Reporting Worksheet in Microsoft Excel is available to grantees through the Program Income page of Research.gov. Grantees are required to report the award number, amount of program income earned, amount of program income expended, and the amount of unexpended program income remaining as of the date. Grantees that have no program income to report will be able to validate that status by an email response. The Program Income Reporting Worksheet is due 45 days after the end of the Federal Fiscal Year.

Failure to report program income or to validate that no program income was earned/expended could result in suspension of future award payments.

5. Other Cost Credits

Purchase discounts, rebates, allowances, credits resulting from overhead rate adjustments and other credits relating to any allowable cost received by or accruing to the grantee shall be credited against NSF award costs if the award has not been financially closed out. See also AAG Chapter V.A.2.c.

E. Award Financial Reporting Requirements - Final Disbursement Reporting

NSF does not require grantees to submit FFRs for each award for purposes of final award accountability. NSF procedures have been designed to extract the final financial data from the entries in ACM\$. This is accomplished as follows:

For any award listed on the ACM\$ Payments screen, the grantee will enter the final payment amount in the Payment Amount Requested column.

- 1. If final disbursements change by \$1.00 or more from the amount at award financial closeout, the grantee should submit an "Adjustment to a Financially Closed Award" through the ACM\$ payment process.
- 2. Grantees must liquidate all obligations incurred under their awards not later than 120 calendar days after the award end date.
- 3. NSF will financially close awards 120 days after the award end date and the award will be removed from the ACM\$ payment screen for active awards.
- 4. Grantees have the option of using ACM\$ to designate awards for financial closeout prior to the scheduled close out date. Grantees can complete that action by selecting the Final Flag on the ACM\$ payment screen. That action will financially close the award upon posting of the ACM\$ transaction to the NSF financial accounting system.

- 5. Post Closeout Adjustments and Continuing Responsibilities. NSF will make settlements for any upward or downward adjustments to the Federal share of costs after the award financial closeout within the following time limits:
- Upward adjustments may be submitted through ACM\$ for up to 15 months after the financial closeout date of the award.
- Downward adjustments may be submitted through ACM\$ until the appropriation funding the award cancels. The time limitation for ACM\$ downward adjustments has no effect on the requirement that the grantee return any funds due to NSF as a result of later refunds, corrections, or other transactions including final indirect cost rate adjustments. In cases where the award appropriation has been cancelled, the grantee should return the funds associated with the downward adjustment in accordance with section D. Cash Refunds and Credits to NSF.

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Public reporting burden for this collection of information is estimated to average 60 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0004), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

INSTRUCTIONS

Please type or print legibly. Items 1, 3, 5, 9, 10, 11e, 11f, 11g, 11i, 12 and 13 are self-explanatory; specific instructions for other items are as follows:

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Entry

- 2 Indicate whether request is prepared on cash or accrued expenditure basis. All requests for advances shall be prepared on a cash basis.
- 4 Enter the Federal grant number, or other identifying number assigned by the Federal sponsoring agency. If the advance or reimbursement is for more than one grant or other agreement, insert N/A; then, show the aggregate amounts. On a separate sheet, list each grant or agreement number and the Federal share of outlays made against the grant or agreement.
- 6 Enter the employer identification number assigned by the U.S. Internal Revenue Service, or the FICE (institution) code if requested by the Federal agency.
- 7 This space is reserved for an account number or other identifying number that may be assigned by the recipient.
- 8 Enter the month, day, and year for the beginning and ending of the period covered in this request. If the request is for an advance or for both an advance and reimbursement, show the period that the advance will cover. If the request is for reimbursement, show the period for which the reimbursement is requested.
- Note: The Federal sponsoring agencies have the option of requiring recipients to complete items 11 or 12, but not both. Item 12 should be used when only a minimum amount of information is needed to make an advance and outlay information contained in item 11 can be obtained in a timely manner from other reports.
 - 11 The purpose of the vertical columns (a), (b), and (c) is to provide space for separate cost breakdowns when a project has been planned and budgeted by program, function, or

Item Entry

activity. If additional columns are needed, use as many additional forms as needed and indicate page number in space provided in upper right; however, the summary totals of all programs, functions, or activities should be shown in the "total" column on the first page.

- 11a Enter in "as of date," the month, day, and year of the ending of the accounting period to which this amount applies. Enter program outlays to date (net of refunds.) rebates, and discounts), in the appropriate columns. For requests prepared on a cash basis, outlays are the sum of actual cash disbursements for goods and services. the amount of indirect expenses charged, the value of inkind contributions applied, and the amount of cash advances and payments made to subcontractors and subrecipients. For requests prepared on an accrued expenditure basis, outlays are the sum of the actual cash disbursements, the amount of indirect expenses incurred, and the net increase (or decrease) in the amounts owed by the recipient for goods and other property received and for services performed by employees, contracts, subgrantees and other payees.
- 11b Enter the cumulative cash income received to date, if requests are prepared on a cash basis. For requests prepared on an accrued expenditure basis, enter the cumulative income earned to date. Under either basis, enter only the amount applicable to program income that was required to be used for the project or program by the terms of the grant or other agreement.
- 11d Only when making requests for advance payments, enter the total estimated amount of cash outlays that will be made during the period covered by the advance.
 - 13 Complete the certification before submitting this request.

Chapter IV: Grantee Standards

NSF encourages the increased involvement of academic researchers and educators with industry and private entrepreneurial ventures, but recognizes that such interactions carry with them an increased risk of conflict of interests. AAG Chapter IV.A contains NSF's policy on conflict of interest.

2 CFR § 200 prescribes three separate sets of standards related to the financial and program management of Federal grants, each governing a different area: financial management, property management, and procurement management. AAG Chapter IV.C, IV.D and IV.E implement these standards, and extend their applicability to all types of recipients of NSF grants, including for-profit organizations.

A. Conflict of Interest Policies

- 1. NSF requires each grantee organization employing more than fifty persons to maintain an appropriate written and enforced policy on conflict of interest and that all conflicts of interest for each award be managed, reduced or eliminated prior to the expenditure of the award funds. If the organization carries out agency-funded research through subrecipients, contractors, or collaborators, the organization must take reasonable steps to ensure that:
- a. the entity has its own policies in place that meet the requirements of this policy; or
- b. investigators working for such entities follow the policies of the primary organization.

Guidance for development of such policies has been issued by university associations and scientific societies.

2. An organizational conflict of interest policy should require that each investigator disclose to a responsible representative of the organization all significant financial interests of the investigator (including those of the investigator's spouse and dependent children): (i) that would reasonably appear to be affected by the research or educational activities funded or proposed for funding by NSF; or (ii) in entities whose financial interests would reasonably appear to be affected by such activities.

The term "investigator" means the principal investigator/project director, co-principal investigators/co-project directors, and any other person at the organization who is responsible for the design, conduct, or reporting of research or educational activities funded or proposed for funding by NSF.

The term "significant financial interest" means anything of monetary value, including, but not limited to, salary or other payments for services (e.g., consulting fees or honoraria); equity interest (e.g., stocks, stock options or other ownership interests); and intellectual property rights (e.g., patents, copyrights and royalties from such rights).

The term does not include:

- a. salary, royalties or other remuneration from the applicant organization;
- b. any ownership interests in the organization, if the organization is an applicant under the Small Business Innovation Research Program or Small Business Technology Transfer Program;
- c. income from seminars, lectures, or teaching engagements sponsored by public or non-profit entities;
- d. income from service on advisory committees or review panels for public or nonprofit entities;
- e. an equity interest that, when aggregated for the investigator and the investigator's spouse and dependent children, meets both of the following tests: (i) does not exceed \$10,000 in value as determined through reference to public prices or other reasonable measures of fair market value; and (ii) does not represent more than a 5% ownership interest in any single entity; or

- f. salary, royalties or other payments that, when aggregated for the investigator and the investigator's spouse and dependent children, are not expected to exceed \$10,000 during the prior twelve-month period.
- 3. An organizational policy must ensure that investigators have provided all required financial disclosures at the time the proposal is submitted to NSF. It must also require that those financial disclosures are updated during the period of the award, either on an annual basis, or as new reportable significant financial interests are obtained.
- 4. An organizational policy must designate one or more persons to review financial disclosures, determine whether a conflict of interest exists, and determine what conditions or restrictions, if any, should be imposed by the organization to manage, reduce or eliminate such conflict of interest. A conflict of interest exists when the reviewer(s) reasonably determines that a significant financial interest could directly and significantly affect the design, conduct, or reporting of NSF-funded research or educational activities.

Examples of conditions or restrictions that might be imposed to manage, reduce or eliminate conflicts of interest include, but are not limited to:

- a. public disclosure of significant financial interests;
- b. monitoring of research by independent reviewers;
- c. modification of the research plan;
- d. disqualification from participation in the portion of the NSF-funded research that would be affected by significant financial interests;
- e. divestiture of significant financial interests; or
- f. severance of relationships that create conflicts.

If the reviewer(s) determines that imposing conditions or restrictions would be either ineffective or inequitable, and that the potential negative impacts that may arise from a significant financial interest are outweighed by interests of scientific progress, technology transfer, or the public health and welfare, then the reviewer(s) may allow the research to go forward without imposing such conditions or restrictions.

- 5. The organizational policy must include adequate enforcement mechanisms, and provide for sanctions where appropriate.
- 6. The organizational policy must include arrangements for keeping NSF's Office of the General Counsel (OGC) appropriately informed if the organization finds that it is unable to satisfactorily manage a conflict of interest and if the institution finds that research will proceed without the imposition of conditions or restrictions when a conflict of interest exists.³

When OGC is notified of an unmanageable conflict of interest by an awardee, OGC will conduct the following review:

- a. Examine a copy of the organization's conflict of interest policy to ascertain if the policy includes procedures for addressing unmanageable conflicts.
- b. Contact the awardee organization's representative to determine what actions the organization plans/has taken with respect to the reported unmanageable conflict of interest, ensuring consistency with their conflict of interest policy.
- c. Request confirmation from the awardee when proposed actions have been accomplished.

³ Grantee notifications of conflict of interest that cannot be managed, reduced, or eliminated and awardee notifications of situations where research will proceed without the imposition of conditions or restrictions when a conflict of interest exists, must be signed and submitted by the AOR via use of NSF's electronic systems.

7. Organizations must maintain records of all financial disclosures and of all actions taken to resolve conflicts of interest for at least three years beyond the termination or completion of the grant to which they relate, or until the resolution of any NSF action involving those records, whichever is longer.

B. Responsible Conduct of Research (RCR)

1. Background

The responsible and ethical conduct of research (RCR) is critical for excellence, as well as public trust, in science and engineering. Consequently, education in RCR is considered essential in the preparation of future scientists and engineers. Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 U.S.C. 1862o–1) requires that "each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project."

The language specified below provides NSF's implementation of Section 7009.

2. Institutional Responsibilities

- a. An institution must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. As noted in GPG Chapter II.C.1.e, institutional certification to this effect is required for each proposal.
- b. While training plans are not required to be included in proposals submitted to NSF, institutions are advised that they are subject to review, upon request.
- c. An institution must designate one or more persons to oversee compliance with the RCR training requirement.
- d. Institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research have received training in the responsible and ethical conduct of research.

C. Financial Management Systems Standards

NSF grantees are required to have financial management systems which meet the requirements of 2 CFR § 200.302.

D. Property Management Standards

2 CFR §§ 200.310-316 prescribe standards for managing and disposing of property furnished by the Federal government or whose cost was charged to a project supported by a Federal grant. In the rare instances where NSF grants involve the acquisition of real property, the real property standards of 2 CFR § 200.311 are applicable to such NSF grants. NSF implementation of the OMB standards on intangible property is contained in AAG Chapter VI.D.

Title to materials developed and supplies purchased under an NSF grant will vest in the grantee, subject to the conditions identified in paragraph 2. below.

2 CFR § 200.312 contains a special category of "exempt property." Under that provision, any Federal agency which has statutory authority (such as NSF) may vest title in an institution of higher education, hospital or other non-profit organization without further obligation to the Federal Government and under conditions the agency considers appropriate. NSF's authority is provided by the Federal Technology Transfer Act (15 USC 3710.)

1. Title to Equipment

a. Title to Equipment - Non-Profit Organizations

- (i) Normal Situations. Unless otherwise specified in the grant, title to equipment purchased or fabricated with NSF grant funds by a college or university or other non-profit organization will vest in the grantee organization upon acquisition. Such equipment is considered "exempt property" (see AAG Chapter IV.D.) and subject to the conditions of AAG Chapter IV.D.2.
- (ii) Special Situations. In special situations the grant may require that title to equipment purchased, acquired or fabricated by the grantee with NSF funds pass directly to the government upon acquisition.

b. Title to Equipment - Commercial Organizations

Unless otherwise specified in the grant, title to equipment purchased or fabricated with NSF grant funds by a small business or other for-profit organization will vest in the government. Such equipment will be acquired and used in accordance with AAG Chapter IV.D.2, and managed in accordance with AAG Chapter IV.D.4.

2. Conditions for Acquisition and Use of Equipment

- a. Grantee Assurance. The grantee will assure that for each purchase of equipment, it is:
- (i) necessary for the research or activity supported by the grant;
- (ii) not otherwise reasonably available and accessible;
- (iii) of the type normally charged as a direct cost to sponsored agreements; and
- (iv) acquired in accordance with organizational practice.
- b. General Purpose Equipment. Expenditures for general purpose equipment are typically not available for support.
- c. Equipment Usage. The equipment must remain in use for the specific project for which it was obtained in accordance with 2 CFR § 200.313 unless the provision in 2 CFR § 200.313(c)(4) applies.
- d. Equipment Sharing. The equipment must be shared on other projects or programs in accordance with 2 CFR § 200.313(c)(1).
- e. Property Management Standards. The grantee shall maintain a property management system which, at a minimum, meets the requirements of 2 CFR § 200.313(d).
- f. Competition. In accordance with 2 CFR § 200.313(c)(3), grantees shall not use equipment acquired with Federal funds to provide services to non-Federal outside organizations for a fee that is less than private companies charge for equivalent services, unless specifically authorized by statute, for as long as the Federal Government retains an interest in the equipment.
- g. Right to Transfer Title.
- (i) In accordance with 2 CFR § 200.313(e), NSF may identify items of equipment having a unit acquisition cost of \$5,000 or more where NSF reserves the right to transfer the title to the Federal government or to a third party named by the Federal government.
- (ii) In such cases where NSF elects to transfer the title, disposition instructions will be issued no later than 120 days after the end date of the NSF-supported project for which it was acquired.

3. Principles Relating to the Use of NSF-Supported Research Instrumentation and Facilities

The following principles on use of NSF-supported instrumentation and facilities were adopted by the National Science Board:

The National Science Foundation seeks the maximum productive use of the Nation's scientific instrumentation and research expertise. Ensuring that the highest quality instrumentation, facilities, and services are available to scientific users, both academic and industrial, is a key requirement, as are harmonious relations and cooperation between industry and universities. Private research and testing laboratories, as well as university, government, and industrial laboratories, have a contribution to make.

The National Science Board recognizes that there may be circumstances where NSF grantees use NSF-supported research instrumentation to provide services in commerce for a fee, to an extent that such practice, (1) detracts from the performance of their obligation under the grant, and/or (2) may have a material and deleterious effect on the success of private companies engaged in the provision of equivalent services. It is contrary to the NSF's intent for grantees to use NSF-supported research instrumentation or facilities to provide services for a fee in competition with private companies in a manner that is prohibited by 2 CFR § 200.313(c)(3).

Grantees should implement the above principles and related grant conditions in a reasonable manner. Grantees are expected to provide fair and adequate consideration of any complaints about use of instrumentation and facilities.

4. Property Management Standards When Title Retained by NSF

In the event that title to equipment or property is vested in the Federal Government, such property shall be marked, tagged or segregated in such a manner as to indicate clearly its ownership by the government. Unless otherwise provided in the grant, such government property shall be used only for the performance of the project. The grantee shall submit an annual inventory report by NSF grant number of such property having an original acquisition cost of \$5,000 or more, to the NSF Property Administrator, Division of Administrative Services (DAS). A physical inventory of Government-Owned Equipment (GOE) shall be conducted every two years pursuant to 2 CFR § 200.313(d)(2). Upon expiration of the grant, the grantee shall report the property to the Property Section for further agency utilization. (See AAG Chapter IV.D.5.)

5. Excess Government Personal Property

a. Policy

- (i) As a means of expanding the ability of grantees to accomplish NSF objectives while conserving supply and equipment funds, NSF will continue to sponsor the transfer of excess government personal property to NSF grantees.
- (ii) Excess government personal property includes all types of personal equipment and materials (except consumable items such as drugs, paint, etc.), new or used, owned by the Federal Government and no longer needed by the holding agency, but having additional useful life. Under regulations established by the General Services Administration (GSA), the agency charged with operating this program, excess government personal property may be reported to, or requested from, GSA by other Federal agencies, including NSF.
- (iii) NSF will sponsor the transfer of excess government personal property to eligible organizations under one of the following conditions:
- (a) the use of the property significantly furthers an NSF grant-supported activity;
- (b) the property is such that it would have been procured under the grant for which property is being requested if additional grant funds had been available;

- (c) the property is used as part of the grant activity and subsequently for research or science education purposes; or
- (d) the property is classified by GSA as scientific or engineering research equipment and has a unit acquisition cost of \$1,000 or more. (See AAG Chapter IV.D.5.f.)

b. Eligibility

Eligible organizations are NSF grantees that are public or private institutions of higher education or non-profit organizations whose primary purpose is the conduct of research or science education activities. State and municipal governments, public health units, hospitals, profit-making firms and individual PI/PDs are not eligible for excess government personal property under NSF sponsorship.

c. Procedures

- (i) To access a worldwide inventory of available excess personal property, an eligible grantee should contact the Property Administrator (fsrpts@nsf.gov), DAS to become a registered user of GSAXcess® (GSA's online personal property system located at http://gsaxcess.gov/).
- (ii) Grantees can visit GSAXcess® to screen for items that are necessary to accomplish the NSF supported project by searching GSA's inventory and adding items to the Selection Cart. Excess personal property is reported by Category (Federal Supply Classification (FSC)) and includes the item control number, name, location, quantity available, and unit of issue, original acquisition cost, surplus release date and condition of items posted. In some instances a photograph of the property item is available.
- (iii) Materials and equipment so selected should be inspected whenever possible (see AAG Chapter IV.D.5.d), or the holding Federal agency should be contacted by the grantee to verify the condition of the items, because interpretation of condition codes can vary among agencies.
- (iv) If the condition of the item is acceptable, the grantee should freeze items by Checkout of the Selection Cart to generate a Transfer Control Number/SF 122, *Transfer Order Excess Personal Property*.
- (v) The grantee should next submit the SF 122, *Transfer Order Excess Personal Property* and a separate written justification statement, if necessary, to the Property Administrator, DAS. The justification will explain why the property is needed to reduce the cost or enhance the performance under the specific grant for which the property is requested.
- (vi) The SF 122 should be signed by either the PI/PD or the Authorized Organizational Representative. The following information should also be provided on each SF 122:
- (a) name of grantee organization;
- (b) grant number;
- (c) end date;
- (d) the statement "The above equipment is requested for use by the grantee in support of research or education as outlined in the grant"; and
- (e) the statement "Transfer is in accordance with the provisions of 41 CFR §101.43." The grantee should also verify the automatic release date with GSA to preclude loss of property before the transaction is processed.
- (vii) The written justification should detail the scientific need for the equipment as it relates to the particular grant under which the equipment is to be used, and should cite the conditions of this section as being binding upon the grantee, should the property be acquired.

- (viii) Upon receipt by NSF, the SF 122 will be reviewed and forwarded to the appropriate GSA Office. Items are usually allocated on a first come, first served basis. Since GSA may have several freezes on a piece of equipment, first come, first served is interpreted as the first approved SF 122 received by the GSA office and designated Area Property Officer (APO). However, preference will be given by GSA to agencies which do not grant title to equipment. As confirmation of approval, the grantee will receive copies of the SF 122 from the GSA APO. If the request is disapproved, it will be returned to the grantee with an appropriate explanation.
- (ix) Upon receipt of the requested property, the grantee should immediately return a copy of the SF 122 to NSF as evidence of delivery. Cancellations by GSA, or nonreceipt within a reasonable period of time should also be reported to NSF after follow-up inquiries have been made to GSA.

d. Visiting Holding Agency Facilities

- (i) Under current GSA regulations all non-Federal grantee representatives wishing to visit holding agency facilities to screen or freeze government excess personal property must receive prior certification from GSA. Because of current security protocols, the holding agency may require written authorization for access.
- (ii) The number of screeners on a grant should be limited to no more than two persons. The primary screener should be the PI/PD. However, if the PI/PD finds it impossible to screen, he/she may designate, in writing, a substitute.
- (iii) Normally, certification will be on a regional basis; however, NSF will, under certain circumstances, sponsor grantee representatives who need to make interregional visits in order to secure equipment not readily available within their region.

e. Dollar Limitation

To ensure equitable distribution of excess government personal property, grantees may be authorized to acquire property under each NSF project grant up to a total acquisition cost equal to the dollar value of that particular grant. Any request for excess property which causes the total to exceed the value of the grant will require additional justification beyond that requested in AAG Chapter IV.D.5.c. A higher percentage of excess property requested under a particular grant by a grantee must be approved by an administrative level in NSF which is higher than the Program Officer who normally administers the grant. NSF will give full consideration to all factors in determining whether to approve transfers of excess property above the dollar value of a given grant. Grantees are therefore urged to be selective in their requests for excess government personal property to limit quantities of each item where possible and to avoid stockpiling items for future use.

f. Restrictions

- (i) NSF will sponsor the transfer of excess government personal equipment to eligible organizations only under project grants. As defined in the GSA regulations, "project grants" refers to grants made for specific purposes with established termination dates, e.g., grants made to specific organizations to perform specific tasks within set time frames and costs. No excess property may be acquired on behalf of conference, publication-support grants or travel grants. In addition, on "summer-type training grants," no property may be acquired after the training period has terminated. Further, grantees should exercise careful judgment on the appropriateness of requesting excess personal property when only a short period of time exists between the date of the property request and the completion or successful accomplishment of the NSF-supported activity. GSA will consider items of personal property as research equipment for transfer without reimbursement to NSF for use by a grantee when the property requested has a unit acquisition cost of \$1,000 or more and is within Federal Supply Classification Groups:
- (a) 12 Fire Control Equipment:
- (b) 14 Guided Missiles;
- (c) 43 Pumps and Compressors;
- (d) 48 Valves;

- (e) 58 Communication, Detection and Coherent Radiation Equipment;
- (f) 59 Electrical and Electronic Equipment Components;
- (g) 65 Medical, Dental and Veterinary Equipment and Supplies;
- (h) 66 Instruments and Laboratory Equipment;
- (i) 67 Photographic Equipment;
- (j) 68 Chemical and Chemical Products; or
- (k) 70 General Purpose Automatic Data Processing Equipment, Software, Supplies and Support Equipment.

Automatic data processing equipment must be acquired under the provisions in 41 CFR §201.23.

(ii) GSA will give consideration to the transfer without reimbursement of items of excess property in other Federal supply classification groups and items with a unit acquisition cost of less than \$1,000, when NSF certifies that the item requested is a component part of or related to a piece of research equipment or is an otherwise difficult to acquire item needed for scientific or engineering research. Items of property determined by GSA to be common-use or general purpose property, regardless of classification or unit acquisition cost, shall not be transferred to a grantee for the purpose of cannibalization, unless the granting agency sends with the transfer request a supporting statement which clearly indicates that disassembly of the requested item for secondary use of its component parts, or for repair and maintenance of a similar item, has greater potential benefit than utilization of the item in its existing form and that a clear cost savings to the government will result, subject to final determination by GSA.

g. Costs

Excess government personal property is usually secured without cost. However, the recipient grantee should specify the method of shipment and must pay all costs of packing, transportation and subsequent installation, rehabilitation and maintenance if required. Grant funds may be used to pay such costs.

h. Title

Title to excess government personal property obtained by academic and other non-profit grantees through NSF sponsorship remains with the government until the property is delivered to the grantee organization. Upon delivery, the grantee should forward to NSF a receipted SF 122 which clearly lists the items of property actually obtained by the grantee. Unless NSF informs the grantee to the contrary, when this SF 122 is received at NSF, title to all property acquired will automatically pass to and be vested in the grantee organization, subject to the understanding that the property will be used for research or for science education purposes as long as it has a useful life. At such time as the property is no longer useful for such purposes, it may be disposed of in accordance with organizational practices, but any proceeds therefrom shall be used by the grantee solely for research or science education purposes. Under certain conditions, such as when highly specialized equipment is involved, NSF may retain title to excess property. When such a condition exists, NSF will inform the grantee. Excess government personal property may not be transferred to a foreign country without the express written approval of the Grants and Agreements Officer.

i. Accountability and Recordkeeping

- (i) While no particular type of classification of accounts or inventory system is required, NSF expects that the responsible officials of the grantee organization will exercise careful stewardship of excess government personal property acquired in support of projects undertaken with NSF's financial assistance. In accordance with AAG Chapter IV.D.5.e, relating to the dollar limitation on the amount of excess government personal property provided by NSF, grantees should maintain appropriate inventory procedures that will enable them to identify those requests which require more extensive administrative and scientific justification. In those cases where title to excess government personal property remains with the government, the grantee must maintain suitable records to identify its location, description, utilization and value. The use of excess government personal property under an NSF grant is subject to inspection and audit by representatives of NSF at all reasonable times during the life of the grant under which the property was acquired.
- (ii) Further details may be obtained from the Property Administrator, Division of Administrative Services, National Science Foundation, 4201 Wilson Boulevard, Room 295, Arlington, VA 22230.

E. Procurement Standards

NSF grantees shall adhere to the requirements of 2 CFR §§ 200.317-326 which prescribes standards for use by recipients in establishing procedures for the procurement of supplies and other expendable property, equipment, real property and other services with Federal funds.

Chapter V: Allowability of Costs

A. Basic Considerations

Expenditures under NSF cost reimbursement grants are governed by the Federal cost principles and must conform with NSF policies where articulated in the grant terms and conditions, grant special provisions and grantee internal policies. While grantees are encouraged to seek advice regarding the treatment of costs from the NSF Grants and Agreements Officer identified in the award notice, it is the grantee organization that is ultimately responsible for ensuring that all costs charged to NSF awards meet the requirements of the cost principles contained in 2 CFR § 200, Subpart E.⁴, grant terms and conditions, and any other specific requirements of both the award notice and the applicable program solicitation. In addition, grantee organizations should ensure that their own internal policies and procedures and other requirements are met for all charges to NSF awards. Otherwise such costs may be disallowed during audit resolution or by specific determination of an NSF Grants and Agreement Officer.

In the event a grantee anticipates charging an item of direct cost that might subsequently be disputed, an authorized official of the grantee organization should discuss the matter with the cognizant NSF Grants and Agreements Officer and document the conditions or factors surrounding the item in order to avoid possible subsequent disallowance. If the NSF Grants and Agreements Officer determines that such costs are appropriate considering the special requirements of a particular NSF sponsored activity, this should be documented through an advance agreement or understanding. Advance agreements regarding the treatment of such costs may be incorporated by specific language in the award notice, or by other written correspondence.

1. Conflicting Guidelines

It is NSF's intent that the following guidance on cost allowability be consistent with the Federal cost principles. However, in the event of any discrepancy between the summary information contained in this Chapter and any specific provision of the cost principles contained in 2 CFR § 200, Subpart E, the cost principles in effect as of the start date of the NSF grant will govern. In the case of a discrepancy between the special provisions of an NSF grant and the standards of the cost principles, the special provisions of the grant will govern.

2. Other Considerations

a. Maximum Obligation

The maximum obligation of NSF for support of the project will not exceed the amount specified in the grant, as amended. NSF does not amend grants to provide additional funds for such purposes as reimbursement for unrecovered indirect costs resulting from the establishment of final negotiated rates, or for increases in salaries, fringe benefits and other costs.

b. Pre-Award (Pre-Start Date) Costs

- (i) Grantees may incur allowable pre-award costs within the 90-day period immediately preceding the start date of the grant providing:
- (a) the approval of pre-award spending is made and documented in accordance with the grantee's procedures; and
- (b) the advanced funding is necessary for the effective and economical conduct of the project.
- (2) Pre-award expenditures are made at the grantee's risk. Grantee authority to approve pre-award costs does not impose an obligation on NSF: (1) in the absence of appropriations; (2) if an award is not subsequently made; or (3) if an award is made for a lesser amount than the grantee anticipated.

⁴ Applicable cost principles for for-profit organizations are contained in Federal Acquisition Regulation Part 31.

(3) Requests for pre-award costs for periods exceeding 90 days must be submitted to NSF via use of NSF's electronic systems. Pre-award expenditures prior to funding of an increment within a continuing grant are not subject to this limitation or approval requirement, but are subject to paragraph (ii) above.

Additional information on pre-award costs is available at 2 CFR §§ 200.308(d)(1) & (d)(4).

c. Post-End Date Costs

NSF funds may not be expended subsequent to the end date of the grant, except to liquidate valid commitments that were made on or before the end date, e.g., commitment of project funds for subrecipient or contractor for services rendered during that award period but not billed to the grantee until after the grant expired. (See AAG Chapter III.E.2.) Generally, the costs of equipment or materials and supplies ordered after the end date, may not be charged to the project.

In addition, the grantee typically should not purchase items of equipment, computing devices, or restock materials and supplies in anticipation of grant expiration where there is little or no time left for such items to be utilized in the actual conduct of the research.

However, in accordance with 2 CFR § 200.461, Publication and Printing costs, awardees may charge the NSF award before closeout for the costs of publication or sharing of research results, if the costs are not incurred during the period of performance of the award.

3. Prior Written Approvals

a. General

The funding of items identified in the NSF award budget constitutes NSF's authorization for the grantee to incur these costs, provided there is not a specific limitation in the grant language and the costs are otherwise allowable, allocable, and reasonable in accordance with the cost principles contained in 2 CFR § 200, Subpart E.

If required in furtherance of the project, the grantee is authorized to transfer funds from one budget category to another for allowable expenditures. Grantees should refer to the applicable grant terms and conditions referenced in the grant, and the prior approval requirements summarized in paragraph b. below for cost-related NSF-required prior approvals. AAG Exhibit II-1 provides a consolidated listing of programmatic and cost-related grantee notifications to, and requests for approval from, the NSF. While the listing is not intended to be allinclusive, it does highlight the most frequent areas where specific notifications and requests for approval are called for.

When a change requires NSF approval, the request must be submitted electronically via use of NSF's electronic systems. The request should clearly state which budget items, if any, are to be changed and by what amounts, and should explain the reasons for any changes.

If a grantee rebudgets funds to support a postdoctoral researcher and the original proposal included a mentoring plan, no further documentation is necessary. If the original proposal did not include a mentoring plan, then the grantee must send the cognizant NSF Program Officer the requisite mentoring plan, as described in GPG Chapter II.C.2.j. If supplemental funding is requested to support a postdoctoral researcher, the guidance in AAG Chapter I.E.4.f should be followed. In all cases, the PI must report on the mentoring activities provided to the individual in the annual and final project reports.

b. NSF Prior Approval Policy

In addition to the required notifications and requests specified in AAG Chapters I and II, written prior approval from the NSF Grants and Agreements Officer is required for:

- Preaward Costs in Excess of 90 days;
- 2 Salaries of Administrative or Clerical Staff;

- 3. Rearrangements/Alterations aggregating \$25,000 or over (Construction);
- 4. Additional categories of participant support costs other than those described in 2 CFR § 200.75 (such as incentives, gifts, souvenirs, t-shirts and/or memorabilia); and
- Adjustments to cost sharing commitments reflected on Line M of the NSF award budget.

Written prior approval from the cognizant NSF Program Officer is required for reallocation of funds provided for participant support costs.

B. Direct Costs

1. Compensation - Personal Services

a. Salaries and Wages

Compensation paid or accrued by the organization for employees working on the NSF-supported project during the grant period is allowable, in accordance with 2 CFR § 200.430.

b. Fringe Benefits

If the proposer's usual accounting practices provide that its contributions to employee benefits (leave, employee insurance, social security, retirement, other payroll-related taxes, etc.) be treated as direct costs, NSF grant funds may be requested to fund fringe benefits as a direct cost. These are typically determined by application of a calculated fringe benefit rate for a particular class of employee (full time or part-time) applied to the salaries and wages requested. They also may be paid based on actual costs for individual employees, if that institutional policy has been approved by the cognizant federal agency.

Fringe benefits that are not accrued but are charged as direct costs and incurred under "pay as you go plans" may be subject to reasonableness determination where the benefits are earned under other work and charged to the last activity the employee was working on. This is of particular concern for large lump sum payments for leave, disability, pregnancy or other employee fringe benefits. See 2 CFR § 200.431 for the definition and allowability of fringe benefits.

2. Administrative and Clerical Salaries & Wages

In accordance with 2 CFR § 200.413, the salaries of administrative and clerical staff should normally be treated as indirect (F&A) costs. Direct charging of these may be appropriate only if all the conditions identified below are met:

- (1) Administrative or clerical services are integral to a project or activity;
- (2) Individuals involved can be specifically identified with the project or activity;
- (3) Such costs are explicitly included in the approved budget or have the prior written approval of the cognizant NSF Grants Officer; and
- (4) The costs are not also recovered as indirect costs.

3. Intra-University (IHE) Consulting

Since intra-university consulting is assumed to be undertaken as a university obligation requiring no compensation in addition to full-time salary, the principles summarized in AAG Chapter V.B.1, also apply to those who function as consultants or otherwise contribute to a project conducted by another faculty member of the same institution. However, in unusual cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the consultant is in addition to his/her regular appointment, any charges for such work representing extra compensation above the salary are allowable if consistent with established university policy and the applicable cost principles. If anticipated, any compensation for such consulting services should be disclosed in the proposal budget, justified in the budget justification, and included in the NSF award budget.

4. Federal Employees

Employees of the Federal government (other than NSF) may be utilized as lecturers or staff members on a project and may receive compensation and/or expenses if they obtain prior approval from their agencies to participate, and if services to the project are performed outside their regular working hours or while they are on leave status from official duties. Under no circumstances may NSF employees receive compensation from an NSF-supported project.

C. Other Direct Costs

1. Rearrangements and Alterations (Construction)

- a. Except under certain programs, NSF does not normally make grants for construction or facility improvements. However, rearrangement and alteration costs that do not constitute construction (i.e., rearrangements and alterations aggregating less than \$25,000) may be allowable under NSF grants to adapt space or utilities within a completed structure to accomplish the objective of the NSF-supported activity, provided that the:
- (i) grantee is not an individual or a foreign organization;
- (ii) building has a usable life consistent with project purposes and is architecturally suitable for conversion;
- (iii) rearrangement and alteration are essential to the project supported by the grant; and
- (iv) space involved will actually be occupied by the project. In situations where the space is rented, in order for the costs of the rearrangement and alteration to be allowable, the grantee must secure a lease for the length of the project. (See AAG Chapter V.C.3.)
- b. Rearrangements and alterations under \$25,000 may be approved by grantees. For rearrangements and alterations expenditures exceeding \$25,000, the grantee must request prior approval from NSF via use of NSF's electronic systems. Otherwise, any plans for such rearrangement or alteration should be clearly set forth in the proposal. If approved by NSF, such approval must be indicated in the award notice. Note that Appendix II of 2 CFR § 200 contains provisions that must be included in contracts made by the grantee.

See 2 CFR § 200.462 for additional information on rearrangement and reconversion costs.

2. News Release Costs

Costs of communicating with the public and press to announce the results and accomplishments of an NSF-supported project are allowable. Grantees should be aware of the restrictions on advertising, organizational promotion, and lobbying costs as outlined in the applicable cost principles. See 2 CFR § 200.421 for additional information on advertising and public relations.

In the event the performing organization wishes to collaborate with NSF in a simultaneous news release, arrangements may be made through the NSF's Office of Legislative and Public Affairs, Public Affairs Group, telephone (703) 292-8070.

3. Rental or Lease of Facilities or Special Purpose Equipment

On occasion, it may be necessary to use facilities or equipment not under the control of the grantee. See 2 CFR § 200.465 for additional information on rental costs of real property and equipment.

4. Relocation Costs

Relocation costs may be charged to an NSF grant as other direct costs in accordance with the cost principles contained in 2 CFR § 200, Subpart E. See 2 CFR § 200.464 for additional information on relocation costs.

5. Temporary Dependent Care Travel Costs

Temporary dependent care costs (a dependent is defined in 26 U.S.C. 152) above and beyond regular dependent care that directly results from travel to conferences are allowable costs provided that the costs are:

- a. a direct result of the individual's travel for the NSF conference award;
- b. consistent with the awardee's documented travel policy for all employee travel; and
- c. only temporary during the travel period.

See 2 CFR § 200.474 for additional information on travel costs.

D. Indirect Costs

1. NSF Policy

- a. Except as noted in an NSF program solicitation, it is NSF policy that grantees are entitled to reimbursement from grant funds for indirect costs (F&A) allocable to the NSF share of allowable direct costs of a project. NSF program staff are not authorized to negotiate indirect costs as a discrete item of a proposal budget. NSF program staff also are not authorized to suggest or request that PI/PDs seek reductions or waivers of indirect costs.
- b. The awarded indirect cost rate is generally based upon a grantee's current federally negotiated indirect cost rate agreement. When establishing an indirect rate for an award where the domestic grantee does not have a current negotiated rate agreement, NSF will consider the rate proposed in the budget, the grantee's indirect cost proposal submission, the amount of total funding requested and other pertinent financial factors. Supporting documentation is not required for organizations that request a *de minimis* rate of 10% (or less) of modified total direct costs. Since some types of rates limit indirect cost recoveries and require adjustments, grantees receiving awards should ensure that they understand the type of indirect cost rate, the applicable base and the type of rate used in the grant.

Foreign grantees that do not have a US federally negotiated indirect cost rate are limited to a *de minimis* indirect cost rate recovery of 10% of modified total direct costs. Foreign grantees that have a negotiated rate agreement with a US federal agency may recover indirect costs at the current negotiated rate.

Types of indirect cost rates that are most frequently used on NSF awards are as follows:

(i) Predetermined Rate – As authorized 41 USC § 4708, and recommended by the federal cost principles in 2 CFR § 200, Appendices III, IV, and VI, NSF has elected to use predetermined rates, where appropriate. A predetermined rate is an indirect cost rate, applicable to a specified current or future period, usually the organization's fiscal year. The rate is based on an estimate of the costs to be incurred during the period. A predetermined rate is not subject to adjustment.

Special Limitation concerning Predetermined Rates at Colleges and Universities subject to 2 CFR § 200 Appendix III, paragraph C.7 contains an additional restriction on recovery of indirect costs for colleges and universities and other organizations of higher education. These awardees are subject to a further limitation in that the negotiated rate at the time the award is made shall be used throughout the life of the award. The applicable text from 2 CFR § 200 Appendix III, paragraph C.7 is repeated below:

"7. Fixed rates for the life of the sponsored agreement.

Federal agencies must use the negotiated rates except as provided in paragraph (e) of §200.414 Indirect (F&A) costs, in effect at the time of the initial award throughout the life of the Federal award. Award levels for Federal awards may not be adjusted in future years as a result of changes in negotiated rates. "Negotiated rates" per the rate agreement include final, fixed, and predetermined rates and exclude provisional rates. "Life" for the purpose of this subsection means each competitive segment of a project. A competitive segment is a period of years approved by the Federal awarding agency at the time of the award. If negotiated rate agreements do not extend through the life of the Federal award at the time of the initial award,

then the negotiated rate for the last year of the award must be extended through the end of the life of the Federal award."

Where grantees receive limited NSF funding, the Foundation may elect to set award specific rates as opposed to a formal annual negotiated indirect cost rate agreement. In these cases, the award notice will specify the rate type, and application base. If the award notice is silent on the rate type, NSF will apply the predetermined rate at the percentage and based specified in the approved award budget.

(ii) Provisional (or billing) rate – A provisional rate is a temporary indirect cost rate applicable to a specified period which is used for funding, interim reimbursement, and reporting indirect costs pending the establishment of a final rate for the period.

Grantees with provisional rates are required to submit indirect cost proposals to their cognizant Federal Agency for rate negotiation within six months after the close of each fiscal year. Adjustments to awards for amounts previously billed at provisional rates are required after final indirect cost rates are established.

- (iii) Final rate A final rate is an indirect cost rate applicable to a specified past period which is based on the actual costs of the period. A final rate is not subject to adjustment.
- c. NSF will not amend a grant solely to provide additional funds for changes in indirect cost rates.
- d. NSF will generally fund continuing grant increments and supplemental support at the indirect cost rate(s) approved at the time of the initial award. (See AAG Chapter I.E.)
- e. Any negotiations with respect to business and financial matters on specific grants, including the amount of indirect cost reimbursement, are conducted by the cognizant Grants and Agreements Officer in DGA with an authorized official of the grantee's organization. The NSF Cost Analysis and Audit Resolution Branch provides advisory assistance to the Grants and Agreements Officer.

2. NSF Cognizant Organizations

Organizations for which NSF is the cognizant agency for negotiation of indirect cost rates and who do not have approved award specific rates are required to submit indirect cost proposals, reconciled to financial statements, within six months after the close of each accounting year during which NSF has active awards. Indirect cost proposals should be sent to the Cost Analysis and Audit Resolution Branch.

See http://www.nsf.gov/bfa/dias/caar/docs/idcsubmissions.pdf for indirect cost rate proposal submission requirements.

Such proposals should be sent electronically to BFACAARMPR@nsf.gov or by paper copy to Team Lead Indirect Costs, National Science Foundation, Division of Institution and Award Support, Room 485, 4201 Wilson Boulevard, Arlington, Virginia 22230.

E. Fee Payments under NSF Grants

Payment of fees (profit) is allowable only if expressly authorized by the terms and conditions of the NSF award.

Chapter VI: Other Post Award Requirements and Considerations

A. Non-Discrimination Statutes

1. General

- a. A number of statutes bar recipients of Federal financial assistance from excluding persons, because of their race, color, national origin, disability, sex, or age, from participation in Federally supported activities. These include: Title VI of the Civil Rights Act of 1964 (barring discrimination on grounds of race, color, or national origin); Section 504 of the Rehabilitation Act of 1973 (barring discrimination against qualified individuals with disabilities); Title IX of the Educational Amendments of 1972 (barring sex discrimination in Federally assisted education programs or activities); and the Age Discrimination Act of 1975 (barring discrimination on the grounds of age). In addition to statutory prohibitions, Executive Order (E.O.) 11246 bars various types of discriminatory employment practices under grants for construction, and E.O. 13166 "Improving Access to Services for Persons with Limited English Proficiency" requires government agencies to take steps to provide meaningful access to its programs and activities to members of the public who are limited in their English proficiency (LEP). The following sections discuss the application of each of these Statutes and E.O. 11246 and E.O. 13166 to NSF awardees.
- b. When a recipient of an NSF grant receives an equal opportunity complaint, the original complaint should be sent to the Director, Office of Diversity and Inclusion, National Science Foundation, 4201 Wilson Boulevard, Suite 255 South, Arlington, VA 22230.

2. Title VI of the Civil Rights Act of 1964

a. Background

Section 602 of the Civil Rights Act of 1964 (42 USC § 2000d, et seq.) provides that no person in the US shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal financial assistance. Section 602 requires that each Government agency which is empowered to extend such financial assistance issue rules or regulations implementing Title VI with respect to such programs or activities administered by the agency.

b. NSF Regulations

NSF regulations implementing Title VI are found at 45 CFR § 611. These regulations apply to the grantee and to any subrecipient of a grantee and successors in interest. These regulations do not apply to contracts for commercially available materials and supplies, equipment or general support services. The regulations require that as a condition of approval of an application for assistance, the applicant must execute an Assurance of Compliance, whether or not a similar assurance form has been filed with another Federal agency. (See GPG Exhibit II-6 for additional information.)

c. Civil Rights Certification - Subrecipient

Before any organization serves as a subrecipient on an NSF grant (for other than the purchase of commercially available materials and supplies, equipment or general support services), it must first file an Assurance of Compliance with the grantee.

d. Grant Condition

Each NSF grant contains as part of the grant terms and conditions, an article implementing Title VI and the NSF regulations.

3. Section 504 of the Rehabilitation Act of 1973

a. Background

Section 504 of the Rehabilitation Act of 1973, as amended (29 USC § 794) provides that "no otherwise qualified individual with a disability in the United States...shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance...."

b. NSF Regulations

NSF regulations implementing Section 504 are found at 45 CFR § 605. With a few changes, these regulations mirror the regulations issued by the Department of Health and Human Services (DHHS) at 45 CFR § 84. These regulations also apply to subrecipients and successors in interest. These regulations do not apply to contracts for commercially available materials and supplies, equipment or general support services.

c. Section 504 Certification - Subrecipients

In lieu of requiring grantees to obtain separate certifications from subrecipients receiving financial assistance under an NSF grant, grantees will include in all subawards (for other than the purchase of commercially available materials and supplies, equipment or general support services), a certification of compliance comparable to that included in NSF grants.

d. Grant Condition

Each NSF grant contains as part of the grant terms and conditions, an article implementing Section 504 and the NSF regulations.

4. Title IX of the Education Amendments of 1972 (Sex Discrimination)

a. Background

Subject to certain exceptions regarding admission policies at certain religious and military organizations, Title IX of the Education Amendments of 1972 (20 USC §§ 1681-1686) prohibits the exclusion of persons on the basis of sex from any education program or activity receiving Federal financial assistance. All NSF grantees must comply with Title IX.

b. NSF Regulations

NSF regulations implementing Title IX are found at 45 CFR § 618.

c. Grant Condition

Each NSF grant contains, as part of the grant terms and conditions, an article implementing Title IX and the NSF regulations.

5. Age Discrimination Act of 1975

a. Background

The Age Discrimination Act of 1975, as amended (42 USC § 6101 et seq.), provides that pursuant to regulations issued by DHHS "no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance."

b. NSF Regulations

NSF regulations implementing the Age Discrimination Act are found at 45 CFR § 617.

c. Grant Condition

Each NSF grant contains, as part of the grant terms and conditions, an article implementing the Age Discrimination Act and the NSF regulations.

6. Equal Employment Opportunity under E.O. 11246

a. Background

E.O. 11246, as amended, requires contractors and subcontractors performing Federally assisted construction projects to provide equal opportunity, without regard to race, color, religion, sex or national origin, to persons employed or seeking employment with them. This E.O. may apply to some NSF grants for construction.

b. Grant Condition

In instances when E.O. 11246 is applicable, the grant will include an equal opportunity clause in conformance with regulations issued by the Secretary of Labor at 41 CFR § 60.

7. Limited English Proficiency (LEP) under E.O. 13166

a. Background

E.O. 13166 requires government agencies to take steps to provide meaningful access to its programs and activities to members of the public who are limited in their English proficiency (LEP). The primary purpose of the E.O., in regards to Federally assisted and conducted programs, is to ensure that people for whom English is not a first language, people who may be said to be "limited" in their English proficiency, may still enjoy meaningful access to the programs and services offered by Federal agencies.

b. Grant Condition

In instances when E.O. 13166 is applicable, grant recipients should contact NSF's LEP Coordinator within the Office of Diversity and Inclusion for guidance at 4201 Wilson Boulevard, Suite 255 South, Arlington, VA 22230.

B. Protection of Living Organisms

1. Human Subjects

a. Background

The grantee is responsible for the protection of the rights and welfare of human subjects involved in activities supported by NSF. All research involving human subjects supported or otherwise subject to regulation by any Federal agency is covered by a policy set forth in a Common Rule, "*Protection of Human Subjects*" (http://www.access.gpo.gov/nara/cfr/waisidx_99/45cfr690_99.html). Complete instructions on preparation and submission of proposals that involve use of human subjects are available in GPG Chapter II.D.8.

b. NSF Regulation

NSF's Common Rule on Protection of Human Subjects is available on the NSF website at: http://www.nsf.gov/bfa/dias/policy/docs/45cfr690.pdf. Guidance about the regulation is available at: http://www.nsf.gov/bfa/dias/policy/guidance.htm#human.

c. Grant Condition

Each NSF grant contains, as part of the grant terms and conditions, an article implementing NSF regulations on projects involving research with human subjects.

2. Research Involving Recombinant or Synthetic Nucleic Acid Molecules

a. Applicability

This section applies to all research, for which NSF grant funds are used, that falls within the scope of the Guidelines for Research Involving Recombinant DNA or Synthetic Nucleic Acid Molecules (NIH Guidelines) (http://oba.od.nih.gov/rdna/nih_guidelines_oba.html), as amended in March 2013, hereafter referred to as the "Guidelines".

b. Policy

NSF grantees performing research within the US that falls within the scope of the Guidelines shall comply with the Guidelines, including the procedural requirements and any subsequent revisions as they are published in the Federal Register. Grantee responsibilities include:

- (i) Each organization involved in the conduct of NSF-supported recombinant or synthetic nucleic acid research subject to the Guidelines must have a standing Institutional Biosafety Committee (IBC) as specified in Section IV of the Guidelines.
- (ii) Recombinant or synthetic nucleic acid research subject to the Guidelines must be registered with the IBC indicating compliance with the containment requirements specified in Part III of the Guidelines. IBCs are required to keep records of recombinant or synthetic nucleic acid research conducted at their organization in a form that is available to NSF upon request.

c. Research Requiring Prior Approval

In certain instances research should not be initiated or registered with IBCs prior to approval and determination of containment level by the Director, NIH. Normally such experiments are reviewed by the Recombinant DNA Advisory Committee before a decision is made by the Director, NIH. Such instances are:

- (i) research for which containment levels are not explicitly specified by the Guidelines:
- (ii) research involving experiments prohibited by the Guidelines, i.e., requests for exceptions to the Guidelines; and
- (iii) requests to perform experiments without regard to the containment specified in the Guidelines, i.e., exemptions from the Guidelines.

3. Vertebrate Animals

a. Background

The grantee is responsible for the humane care and treatment of any vertebrate animal used or intended for use in such activities as field or laboratory research, development, training, experiments, biological testing or for related purposes supported by NSF grants.

b. Federal Regulations

(i) Any grantee performing research on vertebrate animals⁵ shall comply with the Animal Welfare Act [7 USC. 2131 et seq.] and the regulations promulgated thereunder by the Secretary of Agriculture [9 CFR 1.1-4.11] pertaining to the humane care, handling, and treatment of vertebrate animals held or used for research, teaching or other activities supported by Federal awards. The awardee is expected to ensure that the guidelines described in the National Academy of Science (NAS) Publication, "Guide for the Care and Use of Laboratory Animals" are followed and to comply with the Public Health Service Policy and Government Principles Regarding the Care and Use of Animals (included as Appendix D to the NAS Guide).

⁵ In addition to vertebrate animals covered by the Animal Welfare Act, the requirements specified in this coverage also are extended to rats, birds and mice.

In the case of research involving the study of wildlife in the field or in the lab, for the provision in the PHS Assurance for Institutional Commitment (Section II) that requires the organization to establish and maintain a program for activities involving animals in accordance with the *Guide for the Care and Use of Laboratory Animals* (Guide), the organization has established and will maintain a program for activities involving animals according to the Guide. The organization will follow recommendations specified in the Guide for details involving laboratory animals, and taxon-specific guidelines approved by the American Society of Ichthyologists and Herpetologists, the American Society of Mammalogists, and the Ornithological Council, as is appropriate for the taxon to be studied.⁶

- (ii) During the life of the award, additional Institutional Animal Care and Use Committee (IACUC) approval must be obtained if the protocols for use of vertebrate animals have been changed substantively from those originally proposed and approved, or if the previous approval is more than three years old. When an additional IACUC approval is required, the organization must provide to the cognizant NSF Program Officer a signed copy of a new IACUC approval letter indicating approval of the covered activities and explicitly referencing the title of the award. In the event the grantee's multi-project Assurance is cancelled or lapses, the grantee must immediately notify the NSF Grants and Agreements Officer identified in the award.
- (iii) Research facilities subject to the Animal Welfare Act using or intending to use live animals in research and who receive Federal funding are required to register the facility with the Animal and Plant Health Inspection Service (APHIS), US Department of Agriculture. A current listing of licensed animal dealers may also be obtained from APHIS. The location of the nearest APHIS Regional Office, as well as information concerning this and other APHIS activities, may be obtained at: http://www.aphis.usda.gov/.
- (iv) Awards to US grantees for projects involving the care or use of vertebrate animals at a foreign institution or foreign field site also require approval of research protocols by the US grantee's IACUC. If the project is to be funded through an award to a foreign institution or through an individual fellowship award that will support activities at a foreign institution, NSF will require a statement explicitly listing the proposer's name and referencing the title of the award to confirm that activities will be conducted in accordance with all applicable laws in the foreign country and that the *International Guiding Principles for Biomedical Research Involving Animals* (see http://www.cioms.ch/) will be followed.

c. Grant Condition

Each NSF grant contains, as part of the grant terms and conditions, an article implementing NSF regulations on projects involving research with vertebrate animals.

4. Government Permits and Activities Abroad

- a. For awards that include activities requiring permits from appropriate Federal, state, or local government authorities, the awardee should obtain any required permits prior to undertaking the proposed activities.
- b. The awardee should assure that activities carried on outside the US are coordinated as necessary with appropriate US and foreign government authorities and that necessary licenses, permits or approvals are obtained prior to undertaking proposed activities. NSF does not assume responsibility for awardee compliance with the laws and regulations of the country in which the work is to be conducted.

5. Life Sciences Dual Use Research of Concern (DURC)

a. Applicability

This section applies to all research, for which NSF grant funds may be used, that potentially falls within the scope of the *US Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern* (http://www.phe.gov/s3/dualuse/Pages/default.aspx) as published in September 2014, hereafter referred to as the "Policy".

⁶ Guidelines to the Use of Wild Birds in Research; Guidelines of the American Society of Mammalogists for the Use of Wild Mammals in Research; Guidelines for the Use of Fishes in Research; Guidelines for the Use of Live Amphibians and Reptiles in Field and Laboratory Research.

b. Policy

NSF is committed to preserving the benefits of life sciences research while minimizing the risk of misuse of the knowledge, information, products, or technologies provided by such research. The purpose to NSF's implementation of this Policy is to clarify grantee expectations about NSF-funded research with certain high-consequence pathogens and toxins with potential to be considered dual use research of concern.

Grantees are responsible for monitoring the research progress and for implementation of all appropriate biosafety and biosecurity risk mitigation measures including compliance with all applicable laws and regulations related to that implementation, including the Policy specified above. (See also http://osp.od.nih.gov/office-biotechnology-activities/biosecurity/dual-use-research-concern for Frequently Asked Questions, case studies, and other educational materials on DURC.)

C. Construction, Rearrangements and Alterations

1. Davis-Bacon Act

The Davis-Bacon Act (40 USC § § 276a et seq.) establishes minimum wages to be paid to laborers and mechanics on construction contracts to which the US is a party involving public buildings or public works within the US. A number of other statutes have extended this provision to specific Federal grant programs involving construction. However, unless specifically stated in the grant, the Davis-Bacon Act does not normally apply to NSF grants since grantees normally retain title to property acquired under the grant and the construction, if any, is normally on non-Government land.

2. Bonding and Insurance

The NSF Act (42 USC § 1870c) provides NSF with authority to enter into grants, contracts or other agreements without performance or other bonds. Therefore, unless the grant specifically provides otherwise, NSF does not require performance or other bonds or insurance.

3. Seismic Safety of Buildings

E.O. 12699 Seismic Safety of Federal and Federally-assisted or Regulated New Building Construction dated January 5, 1990, requires that consideration be given to seismic hazards in the design of buildings. Very seldom are NSF grantees involved with federally-assisted construction and rarely are new buildings involved. NSF ensures compliance with the Order through its grantees and grantee organizations by inclusion of a specific grant condition in any appropriate grant.

D. Intellectual Property

1. Patents and Inventions

a. Background

- (i) The disposition of rights to inventions made by small business firms and non-profit organizations, including universities and other institutions of higher education, during NSF-assisted research is governed by Chapter 18 of Title 35 of the USC, commonly called the Bayh-Dole Act. In accordance with a Presidential Memorandum entitled *Government Patent Policy* issued on February 18, 1983 and under the authority of Section 12 of the National Science Foundation Act of 1950, as amended (42 USC § 1871), NSF applies the policies of the Bayh-Dole Act to all its grantees. The Department of Commerce (DOC) is the lead agency for implementing the Bayh-Dole Act and has published guidance to Federal agencies in 37 CFR §401. NSF's implementing rules are published in 45 CFR § 650.
- (ii) NSF's standard Patent Rights clause, published at 45 CFR § 650.4(a) and below at Chapter VI.D.1.c, "Standard Patent Rights Clause" is identical to that prescribed in the DOC guidance (37 CFR § 401.14(a)) except that:
- (a) NSF has tailored the clause to apply to grants and to identify NSF;

- (b) pursuant to Section 401.5(d) of the DOC guidance (37 CFR § 401.5(d)), NSF has added to paragraph b. of the clause a stipulation that NSF reserves the right to direct a grantee to transfer to a foreign government or research performer such rights to any subject invention as are required to comply with any international treaty or agreement identified when the grant is made as being applicable to the assisted research;
- (c) as permitted by Section 401.5(f) of the DOC guidance (37 CFR § 401.5(f)), NSF has added a subparagraph to the end of paragraph f. of the clause to require grantees or their representatives to send NSF confirmations of the Government licenses for subject inventions and of the page of any United States patent application that contains the Federal support clause;
- (d) since NSF normally uses the same clause for all subcontractors, the first two subparagraphs of paragraph g. of the clause specified in the DOC guidance have been reduced to one;
- (e) paragraph c.1 of the clause has been changed to require that invention disclosures be submitted electronically via the iEdison system; and
- (f) paragraph L. of the clause has been changed to require that all communications required by the Patents Rights clause be submitted electronically via the iEdison system unless prior permission is obtained from the NSF Patent Assistant.

b. National Science Foundation Patent Policy

As authorized by the National Science Board (NSB), the Director of the NSF has adopted the following NSF patent policy.

- (i) In accordance with the Bayh-Dole Act and the Presidential Memorandum entitled *Government Patent Policy* issued February 18, 1983, NSF will use the Patent Rights clause prescribed by DOC in all its funding agreements for the performance of experimental, developmental or research work, including grants made to foreign entities, unless NSF determines that some other provision would better serve the purposes of that Act or the interests of the US and the general public.
- (ii) In funding agreements covered by a treaty or agreement that provide that an international organization or foreign government, research institute or inventor will own or share patent rights, NSF will acquire such patent rights as are necessary to comply with the applicable treaty or agreement.
- (iii) If a grantee elects not to retain rights to an invention, NSF will allow the inventor to retain the principal patent rights unless the grantee, or the inventor's employer, if other than the grantee, shows that it would be harmed by that action.
- (iv) NSF will normally allow any patent rights not wanted by the grantee or inventor to be dedicated to the public through publication in scientific or engineering journals or as a statutory invention registration. If another Federal agency is known to be interested in the relevant technology, however, NSF may give it an opportunity to review and patent the invention so long as that does not inhibit the dissemination of the research results to the research community.

c. Standard Patent Rights Clause

Each NSF grant contains as part of the grant terms and conditions, an article implementing the standard patent rights clause.

d. Electronic Invention Handling

Grantees are encouraged to use the iEdison System to disclose NSF subject inventions. Detailed instructions for use of that system are provided at: http://s-edison.info.nih.gov/iEdison/ and should be followed for NSF subject inventions except that:

a. All communications required must be provided electronically as a PDF or TIFF file through iEdison

unless prior permission for another form of submission is obtained from the NSF Patent Assistant.

b. NSF does not require either an Annual Utilization Report or a Final Invention Statement and Certification.

Questions on use of iEdison and requests for permission to submit material in other forms may be sent to the NSF Patent Assistant at patents@nsf.gov, or at the Office of the General Counsel, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230.

2. Copyright

a. Rights to Copyrighted Material

The following principles governing the treatment of copyrighted material produced under NSF grants were adopted by the NSB.

- (i) NSF normally will acquire only such rights to copyrighted material as are needed to achieve its purposes or to comply with the requirements of any applicable government-wide policy or international agreement.
- (ii) To preserve incentives for private dissemination and development, NSF normally will not restrict, or take any part of income earned from, copyrighted material except as necessary to comply with the requirements of any applicable government-wide policy or international agreement.
- (iii) In exceptional circumstances, NSF may restrict or eliminate an awardee's control of NSF-supported copyrighted material and of income earned from it, if NSF determines that this would best serve the purposes of a particular program or grant.

b. Standard Copyrighted Material Clause

Unless a special clause has been negotiated, each NSF grant that relates to scientific or engineering research contains as part of the grant terms and conditions, an article implementing the standard copyrighted material requirements.

c. Public Access to Copyrighted Material

NSF's policy on public access to copyrighted material (Public Access Policy) reflects the Foundation's commitment to making certain that, to the extent possible, the American public, industry and the scientific community have access to the results of federally funded scientific research. Pursuant to this policy, awardees must ensure that articles in peer-reviewed scholarly journals and papers in juried conference proceedings:

- are deposited in a public access compliant repository (as identified in the Public Access Policy);
- are available for download, reading, and analysis within 12 months of publication;
- possess a minimum set of machine-readable metadata elements as described in the Public Access Policy; and
- are reported in annual and final reports with a persistent identifier.

Either the final printed version or the final peer-reviewed manuscript is acceptable for deposit. NSF's Public Access Policy applies to awards, funded in whole or in part, as a result of proposals submitted, or due, on or after January 25, 2016. NSF's Public Access Policy may be viewed at http://www.nsf.gov/news/special reports/public access/index.jsp.

Each NSF grant contains as part of the grant terms and conditions, an article implementing the public access requirements.

3. Special Patent and Copyright Situations

a. Special Grant Provisions

At the request of the prospective grantee or on recommendation from NSF staff, the NSF Grants and Agreements Officer, with the concurrence of the cognizant NSF Program Officer, may negotiate special patent or copyright provisions when he/she determines that exceptional circumstances require restriction or elimination of the right of a prospective grantee to control principal rights to subject inventions or writings in order to better achieve the objectives of the program, the National Science Foundation Act, or (in the case of inventions) Chapter 18 of Title 35 of the USC. Every special copyright or patent provision will allow the grantee, after an invention has been made or copyrighted material created, to request that it be allowed to retain principal rights to that invention or material, unless doing so would be inconsistent with an obligation imposed on NSF by statute, international agreement or pact with other participants in, or supporters of, the research.

b. Grants Not Primarily for Research

- (i) Grants not primarily intended to support scientific or engineering research generally do not contain patent or copyrighted material provisions. Examples of such grants are travel, conference and equipment grants.
- (ii) NSF Fellowships and Traineeships. In accordance with Section 212 of Title 35 of the USC, NSF claims no rights to inventions made by fellows or trainees. The following provision will be included in each fellowship or traineeship program solicitation and made part of the grant:

INTELLECTUAL PROPERTY RIGHTS

The National Science Foundation claims no rights to any inventions or writings that might result from its fellowship or traineeship grants. However, fellows and trainees should be aware that the NSF, another Federal agency, or some private party may acquire such rights through other support for particular research. Also, fellows and trainees should note their obligation to include an Acknowledgment and Disclaimer in any publication.

[END OF PROVISION]

c. Grants Affected by International Agreements

(i) Many of the bilateral and multilateral treaties and agreements underlying NSF's international cooperative research programs contain provisions on allocation of rights to inventions or writings. These sometimes require an allocation of rights different from that provided by the standard Copyrighted Material or Patent Rights clauses. In those cases, the standard clauses will be modified through the addition of the following to the grant:

"This project is supported under the cooperative program listed below. Your rights in inventions, writings, and data may be affected."

The applicable agreement or treaty will be identified immediately beneath that sentence.

(ii) After an invention is disclosed to the Patent Assistant, the grantee of a grant subject to an international agreement will be informed as to what rights, if any, it must transfer to foreign participants. Grantees also may ask the NSF Program Officer for copies of the identified international agreement before or after accepting a grant.

4. Dissemination and Sharing of Research Results

- a. Investigators are expected to promptly prepare and submit for publication, with authorship that accurately reflects the contributions of those involved, all significant findings from work conducted under NSF grants. Grantees are expected to permit and encourage such publication by those actually performing that work, unless a grantee intends to publish or disseminate such findings itself.
- b. Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Grantees are expected to encourage and facilitate such sharing. Privileged or confidential information should be released only in a form that protects the privacy of individuals and subjects involved. General adjustments and, where essential, exceptions to this sharing expectation may be specified by the funding NSF Program or Division/Office for a particular field or discipline to safeguard the rights of individuals and subjects, the validity of results, or the integrity of collections or to accommodate the legitimate interest of investigators. A grantee or investigator also may request a particular adjustment or exception from the cognizant NSF Program Officer.
- c. Investigators and grantees are encouraged to share software and inventions created under the grant or otherwise make them or their products widely available and usable.
- d. NSF normally allows grantees to retain principal legal rights to intellectual property developed under NSF grants to provide incentives for development and dissemination of inventions, software and publications that can enhance their usefulness, accessibility and upkeep. Such incentives do not, however, reduce the responsibility that investigators and organizations have as members of the scientific and engineering community, to make results, data and collections available to other researchers.
- e. NSF program management will implement these policies for dissemination and sharing of research results, in a way appropriate to field and circumstances, through the proposal review process; through award negotiations and conditions; and through appropriate support and incentives for data cleanup, documentation, dissemination, storage and the like.

5. Tangible Property

a. Background

Some NSF grants support collection or creation of tangible property, such as insects, marine life, drilling core samples and genetically-altered microorganisms. As used in this section "tangible property" means any personal property other than equipment (see GPG Chapter II.C.2.g(iii)), and intellectual property.

b. Legal Rights to Tangible Property

Unless otherwise provided in the grant, all legal rights to tangible property collected or created during NSF-assisted research remain with the grantee or investigators as determined by the policies of the organization. As members of the scientific and engineering community, both grantees and investigators are responsible for making such tangible property appropriately available to other researchers.

E. Publication / Distribution of Grant Materials

1. NSF Policy

NSF advocates and encourages open scientific and engineering communication. NSF expects significant findings from research it supports to be promptly submitted for publication, with authorship that accurately reflects the contributions of those involved. Copyrighted material published in peer-reviewed scholarly journals and papers included in juried conference proceedings must comply with NSF's Public Access Policy as implemented in the grant terms and conditions.

2. Costs

Cost of documenting, preparing, publishing, disseminating and sharing research findings and supporting material are allowable charges against the grant. (See AAG Chapter V.A.2.c.)

3. Responsibilities

Unless otherwise provided in the grant, preparation, content, editing, identification of authorship and submission for publication of significant research findings are the responsibility of the investigators, consistent with such policies and procedures as the grantee may prescribe.

4. Grantee Obligations

- a. Acknowledgement of Support. Unless otherwise provided in the grant, the grantee is responsible for assuring that an acknowledgment of NSF support is made:
- (i) in any publication (including Web pages) of any material based on or developed under this project, in the following terms:

"This material is based upon work supported by the National Science Foundation under Grant No. (NSF grant number)."

- (ii) NSF support also must be orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.
- b. Disclaimer. The awardee is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this award, except scientific articles or papers appearing in scientific, technical or professional journals, contains the following disclaimer:

"Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

- c. Copies for NSF. The grantee is responsible for assuring that the cognizant NSF Program Officer is provided access to, either electronically or in paper form, a copy of every publication of material based on or developed under this award, clearly labeled with the award number and other appropriate identifying information, promptly after publication.
- d. Compliance with NSF Public Access Policy. The grantee is responsible for ensuring that copyrighted material published in peer-reviewed scholarly journals and papers in juried conference proceedings are accessible to the public in accordance with the grant terms and conditions.
- e. Grantees also should note their obligations in regard to copyrights (see AAG Chapter VI.D.2) and their responsibilities as members of the scientific and engineering community to disseminate and share research results (see AAG Chapter VI.D.4).

F. International Considerations

1. Travel to Foreign Countries

a. Policy

(i) Expenses for transportation, lodging, subsistence and related items incurred by project personnel and by outside consultants employed on the project, (see GPG Chapter II.C.2.g(iv)) who are on travel status on business related to an NSF-supported project are allowable as prescribed in the governing OMB cost principles. The requirements for prior approval detailed in the governing OMB cost principles are waived.

- (ii) Except as provided in the governing OMB cost principles, the difference between economy airfare and a higher-class airfare is unallowable. A train, bus or other surface carrier may be used in lieu of, or as a supplement to, air travel at the lowest first-class rate by the transportation facility used. If such travel, however, could have been performed by air, the allowance will not normally exceed that for jet economy airfare.
- (iii) Support for the foreign travel of an investigator's dependents is allowable only under the conditions identified in AAG Chapter V.C.5.

b. Use of US-Flag Air Carriers

- (i) In accordance with the Fly America Act (49 USC 40118), any air transportation to, from, between, or within a country other than the US of persons or property, the expense of which will be assisted by NSF funding, must be performed by or under a code-sharing arrangement with a US-flag air carrier if service provided by such a carrier is available (see Comptroller General Decision B-240956, dated September 25, 1991). Tickets (or documentation for electronic tickets) must identify the US flag air carrier's designator code and flight number.
- (ii) For the purposes of this requirement, US-flag air carrier service is considered available even though:
- (a) comparable or a different kind of service can be provided at less cost by a foreign-flag air carrier;
- (b) foreign-flag air carrier service is preferred by, or is more convenient for, NSF or traveler; or
- (c) service by a foreign-flag air carrier can be paid for in excess foreign currency.
- (iii) The following rules apply unless their application would result in the first or last leg of travel from or to the US being performed by a foreign-flag air carrier:
- (a) a US-flag air carrier shall be used to destination or, in the absence of direct or through service, to the farthest interchange point on a usually traveled route.
- (b) if a US-flag air carrier does not serve an origin or interchange point, a foreign-flag air carrier shall be used only to the nearest interchange point on a usually traveled route to connect with a US flag air carrier.

c. Use of Foreign-Flag Air Carriers

There are certain circumstances under which use of a foreign-flag air carrier is permissible. These circumstances are outlined below:

(i) Airline "Open Skies" Agreement:

A foreign flag air carrier may be used if the transportation is provided under an air transportation agreement between the United States and a foreign government, which the Department of Transportation has determined meets the requirements of the Fly America Act. For information on "open skies" agreements in which the United States has entered, please refer to the GSA website at: http://www.gsa.gov/portal/content/103191.

Note on US/European Union Open Skies Agreement

In 2007, the US entered into an "Open Skies" Agreement with the European Union ("EU"). This agreement was modified in June 2010. The current Agreement gives European Community airlines (airlines of Member States) the right to transport passengers and cargo on flights funded by the US government, when the transportation is between: (1) any two points outside the United States; or (2) a point in the United States and any point outside the United States that the EU airline is authorized to serve under the "Open Skies" Agreement.

In 2011, two significant changes were made to the US/EU Open Skies Agreement. First, EU airlines are now granted the right to transport civilian agency-funded passengers who are NOT eligible to travel on GSA Airline City Pair Contract fares (e.g., grantees) between a point in the United States and a point outside the United States even if there is a GSA Airline City Pair Contract fare in effect between the origin and destination points. An individual, however, who is traveling on a route for which there is a City Pair Contract fare in effect, and who

is eligible for such a fare (e.g., Federal employee), are required to fly on a US carrier, absent another applicable exception.

Second, under the amended Agreement, EU airlines are now authorized to transport passengers between points in the United States and points outside the EU if the EU airline is authorized to serve the route under the Agreement. This includes flights that originate, arrive, or stop in the EU. Prior to this change, EU airlines were limited to flying passengers between points in the US and points in the EU.

(ii) Involuntary Rerouting

Travel on a foreign-flag carrier is permitted if a US-flag air carrier involuntarily reroutes the traveler via a foreign-flag air carrier, notwithstanding the availability of alternative US-flag air carrier service.

(iii) Travel To and From the US on non-European Community Airlines

Use of a non-European Community foreign-flag air carrier is permissible if the airport abroad is:

- (a) the traveler's origin or destination airport, and use of US-flag air carrier service would extend the time in a travel status by at least 24 hours more than travel by a foreign-flag air carrier; or
- (b) an interchange point, and use of US-flag air carrier service would increase the number of aircraft changes the traveler must make outside of the US by two or more, would require the traveler to wait four hours or more to make connections at that point, or would extend the time in a travel status by at least six hours more than travel by a foreign-flag air carrier.
- (iv) Travel Between Points Outside the US on non-European Community Airlines

Use of a non-European Community foreign-flag air carrier is permissible if:

- (a) travel by a foreign-flag air carrier would eliminate two or more aircraft changes en route;
- (b) travel by a US-flag air carrier would require a connecting time of four hours or more at an overseas interchange point; or
- (c) the travel is not part of the trip to or from the US, and use of a US-flag air carrier would extend the time in a travel status by at least six hours more than travel by a foreign-flag air carrier.
- (v) Short Distance Travel.

For all short distance travel, regardless of origin and destination, use of a foreign-flag air carrier is permissible if the elapsed travel time on a scheduled flight from origin to destination airport by a foreign-flag air carrier is three hours or less and service by a US-flag air carrier would double the travel time.

2. Charter Flights

Because of the risk of catastrophic loss, NSF does not encourage the use of charter flights as a means of mass transportation for groups of scientists and engineers nor does it make arrangements for purchase of charter flight airline tickets.

3. Projects in a Foreign Country

- a. For awards that include activities requiring permits from appropriate Federal, state, or local government authorities, the grantee should obtain any required permits prior to undertaking the proposed activities.
- b. The grantee must comply with the laws and regulations of any foreign country in which research is to be conducted. Areas of potential concern include: (1) requirements for advance approval to conduct research or surveys; (2) special arrangements for the participation of foreign scientists and engineers; and (3) special visas

for persons engaged in research or studies. NSF does not assume responsibility for grantee compliance with the laws and regulations of the country in which the work is to be conducted.

c. The grantee also should assure that activities carried on outside the US are coordinated as necessary with appropriate US and foreign government authorities and that necessary licenses, permits or approvals are obtained prior to undertaking the proposed activities.

4. Passports and Visas

NSF assumes no responsibility for securing passports or visas required by any person because of participation in an NSF-supported project. For restrictions concerning directly charging visa costs to an NSF award, see 2 CFR § 200.463.

It should be noted that some countries that normally do not require visas for tourists do require special visas for scientists and engineers engaged in research or studies.

G. Intergovernmental Review of Federal Programs

The Foundation's regulation on Intergovernmental Review of National Science Foundation Programs and Activities is published in 45 CFR Part 660.

H. Handling of Information

1. Questionnaires: Data Collection Under NSF Grants

a. Paperwork Control

Under the OMB regulation, *Controlling Paperwork Burdens on the Public* (5 CFR § 1320), if a grantee obtains information from ten or more persons by means of identical questions, it is considered to be "sponsored" by NSF only if:

- (i) the grantee is collecting the information at the specific request of NSF; or
- (ii) the terms of the grant require specific approval by NSF of the collection or its procedures.

If either of these conditions is met, OMB approval of the data collection is generally required and grantees should obtain the necessary control number from the cognizant NSF Program Officer.

b. NSF Policy

Data collection activities of NSF grantees are the responsibility of grantees, and NSF support of a project does not constitute NSF approval of the survey design, questionnaire content or data collection procedures. No representation may be made to respondents that such data are being collected for, or in association with, NSF or the government. However, this requirement is not intended to preclude mention of NSF support of the project in response to an inquiry or acknowledgment of such support in any publication of this data (see AAG Chapter VI.E.4).

2. Release of Information by NSF

a. Press Releases

Grants for projects which appear to be of special interest to the general public may be made the subject of an NSF or joint NSF/grantee organization press release to the news media. (See AAG Chapter V.C.2.)

b. Open Government Legislation

(i) Pursuant to the Freedom of Information Act (FOIA) (5 USC § 552), NSF will provide agency records, with certain exceptions, if the request is in writing, includes the requester's name and mailing address, is clearly

identified as a FOIA request, and describes the records sought with sufficient specificity to permit identification. The requester also must agree to pay fees that are chargeable under the NSF regulations. Detailed procedures are contained in 45 CFR § 612. Further information is available at: http://www.nsf.gov/policies/foia.jsp.

(ii) The Government in the Sunshine Act (5 USC § 552b) requires that all meetings of the National Science Board be open to public observation unless the subject falls within one of ten exemptions. NSF's Sunshine Act regulations are contained in 45 CFR § 614. The Sunshine Act and the FOIA cited above, may require NSF to release to the public information, correspondence and documents received by NSF from grantees, unless they fall within the Acts' limited exceptions.

c. Release of Project Reports

NSF expects significant findings from research it supports to be promptly submitted for publication. To the extent permitted by law, NSF will honor requests from grantees that release of Annual and Final Project Reports be delayed to permit orderly dissemination of significant findings through refereed channels. Unless such a request is received or material is marked as proprietary, such reports may be made available to others without notice to the grantee. Information, the disclosure of which might invade personal privacy, will be redacted before release.

I. Tax Status

Determination of the tax status of an organization or person receiving compensation in any form as a result of an NSF grant is the responsibility of the IRS, State and local tax authorities and the courts.

J. Protection of Properties in the National Register of Historic Places

NSF is required by 16 USC §470f to take into account the effect of grant activities on properties included in the National Register of Historic Places. Occasionally, an NSF grant may involve activities that require mitigation or other actions under the National Historic Preservation Act and implementing regulations of the Advisory Council on Historic Preservation (36 CFR §800). In such cases, as deemed appropriate by NSF, conditions executing the goals of the National Historic Preservation Act may be included in the grant and grantees or prospective grantees may be required to coordinate with State or local historical preservation officers.

K. Environmental Compliance

Prior to making an award, NSF considers the anticipated environmental impacts associated with the activities described in the proposal. The assessment of environmental impacts is based, in part, on information provided by the Institution/Organization. If, while performing the work required by the award, the awardee learns of any potential or actual unanticipated environmental impacts, the awardee shall immediately notify NSF of such impacts. The awardee also shall cease all work anticipated to cause or causing such unanticipated environmental impacts until NSF has had a reasonable opportunity to assess the situation, comply with all relevant environmental laws, and provide further direction to the awardee.

L. National Security

NSF awards are intended for unclassified, publicly releasable research. The awardee will not be granted access to classified information. NSF does not expect that the results of the research project will involve classified information.

If, however, in conducting the activities supported under an award, the PI is concerned that any of the research results involve potentially classifiable information that may warrant Government restrictions on the dissemination of the results, the PI should promptly notify the cognizant NSF Program Officer.

M. Miscellaneous

1. Liabilities and Losses

NSF cannot assume any liability for accidents, bodily injury, illness, breach of contract, any other damages or loss, or any claims arising out of any activities undertaken pursuant to the grant, whether with respect to persons or property of the grantee or third parties. The grantee institution is advised to insure or otherwise protect itself or others, as it may deem desirable.

2. Pre-College Students and Experimental Curriculum Development Projects

As required by 42 USC §1869 a and b, grantees of projects which involve pre-college students in research or development, or pilot-testing, evaluation or revision of, experimental or innovative curriculum development projects will:

- a. provide to the school board, or comparable authority responsible for the schools considering participation in the project, information concerning the need for and purposes of, the particular education project, the proposed content of the material to be used, the expected benefits to be derived and other information to assist the jurisdiction in arriving at a decision on participation;
- b. obtain written approval for participation in the project activities after the responsible authority has carried out its procedures;
- c. provide information and materials to the responsible school authority to assist it in carrying out its own established procedures regarding the participation of students in project activities;
- d. provide information to NSF describing compliance with the above provisions; and
- e. provide in every publication, testing or distribution agreement involving instructional material developed under a grant (including but not limited to teacher's manuals, textbooks, films, tapes or other supplementary material) that such material will be made available within the school district using such material, for inspection by parents or guardians of children engaged in educational programs or projects of that school district.

3. Use of Metric Measurements

The Metric Conversion Act of 1975 (15 USC § § 205a-k) and E.O. 12770 (3 CFR, § 1991 comp.) encourage Federal agencies to use the Metric System in procurement, grants and other business-related activities. The NSF grant will contain a provision encouraging PI/PDs to submit project reports, final reports, other reports and publications produced under grants that employ the metric system of measurements.

Chapter VII: Grant Administration Disputes and Misconduct

A. Suspension and Termination Procedures

1. Definitions

- a. SUSPENSION means an action by NSF that temporarily withholds Federal support of a project pending corrective action by the grantee or a decision by NSF to terminate the grant.
- b. TERMINATION means the ending of the NSF award, in whole or in part at any time prior to the planned end of the period of performance.

2. Suspension and Termination

a. NSF Policy

- (i) A grant may be suspended or terminated in whole or in part in any of the following situations by:
- (a) NSF when the grantee fails to comply with the terms and conditions of the grant;
- (b) NSF when the Foundation has cause;
- (c) NSF when ordered by the Deputy Director under NSF's Regulation on Research Misconduct (45 CFR § 689);
- (d) mutual agreement of NSF and the grantee; or
- (e) the grantee on written notice to NSF setting forth the reasons for such action, the effective date, and, in the case of partial termination, the portion to be terminated or suspended (with the understanding that if NSF determines that the unterminated portion will not accomplish the purposes of the grant it may suspend or terminate the entire grant).
- (ii) Normally, action by NSF to suspend or terminate a grant will be taken only after the grantee has been informed by NSF of the proposed action, or informed of any deficiency on its part and given an opportunity to correct it. NSF, however, may immediately suspend or terminate a grant without notice when it believes such action is reasonable to protect the interests of the government.
- (iii) No costs incurred during a suspension period or after the effective date of a termination will be allowable, except those costs which, in the opinion of NSF, the grantee could not reasonably avoid or eliminate, or which were otherwise authorized by the suspension or termination notice, provided such costs would otherwise be allowable under the terms of the grant and the governing cost principles.
- (iv) Within 30 days of the termination date the grantee will furnish a summary of progress under the grant and an itemized accounting of costs incurred prior to the termination date or pursuant to (iii) above. Final allowable costs under a termination settlement shall be in accordance with the terms of the grant, including this section, and the governing cost principles, giving due consideration to the progress under the grant. In no event will the total of NSF payments under a terminated grant exceed the grant amount or the NSF pro rata share when cost sharing was anticipated, whichever is less.
- (v) A notice of termination other than by mutual agreement and/or the final settlement amount may be subject to review pursuant to AAG Chapter VII.B.
- (vi) NSF will report award terminations to the OMB-designated integrity and performance system in accordance with Federal regulation, but only after the grantee has had an opportunity to exhaust the review procedures contained in AAG Chapter VII.B.

b. Procedures for Suspension or Termination by NSF

- (i) When it is believed that a grantee has failed to comply with one or more of the terms and conditions of a grant, the NSF Grants and Agreements Officer will normally advise the grantee in writing of the nature of the problem and that failure to correct the deficiency may result in suspension or termination of the grant. The grantee will be requested to respond in writing within 30 calendar days of the date of such letter, describing the action taken or the plan designed to correct the deficiency. Copies of such correspondence will be furnished to the PI/PD and to the cognizant NSF Program Officer. NSF, however, may immediately suspend or terminate a grant without notice when it believes such action is reasonable to protect the interests of the government.
- (ii) If a satisfactory response is not received within the above period, the NSF Grants and Agreements Officer may issue a notice immediately suspending authority to further obligate grant funds, in whole or in part. Notice of suspension is sent to the Authorized Organizational Representative, with a copy to the PI/PD. Within NSF, copies are furnished to the NSF Division of Financial Management and to the cognizant NSF Program Officer. The notice will set forth the terms of the suspension and its effective date.
- (iii) Normally, the suspension will remain in effect for a maximum of 60 days to allow the grantee to take corrective action. In the event that the deficiency is not corrected to the satisfaction of NSF, the NSF Grants and Agreements Officer may issue a notice of termination, addressed as in b., above. The notice will set forth the reasons for the action and its effective date.
- (iv) The remedies described in AAG Chapter VII.B do not preclude a grantee being subject to debarment and suspension under the OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement) published at 2 CFR § 180 and NSF's Implementation of the OMB Guidelines, located at 2 CFR Chapter XXV.
- (v) Suspension or termination due to research misconduct will be imposed as provided in that regulation.

3. Termination by Mutual Agreement

a. NSF Policy

Circumstances may arise in which either NSF or the grantee wishes to terminate a project. If both parties agree that continuation of the project would not produce results commensurate with the further expenditure of funds, or if there arises any other reason, the grant may be terminated by mutual agreement.

b. Procedures

- (i) If the grantee wishes to terminate the project, the Authorized Organizational Representative should advise the NSF Grants and Agreements Officer in writing and send a copy to the cognizant NSF Program Officer.
- (ii) If NSF wishes to terminate the project, the NSF Grants and Agreements Officer will advise the grantee's Authorized Organizational Representative in writing and send copies to the PI/PD and the cognizant NSF Program Officer.
- (iii) Within 30 days after receipt of request from either party for termination by mutual agreement, the other party will provide an appropriate written response. In the event of disagreement between the parties, the NSF Grants and Agreements Officer will make a final decision, subject to the review procedures prescribed by AAG Chapter VII.B.
- (iv) Following termination, grant closeout procedures will be initiated.

4. NSF Suspension or Termination Review Procedure

Grantees should refer to AAG Chapter VII.B.3 for procedures to request review of a suspension or termination notice. Pending resolution of the request for review, a notice of termination shall remain in effect.

B. Informal Resolution of Grant Administration Disputes

1. Background

Consistent with the *Recommendation on Grant Disputes* by the Administrative Conference of the US, and with the intent of the provisions of Alternative Dispute Resolution, the Foundation provides the informal resolution processes described below concerning disputes or disagreements that may arise over Grants and Agreements Officer post-award decisions under an NSF grant.

2. Scope of Post-Award Disputes Covered

The disputes below are covered under the process described in AAG Chapter VII.B.3:

- a. cost disallowances pursuant to a Grants and Agreements Officer's decision (e.g., specific disallowances under an individual grant or as a result of an audit report);
- b. termination orders; and
- c. the final settlement amount under a termination.
- Procedures
- a. The grantee should submit a certified letter addressed to both the Division Director, Division of Grants and Agreements (DGA) and the Division Director, Division of Acquisition and Cooperative Support (DACS), National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. This letter must specify the grantee's disagreement or dispute and identify the NSF Grants and Agreements Officer's decision in question, giving reasons for the request for review and providing any other material pertinent to the request. NSF will determine the appropriate Division to respond to the dispute.
- b. The certified letter to the Division Directors, DGA and DACS, must be postmarked no later than 30 days after the date of the NSF letter notifying the grantee of the decision in question. The time for filing a request for review is strictly enforced and no extensions will be granted.
- c. The request for review need not follow a prescribed format; however, it must contain a full statement of the grantee's position with respect to the disputed matter and the facts and rationale that support the grantee's position. Dispute requests will be reviewed if the grantee:
- submits new information (which was unavailable at the time of the original decision);
- identifies an error in fact or application of NSF policy in the original decision; or
- improper procedures were followed in the original decision.
- d. The Division Director, DGA or DACS, will review or designate one or more individuals to review the matter. One reviewing official will be at least at a management level equivalent to the official who made the decision that is being reviewed. In no case, will the review be conducted by any individual involved with the original decision or involved in recommending and/or monitoring the programmatic aspects of the project, or responsible for negotiating and/or administering its business or financial aspects.
- e. The designated individual(s) will review and consider all relevant information available. A report which identifies the conclusion and recommendation will be completed, and in disputes covered under:
- (i) AAG Chapter VII.B.2.a and AAG Chapter VII.B.2.b, the report will be completed within 30 days and forwarded to the Director, DGA or DACS or their designee for a final and unappealable written decision for the agency. The Director, DGA or DACS or their designee will communicate the decision in writing to the grantee, normally within 15 days of receipt of the report, unless otherwise specified by NSF.
- (ii) AAG Chapter VII.B.2.c, the report will be completed within 90 days and forwarded to the NSF Deputy Director or his/her designee. The NSF Deputy Director or his/her designee will make the final and unappealable

decision for the agency and will communicate the decision in writing to the grantee within 15 days of receipt of the report unless otherwise specified by NSF.

C. Research Misconduct

RESEARCH MISCONDUCT means fabrication, falsification, or plagiarism in proposing or performing research funded by NSF, reviewing research proposals submitted to NSF, or in reporting research results funded by NSF.

1. NSF Policies and Responsibilities

- a. The NSF will take appropriate action against individuals or organizations upon a determination that misconduct has occurred. It may also take interim action during an investigation. Possible actions include sending a letter of reprimand to the individual or organization, requiring prior NSF approval of particular activities by an individual or organization, requiring special assurances of compliance with particular policies, restricting designated activities or expenditures under particular grants, suspending or terminating grants, debarring or suspending an individual or organization and prohibiting participation by an individual as an NSF reviewer, advisor or consultant.
- b. NSF will find misconduct only after careful inquiry and investigation by a grantee organization, by another Federal agency or by NSF. An "inquiry" consists of preliminary information-gathering and preliminary fact-finding to determine whether an allegation or apparent instance of misconduct has substance. An investigation must be undertaken if the inquiry determines the allegation or apparent instance of misconduct has substance. An "investigation" is a formal development, examination, and evaluation of a factual record to determine whether misconduct has taken place or, if misconduct has already been confirmed, to assess its extent and consequences or determine appropriate action.
- c. Before NSF makes any final finding of misconduct or takes any final action on such a finding, NSF will normally afford the accused individual or organization notice, a chance to provide comments and rebuttal and a chance to appeal. In structuring procedures in individual cases, NSF may take into account procedures already followed by other entities investigating or adjudicating the same allegation of misconduct.
- d. Debarment or suspension for misconduct will be imposed only after further procedures described in applicable debarment and suspension regulations (2 CFR § 180 and 2 CFR Chapter XXV).
- e. The Office of Inspector General oversees investigations of research misconduct and conducts any NSF inquiries and investigations into suspected or alleged research misconduct.
- f. The Deputy Director adjudicates research misconduct proceedings and the Director decides appeals.
- g. After receiving an investigation report, the subject's rebuttal and recommendations of the OIG, the NSF Deputy Director may initiate further investigation or hearings or order interim or final actions. A written disposition specifying actions to be taken will be sent to affected individuals or organizations and will include instructions on how to pursue an appeal to the Director of the Foundation.

2 Role of Grantees

- a. Grantees bear primary responsibility for prevention and detection of misconduct. In most instances, NSF will rely on grantees to promptly:
- (i) initiate an inquiry into any suspected or alleged misconduct;
- (ii) conduct a subsequent investigation, if the inquiry finds substance;
- (iii) take action necessary to ensure the integrity of research, the rights and interests of research subjects and the public and the observance of legal requirements or responsibilities; and
- (iv) provide appropriate safeguards for subjects of allegations as well as informants.

- b. If a grantee wishes NSF to defer independent inquiry or investigation, it should:
- (i) inform NSF immediately if an initial inquiry finds substance;
- (ii) keep NSF informed during such an investigation;
- (iii) notify NSF even before deciding to initiate an investigation or as required during an investigation:
- (a) if there is reasonable indication of possible violations of civil or criminal law;
- (b) if public health or safety are at risk;
- (c) if NSF's resources, reputation, or other interests need protecting;
- (d) if Federal action may be needed to protect the interests of a subject of the investigation or of others potentially affected;
- (e) if the research community or the public should be informed; or
- (f) if research activities should be suspended.
- (iv) provide NSF with the final report from any investigation.
- c. If a grantee wishes NSF to defer independent inquiry or investigation, it should complete any inquiry and decide whether an investigation is warranted within 90 days. It should similarly complete any investigation and reach a disposition within 180 days. If completion of an inquiry or investigation is delayed, but the grantee wishes NSF deferral to continue, NSF may require submission of periodic status reports.
- d. Grantees should maintain and effectively communicate to their staffs appropriate policies and procedures relating to misconduct, which should indicate when NSF must or should be notified.
- e. Online research ethics training is available through the Department of Health and Human Services, Office of Research Integrity at http://ori.hhs.gov/education/products/rcr_misconduct.shtml.

3. Reporting Possible Misconduct

Possible misconduct in activities funded by NSF should be reported to the Office of Inspector General, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230, (703) 292-7100 or (800) 428-2189 or via email at oig@nsf.gov.

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Privacy Act and Public Burden Statements

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; and project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to proposer institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies or other entities needing information regarding Proposers or nominees as part of a joint application review process, or in order to coordinate programs or policy; and to another Federal agency, court, or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

An agency may not conduct or sponsor, and a person is not required to respond to, an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding the burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to:

Suzanne H. Plimpton Reports Clearance Officer Office of the General Counsel National Science Foundation Arlington, VA 22230