



NATIONAL SCIENCE FOUNDATION (NSF)
Grant General Conditions (GC-1)
Effective FEBRUARY 24, 2014

Effective February 24, 2014, new NSF grants and funding amendments to existing NSF grants begin referencing and are subject to the *Grant General Conditions (GC-1)* dated 02/14. Unless otherwise noted in a specific article, the *Grant General Conditions* apply to all new NSF grants and funding amendments to existing NSF grants awarded on or after February 24, 2014.

TABLE OF CONTENTS

Article Subject

1. Grantee Responsibilities and Federal Requirements
2. Prior Approval Requirements
3. Pre-Award Costs
4. No-Cost Extensions
5. Consultant Services
6. Equipment
7. Participant Support Costs
8. Significant Project Changes
 - a. Transfer of the Project Effort (Subawards)
 - b. Change in Objectives or Scope
 - c. Absence or Change of Principal Investigator
9. Procurement Standards
10. Travel
 - a. Allowability of Travel Expenses
 - b. Travel Support for Dependents of Key Project Personnel
 - c. Use of U.S.-Flag Air Carriers
 - d. Use of Foreign-Flag Air Carriers
11. Rearrangements and Alterations
12. Allowable Costs
13. Payments
14. Continuing Grant Increments
15. Project Reporting Requirements
 - a. Annual Project Reports
 - b. Final Project Report
 - c. Project Outcomes Report for the General Public
16. Expenditure Reports
17. Information Collection
18. Responsible Conduct of Research
19. Reporting Subawards and Executive Compensation
20. System for Award Management and Universal Identifier Requirements

21. Federal Tax Obligations
22. Unpaid Federal Tax Liability
23. Criminal Convictions
24. Copyrightable Material
25. Program Income
26. Publications
 - a. Acknowledgment of Support
 - b. Disclaimer
 - c. Copies for NSF
 - d. Metric System
27. Patent Rights
28. Cost Sharing and Cost Sharing Records
29. Audit and Records
30. Site Visits
31. Suspension or Termination
32. Termination Review Procedure
33. Nondiscrimination
34. Reporting Classifiable Information
35. Animal Welfare
36. Research Involving Recombinant DNA Molecules
37. Clean Air and Water
38. Human Research Subjects
39. Investigator Financial Disclosure Policy
40. State Sales and Use Taxes
41. Debarment and Suspension
42. Resolution of Conflicting Conditions

Other Considerations

43. Liability
44. Sharing of Findings, Data, and Other Research Products
45. Government Permits and Activities Abroad
46. Sense of the Congress on Use of Funds
47. Increasing Seat Belt Use in the United States

1. Grantee Responsibilities and Federal Requirements

- a. The grantee has full responsibility for the conduct of the project or activity supported under this award and for adherence to the award conditions. Although the grantee is encouraged to seek the advice and opinion of NSF on special problems that may arise, such advice does not diminish the grantee's responsibility for making sound scientific and administrative judgments and should not imply that the responsibility for operating decisions has shifted to NSF. The grantee is responsible for notifying NSF about: (1) any allegation of research misconduct that it concludes has substance and requires an investigation in accordance with NSF research misconduct regulations published at 45 Code of Federal Regulations (CFR) Part 689; or (2) any significant problems relating to the administrative or financial aspects of the award.
- b. The requirements of this award are contained in these *Grant General Conditions* unless otherwise specified in the award instrument. Certain applicable Federal administrative standards are incorporated by reference. The applicable requirements are contained in:

1. 2 CFR Part 215, Uniform Administrative Requirements for Grants and Cooperative Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations. NSF has determined that 2 CFR Part 215 standards also will be applied to commercial organizations, including small businesses;
 2. 45 CFR Part 602, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- c. By acceptance of this award, the grantee agrees to comply with the applicable Federal requirements for grants and cooperative agreements and to the prudent management of all expenditures and actions affecting the award. A listing of National Policy Requirements that grantees must adhere to, where applicable, is located at: http://www.nsf.gov/bfa/dias/policy/rtc/appc_june11.pdf. Documentation for each expenditure or action affecting this award must reflect appropriate organizational reviews or approvals that 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:
1. is consistent with award terms and conditions;
 2. is consistent with NSF and grantee policies;
 3. represents effective utilization of resources; and
 4. does not constitute a significant project change (see Article 8).

Nothing in this article shall be construed to require administrative reviews or documentation that duplicates those already required by existing organizational systems or by applicable Federal standards, e.g., 2 CFR Part 215.

- d. The grantee is responsible for ensuring that the Principal Investigator(s) or Project Director(s) receives a copy of the award conditions, including: the award notice, the budget, these general terms and conditions, any special terms and conditions and any subsequent changes in the award conditions. These grant conditions are made available to the grantee by NSF in electronic form at http://www.nsf.gov/awards/managing/general_conditions.jsp?org=NSF, and may be duplicated, copied or otherwise reproduced by the grantee as appropriate. This provision does not alter the grantee's full responsibility for conduct of the project and compliance with all award terms and conditions. Award notices are available electronically via the NSF FastLane system at <https://www.fastlane.nsf.gov/fastlane.jsp>. Sponsored project offices are able to view, print and/or download NSF award notices for their organizations and Principal Investigators (PIs) can access their individual award notices through use of the FastLane system.

2. Prior Approval Requirements

Unless otherwise specified in the award, provisions of the applicable Federal cost principles and other Federal administrative requirements for prior agency approval apply only to the activities and expenditures specified below.

- a. Written prior approval from the NSF Grants and Agreements Officer is required for:
 1. Significant Project Changes.
 - (a) Transfer of the project effort (see Article 8);
 - (b) Change in objective or scope (see Article 8);
 - (c) Absence or change of PI (see Article 8);
 - (d) Change in the amount of cost sharing reflected on Line M of the award budget (see Article 28); or
 2. Rearrangements/Alterations aggregating \$25,000 or over (Construction) (see Article 11).
- b. Written prior approval from the NSF Program Officer is required for reallocation of funds provided for participant or trainee support (see Article 7).
- c. Requests for the prior approvals identified above (as well as other types of award related notifications stipulated in the [NSF Proposal & Award Policies & Procedures Guide, Part II; Award & Administration Guide \[AAG\] Chapter II, Exhibit II-1](#)) must be submitted electronically to NSF through use of the NSF FastLane system.

3. Pre-Award Costs

- a. Grantees may approve pre-award costs incurred within the ninety calendar day period immediately preceding the effective date of the award. Requests for approval of pre-award costs for periods greater than 90 calendar days must be submitted electronically via the NSF FastLane system. Pre-award expenditures prior to funding of an increment within a continuing award are not subject to this limitation or approval requirement, but are subject to paragraph c. below.
- b. Pre-award costs must be necessary for the effective and economical conduct of the project and the costs must be otherwise allowable in accordance with Article 12.
- c. 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 expected.

4. No-Cost Extensions

- a. Grantees may authorize a one-time extension of the expiration date of the award up to 12 months if additional time beyond the established expiration date is required to assure adequate completion of the original scope of work within the funds already made available.¹ A single extension, which shall not exceed 12 months, may be made for this purpose and must be made prior to the originally established expiration date. This one-time extension may not be exercised merely for the purpose of using any unliquidated award balances.
- b. Grantees shall notify NSF, providing supporting reasons for the extension, and the revised expiration date, at least ten days prior to the expiration date specified in the

¹ Awardees are not authorized to extend an award that contains a zero balance.

award to ensure accuracy of NSF's award data. All grantee-authorized extensions must be submitted electronically via the FastLane system.

- c. Requests for no-cost extensions beyond the above referenced authority must follow the procedures set forth in [AAG Chapter I.D.3.c](#).

5. Consultant Services

Costs of consultants, including those who are members of a particular profession or possess a special skill and who are not officers or employees of the performing organization, are allowable when reasonable in relation to the services rendered. While NSF appropriations no longer identify a limitation on payments to consultants under NSF awards, payments should be comparable to the normal or customary fees charged and received by the consultant for comparable services, especially on non-government contracts and grants.

6. Equipment

a. *Title to Equipment – Non-profit Organizations*

Unless otherwise specified in the grant, title to equipment purchased or fabricated with NSF grant funds shall vest in the grantee upon acquisition. Such equipment is considered exempt property and shall be acquired and used in accordance with paragraph c below.

b. *Title to Equipment – Commercial Organizations*

Unless otherwise specified in the award, title to equipment purchased or fabricated with NSF award funds by a small business or other commercial firm shall vest in the Government. Such equipment shall be acquired and used in accordance with paragraph c below.

c. *Conditions for Acquisition and Use of Equipment*

1. Grantee Assurance. The grantee will assure that each purchase of equipment is:
 - (a) necessary for the research or activity supported by the grant;
 - (b) not otherwise reasonably available and accessible;
 - (c) of the type normally charged as a direct cost to sponsored agreements;
and
 - (d) acquired in accordance with organizational practice.
2. General Purpose Equipment. Expenditures for general-purpose equipment (see [AAG Chapter V.B.2d](#)) are unallowable unless the equipment is primarily or exclusively used in the actual conduct of the research.
3. Equipment Usage. The equipment will remain in use for the specific project for which it was obtained in accordance with 2 CFR § 215.34(c), unless the provision in 2 CFR § 215.34(e) applies.
4. Equipment Sharing. The equipment must be shared on other projects or programs in accordance with 2 CFR § 215.34(d).

5. **Property Management Standards.** The grantee shall maintain a property management system that, at a minimum, meets the requirements of 2 CFR § 215.34(f). Because of increasing threats to information technology systems, the grantee is reminded that, under 2 CFR §§ 215.34.(f). (4) and (5), "[a] control system shall be in effect to insure adequate safeguards to prevent loss, damage, or theft of the equipment" and "[a]dequate maintenance procedures shall be implemented to keep the equipment in good condition." This requirement imposes on the grantee a duty to adequately maintain and to insure adequate safeguards against the loss, damage, or theft of information technology equipment and systems purchased with NSF funds.

6. **Inventory Requirements.**
 - (a) In accordance with the requirements of 2 CFR § 215.33(a)(1), for all NSF-owned equipment equal to or exceeding \$5,000, the grantee must submit an annual inventory listing to the NSF Property Administrator, Division of Administrative Services (DAS). The listing should include all NSF-owned equipment purchased or constructed, including land and buildings, under the award or acquired by screening excess through the General Services Administration (GSA); and include the type of equipment or property, serial number, acquisition price, acquisition date and condition of the equipment. In the event that the grantee is in possession of NSF-owned equipment under multiple awards, the reporting must be specific to each NSF award number.

The listing also should include a description of Construction-in-Progress (CIP) and Work-in-Progress (WIP) items and construction costs incurred to date. CIP is defined as real property that is in the process of being manufactured or fabricated but is not yet complete. WIP is defined as equipment that is in the process of being manufactured or fabricated but is not yet complete. CIP and WIP consist of the costs of direct materials, direct labor, direct purchased services, and indirect costs, including general and administrative and overhead costs. Costs coded as such should not be depreciated. The inventory should be submitted electronically to fsrpts@nsf.gov and must be received by DAS no later than August 15 each year.
 - (b) A physical inventory of NSF-owned equipment shall be conducted every two years pursuant to 2 CFR § 215.34(f). Upon expiration of the award, the grantee shall report the property to the DAS Property Administrator for further agency utilization.

7. **Competition.** The grantee 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 in accordance with 2 CFR § 215.34(b).

8. **Right to Transfer Title.**
 - (a) NSF may identify items of equipment having an acquisition cost of \$5,000 or more where NSF reserves the right to transfer the title to the Federal

Government or a third party named by the Federal Government at any time during the grant period.

- (b) In cases where NSF elects to transfer the title, disposition instructions will be issued no later than 120 calendar days after the expiration date of the NSF-supported project for which it was acquired.

7. Participant Support Costs

- a. Participant support costs are direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with meetings, conferences, symposia or training projects. (See also [AAG Chapter V.C.5](#)) Grantee organizations must account for participant support costs separately. Indirect costs (F&A) are not allowed on participant support costs (see [AAG Chapter V.B.8](#).)
- b. Funds provided for participant support may not be used by grantees for other categories of expense without the specific prior written approval of the cognizant NSF Program Officer. Such requests must be submitted electronically via the NSF FastLane system.

8. Significant Project Changes

The grantee is required to obtain prior written approval from the NSF Grants and Agreements Officer whenever there are significant changes in the project or its direction as stipulated below.

- a. *Transfer of the Project Effort (Subawards)*
 - 1. NSF authorization to contract or otherwise transfer a significant part of the research or substantive effort to another organization that has been disclosed in the proposal is not needed unless approval has been specifically withheld in the award notice.
 - 2. If it becomes necessary to transfer, by contract or other means, a significant part of the research or substantive effort after an award has been made, notification of this intent should be submitted to NSF electronically via the NSF FastLane system and electronically signed by an Authorized Organizational Representative (AOR). At a minimum, the request shall include a clear description of the work to be performed and the basis for selection of the subrecipient (except for collaborative/joint arrangements); (see [AAG Chapter II.B.3](#) for additional information). NSF approval of such changes will be by an amendment to the grant signed by the NSF Grants and Agreements Officer.
 - 3. The grantee remains responsible for maintaining the necessary documentation on all subawards and making it available to NSF upon request. The grantee shall include subaward activities in the annual and final project reports that are submitted to NSF.
 - 4. Grantees shall ensure that the following articles, if applicable, flow down to all subrecipients, or are appropriately addressed in the subaward instrument: Articles 5, 7, 9, 10, 11, 12, 17, 18, 19, 20, 24, 25, 26, 27, 28, 29, 30, 33, 34, 35, 36, 37, 38, 40, 41, 43, 44, 45, 46 and 47. If the grantee issues subawards exceeding \$2,000 for construction, alteration or repair that are within the scope of the Acts found in 2 CFR Part 215, Appendix A, "Contract Provisions," the appropriate clauses applicable to construction activities also will be included in applicable subawards.

b. *Change in Objectives or Scope*

A proposed change in the phenomenon or phenomena under study or the objectives of the project stated in the proposal or agreed modifications thereto should be communicated to NSF via use of the FastLane notification and request module at <https://www.fastlane.nsf.gov/fastlane.jsp>. NSF approval of such changes will be by an amendment to the award signed by the NSF Grants and Agreements Officer.

c. *Absence or Change of Principal Investigator*

If a named Principal Investigator or Project Director plans to or becomes aware that he or she will: (1) devote substantially less effort to the work than anticipated in the approved proposal (defined as a reduction of 25% or more in time); (2) sever his or her connection with the grantee organization; or (3) be absent for a continuous period of three months or more, or otherwise relinquish active direction of the project, he or she shall advise both the NSF Program Officer and the grantee's Authorized Organizational Representative via use of the NSF FastLane Notification and Request module. Action appropriate to the situation will be initiated in accordance with the guidelines described in [AAG Chapter II.B.2](#).

9. Procurement Standards

Whether or not approval of a procurement is required under Article 8.a., where appropriate, the grantee (including commercial organizations) is responsible for compliance with the procurement standards identified in 2 CFR §§ 215.40 - .48. The grantee also is responsible for ensuring that the appropriate NSF conditions from this award (including Article 29, Audit and Records) are made a part of any contract or other arrangement whose award amount exceeds the simplified acquisition threshold (currently \$150,000).

10. Travel

a. *Allowability of Travel Expenses*

1. Expenses for transportation, lodging, subsistence and related items incurred by project personnel and by outside consultants employed on the project (see [AAG Chapter V.B.4](#)) who are in travel status on business related to an NSF-supported project are allowable as prescribed in the governing Office of Management and Budget (OMB) cost principles. The requirements for prior approval detailed in the governing OMB cost principles are waived.

2. 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.

b. *Travel Support for Dependents of Key Project Personnel*

Travel support for dependents of key project personnel is allowable only under the following conditions:

1. the individual is a key person who is essential to the project on a full-time basis;

2. the individual's residence away from home and in a foreign country is for a continuous period of six months or more and is essential to the effective performance of the project; and

3. the dependents' travel allowance is consistent with the policies of the organization administering the award.

c. *Use of U.S.-Flag Air Carriers*

1. In accordance with the Fly America Act (49 USC 40118), any air transportation to, from, between, or within a country other than the U.S. 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 U.S.-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 U.S. flag air carrier's designator code and flight number.

2. For the purposes of this requirement, U.S.-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.

3. The following rules apply unless their application would result in the first or last leg of travel from or to the U.S. being performed by a foreign-flag air carrier:

(a) a U.S.-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 U.S.-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 U.S. flag air carrier.

d. *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:

1. *Airline "Open Skies" Agreements:*

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 General Services Administration's (GSA) website at <http://www.gsa.gov/portal/content/103191>.

Note on U.S./European Union Open Skies Agreement

In 2007, the U.S. 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 U.S. 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.

As of 2011, two significant changes have been made to the U.S./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), will be required to fly on a U.S. 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 U.S. and points in the EU.

2. *Involuntary Rerouting:* Travel on a foreign-flag carrier is permitted if a U.S.-flag air carrier involuntarily reroutes the traveler via a foreign-flag air carrier, notwithstanding the availability of alternative U.S.-flag air carrier service.

3. *Travel To and From the U.S. 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 U.S.-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 U.S.-flag air carrier service would increase the number of aircraft changes the traveler must make outside of the U.S. 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.

4. *Travel Between Points Outside the U.S. 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 U.S.-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 U.S., and use of a U.S.-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.

5. *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 U.S.-flag air carrier would double the travel time.

11. Rearrangements and Alterations

- a. Rearrangement and alteration costs that do not constitute construction (i.e., rearrangements and alterations aggregating less than \$25,000) to adapt space or utilities within a completed structure to accomplish the objectives of the award, are allowable and approved, provided:
 1. the building has a usable life consistent with project purposes and is architecturally suitable for conversion;
 2. the rearrangements and alterations are essential to the project; and
 3. the space involved will be occupied by the project.
- b. Rearrangements and alterations (construction) aggregating \$25,000 or over require the prior written approval of the NSF Grants and Agreements Officer.

12. Allowable Costs

- a. The allowability of costs and cost allocation methods for work performed under this award, up to the amount specified in the award, shall be determined in accordance with the applicable Federal cost principles in effect on the effective date of the award and the terms and conditions of the award.
- b. The Federal cost principles applicable to specific types of grantees are contained in:
 1. 2 CFR Part 220, Cost Principles for Educational Institutions (OMB Circular A-21);
 2. 2 CFR Part 225, Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87);
 3. 2 CFR Part 230, Cost Principles for Nonprofit Organizations (OMB Circular A-122)
 4. Federal Acquisition Regulation 31.2 (48 CFR § 31.2) for commercial firms and those non-profit organizations specifically exempted from the provisions of 2 CFR Part 230 (OMB Circular A-122); and
 5. 45 CFR Part 74, Appendix E, "Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals," for hospitals.
- c. Certain prior approval requirements contained in these Federal cost principles have been modified by Article 2.

13. Payments

a.

Except as noted in AAG Chapter III.C, NSF awardees are required to request payments electronically through the Award Cash Management Service (ACM\$). Under ACM\$, awardees must provide award level detail at the time of the payment request. Awardees should request payments in amounts necessary to meet their current needs, pursuant to the guidelines contained in 31 CFR Part 205. Unless otherwise specified in the award, the grantee agrees to comply with all applicable Treasury regulations and National Science Foundation implementing and reporting procedures, which are outlined in [AAG Chapter III](#).

b. In accordance with 2 CFR § 215.22, where appropriate, grantees are required to maintain advances of Federal funds in interest-bearing accounts. For grantees not subject to the Cash Management Improvement Act (CMIA), such as State agencies or instrumentalities, interest earned on Federal advances deposited in interest bearing accounts shall be remitted annually to:

Department of Health and Human Services (DHHS)
Payment Management System
P.O. Box 6021
Rockville, MD 20852

c. Interest amounts up to \$250 per year may be retained by the grantee for administrative expenses. The requirement to remit interest annually to DHHS does not apply to grantees subject to the Cash Management Improvement Act (CMIA), Subpart A - Rules Applicable to Federal Assistance Programs Included in a Treasury-State Agreement.

14. Continuing Grant Increments

Unless otherwise specified, each successive increment of a continuing grant will be funded at the level specified in the original award notice without a formal request from the grantee provided an annual project report has been received from the Principal Investigator(s) and accepted by the NSF Program Officer.

Continuing funding is contingent on (1) availability of funds; (2) satisfactory scientific/technical progress; and (3) any special conditions of the grant.

15. Project Reporting Requirements

a. *Annual Project Reports*

1. Submission Requirement. Annual project reports are required for both standard and continuing awards.²
2. Content of 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. The grantee

² Submission of an "interim" report via [Research.gov](#) does not constitute compliance with the annual reporting requirement.

shall include subaward activities in annual project reports that are submitted to NSF.

3. Timing of Annual Project Reports.

Unless otherwise specified in the award, annual project reports should be submitted electronically, via Research.gov, at least 90 days prior to the end of the current budget period to allow adequate time for the 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. It should be noted that the final annual report serves as the project's final report and must be submitted in accordance with paragraph b below.

Failure to submit timely reports will delay NSF review and processing of pending proposals and processing of additional funding and administrative actions, including, but not limited to, no cost extensions for all identified PIs and co-PIs on a given award. In the case of continuing grants, failure to submit timely reports may delay processing of funding increments.

b. *Final Project Report*

1. Submission Requirement. Unless otherwise specified in the award, the final project report should be submitted electronically, via [Research.gov](https://www.research.gov), within 90 days following expiration of the grant. 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.

2. Content of 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. The grantee shall include subaward activities in final project reports that are submitted to NSF.

3. Additional Requirements. The grantee also shall provide to the cognizant NSF Program Officer, within 90 days following the expiration of the grant, any unique reports or other end items specified in the award (e.g., special cost sharing reports), 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.

c. *Project Outcomes Report for the General Public*

Within 90 days following expiration of the grant, a project outcomes report for the general public must be submitted electronically via Research.gov. This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project. For information about the content of the report, see the [AAG Chapter II.E.3](#).

16. Expenditure Reports

NSF does not require awardees to submit Federal Financial Reports (FFR's) for each award for purposes of final award accountability. NSF procedures have been designed to extract the final financial data from the entries in the Award Cash Management Service (ACM\$). For instructions regarding final disbursement reporting, see the [AAG Chapter III.E](#).

17. Information Collection

Information collection activities performed under this award are the responsibility of the grantee, and NSF support of the project does not constitute NSF approval of the survey design, questionnaire content or information collection procedures. The grantee shall not represent to respondents that such information is being collected for or in association with the National Science Foundation or any other Government agency without the specific written approval of such information collection plan or device by the Foundation. This requirement, however, 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 information.

18. Responsible Conduct of Research

Article 18 applies to new proposals submitted or due on or after January 4, 2010.

In accordance with Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 U.S.C. 1862o-1) NSF requires that grantees must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research (RCR) to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. Training plans are subject to review, upon request.

Grantees must designate one or more persons to oversee compliance with the RCR training requirement. Grantees 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, in accordance with the plan the grantee has put in place for their organization.

Grantees shall ensure that these RCR requirements flow down to all subrecipients, or are otherwise appropriately addressed in the subaward instrument.

19. Reporting Subawards and Executive Compensation

Article 19 applies to new grants of \$25,000 or more awarded on or after October 1, 2010. As of July, 2012, the URL referenced in b.2.(a) below has changed to: <https://www.sam.gov>.

In accordance with the Office of Management and Budget guidance published in the Federal Register (FR) September 14, 2010 on *Requirements for Federal Funding Accountability and Transparency Act Implementation*, grantees must comply with the following award term, contained in 75 FR 22705:

a. *Reporting of first-tier subawards*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e of this award term).

2. *Where and when to report*

(a) You must report each obligating action described in paragraph a.1. of this award term to www.fsr.gov.

(b) For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. *What to report.* You must report the information about each obligating action that the submission instructions posted at www.fsr.gov specify.

b. *Reporting Total Compensation of Recipient Executives*

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if:

(a) the total Federal funding authorized to date under this award is \$25,000 or more;

(b) in the preceding fiscal year, you received—

(i) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(ii) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(c) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:

(a) As part of your registration profile at www.ccr.gov.

(b) By the end of the month following the month in which this award is made, and annually thereafter.

c. *Reporting of Total Compensation of Subrecipient Executives*

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:

(a) in the subrecipient's preceding fiscal year, the subrecipient received—

(i) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(ii) \$25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

(b) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

(a) To the recipient.

(b) By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e., between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions*

If, in the previous tax year, you had gross income, from all sources, under \$300,000, you are exempt from the requirements to report:

1. subawards, and

2. the total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions*

For purposes of this award term:

1. Entity means all of the following, as defined in 2 CFR part 25:
 - (a) A Governmental organization, which is a State, local government, or Indian tribe;
 - (b) A foreign public entity;
 - (c) A domestic or foreign nonprofit organization;
 - (d) A domestic or foreign for-profit organization;
 - (e) A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
2. Executive means officers, managing partners, or any other employees in management positions.
3. Subaward:
 - (a) This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - (b) The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. --.210 of the attachment to OMB Circular A- 133, "Audits of States, Local Governments, and Non-Profit Organizations").
 - (c) A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
4. Subrecipient means an entity that:
 - (a) Receives a subaward from you (the recipient) under this award; and
 - (b) Is accountable to you for the use of the Federal funds provided by the subaward.
5. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):
 - (a) *Salary and bonus.*
 - (b) *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

- (c) *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
- (d) *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.
- (e) *Above-market earnings on deferred compensation which is not tax-qualified.*
- (f) Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

20. System for Award Management and Universal Identifier Requirements

Article 20 applies to new grants awarded on or after October 1, 2010. As of July 2012, the Central Contractor Registration (CCR) has become the System for Award Management (SAM). The URL has changed to: <https://www.sam.gov>. All requirements related to CCR mentioned in the Article below now apply to and must be completed in SAM. See the *NSF Grant Proposal Guide* Chapter I.G.3 for further information regarding SAM.

In accordance with the Office of Management and Budget guidance published in the Federal Register (FR) September 14, 2010 on *Financial Assistance Use of Universal Identifier and Central Contractor Registration*, grantees must comply with the following award term, contained in 75 FR 22706:

- a. *Requirement for Central Contractor Registration (CCR).* Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the CCR until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.
- b. *Requirement for Data Universal Numbering System (DUNS) numbers.* If you are authorized to make subawards under this award, you:
 - 1. Must notify potential subrecipients that no entity (see definition in paragraph c. of this award term) may receive a subaward from you unless the entity has provided its DUNS number to you.
 - 2. May not make a subaward to an entity unless the entity has provided its DUNS number to you.
- c. *Definitions.* For purposes of this award term:
 - 1. Central Contractor Registration (CCR) means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the CCR Internet site (currently at <http://www.ccr.gov>).

2. Data Universal Numbering System (DUNS) number means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866-705-5711) or the Internet (currently at <http://fedgov.dnb.com/webform>).

3. Entity, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:

- (a) A Governmental organization, which is a State, local government, or Indian tribe;
- (b) A foreign public entity;
- (c) A domestic or foreign nonprofit organization;
- (d) A domestic or foreign for-profit organization; and
- (e) A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. Subaward:

(a) This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

(b) The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. --.210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations").

(c) A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

5. Subrecipient means an entity that:

- (a) Receives a subaward from you under this award; and
- (b) Is accountable to you for the use of the Federal funds provided by the subaward.

21. Federal Tax Obligations

Article 21 applies only to awards that have cumulative budgets that exceed \$5,000,000.

In accordance with the *Commerce, Justice, Science and Related Agencies Appropriations Act of 2012*, the grantee affirms that they:

- (1) have filed all required Federal tax returns;
- (2) have not been convicted of a criminal offense under the Internal Revenue Code of 1986; and

- (3) have not been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

22. Unpaid Federal Tax Liability

Article 22 applies only to grantees that are corporations.

In accordance with the *Commerce, Justice, Science and Related Agencies Appropriations Act of 2012*, the grantee affirms that the corporation has no unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

23. Criminal Convictions

Article 23 applies only to grantees that are corporations.

In accordance with the *Commerce, Justice, Science and Related Agencies Appropriations Act of 2012*, the grantee affirms that the corporation has not been convicted of a felony criminal violation under any Federal law.

24. Copyrightable Material

a. Definition

Subject writing means any material that:

1. is or may be copyrightable under Title 17 of the U.S.C.; and
2. is produced by the grantee or its employees in the performance of work under this award.

Subject writings include such items as reports, books, journal articles, software, databases, sound recordings, videotapes, and videodiscs.

b. Copyright Ownership, Government License

Except as otherwise specified in the award or by this paragraph, the grantee may own or permit others to own copyright in all subject writings. The grantee agrees that if it or anyone else does own copyright in a subject writing, the Federal government will have a nonexclusive, nontransferable, irrevocable, royalty-free license to exercise or have exercised for or on behalf of the U.S. throughout the world all the exclusive rights provided by copyright. Such license, however, will not include the right to sell copies or phonorecords of the copyrighted works to the public.

c. Awards Affected by International Agreements

If the award indicates it is subject to an identified international agreement or treaty, NSF can direct the grantee to convey to any foreign participant or otherwise dispose of such rights to subject writings as are required to comply with that agreement or treaty.

d. *Grantee Action to Protect Government Interests*

The grantee agrees to acquire, through written agreement or an employment relationship, the ability to comply with the requirements of the preceding paragraphs and, in particular, to acquire the ability to convey rights in a subject writing to a foreign participant if directed by NSF under the previous paragraph. The grantee further agrees that any transfer of copyright or any other rights to a subject writing, by it or anyone whom it has allowed to own such rights, will be made subject to the requirements of this article.

25. Program Income

a. *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 award. Program income includes, but is not limited to, income from fees for services performed, the use or rental of real or personal property acquired under the award, the sale of commodities or items fabricated under the award, license fees and royalties on patents and copyrights, and interest on loans made with award funds. Interest earned on advances of Federal funds is not program income. Program income does not include the receipt of principal on loans, rebates, credits, discounts, etc., or interest earned on any of them.

b. *Treatment*

Unless otherwise specified in the award notice, program income is designated for standard (additive) treatment, and 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 an awardee has unexpended program income remaining at award expiration, it will be remitted to NSF by crediting costs otherwise chargeable against the award.

If, in accordance with language added to the award notice, program income is designated for deductive treatment, it will be remitted to NSF by crediting costs otherwise chargeable against the award.

Also, unless otherwise specified, the awardee shall have no obligation to NSF with respect to: (1) license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions received or accrued at any time; or (2) program income received beyond the period of this award (see [AAG Chapter III.D.4](#)).

c. *Records Retention*

The grantee is required to retain appropriate financial and other records relating to project income earned during the award period and for three years beyond the end of the award period.

d. *Reporting Requirements*

On an annual basis, awardees are required to submit a Program Income Reporting Worksheet to NSF in order to report on any active awards during the previous Federal fiscal year. The first

report is due to NSF no later than March 31, 2014 and covers the period of October 1, 2012 through September 30, 2013. Each year thereafter, awardees will be required to submit the Program Income Reporting Worksheet by October 31 in order to report the amount of program income earned and expended during the previous Federal fiscal year or to validate that program income was not earned or expended for any active awards during the applicable period. The Program Income Reporting Worksheet and related instructions are available through Research.gov (<http://research.gov/programincome>).

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

26. Publications

a. *Acknowledgment of Support*

The grantee is responsible for assuring that an acknowledgment of NSF support:

1. is made in any publication (including World Wide 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)."

2. is orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

b. *Disclaimer*

The grantee 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. *Metric System*

All reports and publications resulting from this NSF award are encouraged to use the metric system of weights and measures.

27. Patent Rights³

Unless otherwise provided in the award, if this award is for experimental, developmental, or research work, the following clause (implementing the Bayh-Dole Act, [35 U.S.C. § 200 et seq.]) shall apply. The grantee shall include this clause in all subawards for experimental, developmental, or research activities.

a. *Definitions*

1. INVENTION means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the USC, to any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. § 2321 et seq.).
2. SUBJECT INVENTION means any invention of the grantee conceived or first actually reduced to practice in the performance of work under this award, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d)) must also occur during the period of performance.
3. PRACTICAL APPLICATION means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.
4. MADE when used in relation to any invention means the conception or first actual reduction to practice of such invention.
5. NON-PROFIT ORGANIZATION means a domestic university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. § 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 U.S.C. § 501(a)) or any domestic non-profit scientific or educational organization qualified under a State non-profit organization statute.

b. *Allocation of Principal Rights*

The grantee may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Patent Rights clause and 35 U.S.C. § 203. With respect to any subject invention in which the grantee retains title, the Federal Government shall have a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the U.S. the subject invention throughout the world. If the award indicates it is subject to an identified international agreement or treaty, the National Science Foundation (NSF) also has the right to direct the grantee to convey to any foreign participant such patent rights to subject inventions as are required to comply with that agreement or treaty.

³ Awardees are reminded that, in view of the U.S. Supreme Court decision in *Stanford v. Roche*, employee assignment agreements should include a present conveyance of rights ("I hereby assign" rather than a promise or intent to assign) in order to effectively convey patent rights to the institution, allowing the institution to meet its responsibility under the Bayh-Dole Act to provide the agency with a license to patented inventions.

c. *Invention Disclosure, Election of Title and Filing of Patent Applications by Grantee*

1. The grantee will disclose each subject invention to NSF within two months after the inventor discloses it in writing to grantee personnel responsible for the administration of patent matters. The disclosure to NSF shall be in the form of a written report and shall identify the award under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding of the nature, purpose, operation, and, to the extent known, the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention, whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication, at the time of disclosure. In addition, after disclosure to NSF, the grantee will promptly notify NSF of the acceptance of any manuscript describing the invention for publication, or of any on sale or public use planned by the grantee.
2. The grantee will elect in writing whether or not to retain title to any such invention by notifying NSF within two years of disclosure to NSF. However, in any case where publication, on sale, or public use has initiated the one-year statutory period wherein valid patent protection can still be obtained in the U.S., the period for election of title may be shortened by NSF to a date that is no more than 60 days prior to the end of the statutory period.
3. The grantee will file its initial patent application on an invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the U.S. after a publication, on sale, or public use. The grantee will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application, or six months from the date when permission is awarded by the Commissioner of Patents and Trademarks to file foreign patent applications when such filing has been prohibited by a Secrecy Order.
4. Requests for extension of the time for disclosure to NSF, election, and filing under subparagraphs 1., 2., and 3. may, at the discretion of NSF, be awarded.

d. *Conditions When the Government May Obtain Title*

The grantee will convey to NSF, upon written request, title to any subject invention:

1. if the grantee fails to disclose or elect the subject invention within the times specified in paragraph c. above, or elects not to retain title, provided that NSF may only request title within 60 days after learning of the failure of the grantee to disclose or elect within the specified times;
2. in those countries in which the grantee fails to file patent applications within the times specified in paragraph c. above, but prior to its receipt of the written request of NSF, the grantee shall continue to retain title in that country; or in any country in which the grantee decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

e. *Minimum Rights to Grantee*

1. The grantee will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the grantee fails to disclose the subject invention within the times specified in paragraph c. above. The grantee's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the grantee is a party and includes the right to award sublicenses of the same scope to the extent the grantee was legally obligated to do so at the time the award was made. The license is transferable only with the approval of NSF except when transferred to the successor of that part of the grantee's business to which the invention pertains.
2. The grantee's domestic license may be revoked or modified by NSF to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404. This license will not be revoked in that field of use or the geographical areas in which the grantee has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at discretion of NSF to the extent the grantee, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.
3. Before revocation or modification of the license, NSF will furnish the grantee a written notice of its intention to revoke or modify the license, and the grantee will be allowed thirty days (or such other time as may be authorized by NSF for good cause shown by the grantee) after the notice to show cause why the license should not be revoked or modified. The grantee has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

f. *Grantee Action to Protect Government's Interest*

1. The grantee agrees to execute or to have executed and promptly deliver to NSF all instruments necessary to: (i) establish or confirm the rights the Government has throughout the world in those subject inventions for which the grantee retains title; and (ii) convey title to NSF when requested under paragraph d. above, and to enable the Government to obtain patent protection throughout the world in that subject invention.
2. The grantee agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the grantee each subject invention made under this award in order that the grantee can comply with the disclosure provisions of paragraph c. above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information requested by paragraph c.1 above. The grantee shall instruct such employees through the employee agreements or other suitable educational programs on the importance

of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

3. The grantee will notify NSF of any decision not to continue prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.
4. The grantee agrees to include, within the specification of any U.S. patent application and any patent issuing thereon covering a subject invention, the following statement:

“This invention was made with Government support under (identify the award) awarded by the National Science Foundation. The Government has certain rights in this invention.”
5. The grantee or its representative will complete, execute and forward to NSF a confirmation of a License to the U.S. Government and the page of a United States patent application that contains the Federal support clause within two months of filing any domestic or foreign patent application.

g. *Subcontracts*

1. The grantee will include this Patent Rights clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental or research work. The subcontractor will retain all rights provided for the grantee in this Patent Rights clause, and the grantee will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractors' subject inventions.
2. In the case of subcontracts, at any tier, when the prime award by NSF was a contract (but not a cooperative agreement), NSF, subcontractor, and contractor agree that the mutual obligations of the parties created by this Patent Rights clause constitute a contract between the subcontractor and the Foundation with respect to those matters covered by this Patent Rights clause.

h. *Reporting on Utilization of Subject Inventions*

The grantee agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the grantee or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the grantee and such other data and information as NSF may reasonably specify. The grantee also agrees to provide additional reports in connection with any march-in proceeding undertaken by NSF in accordance with paragraph j. of this Patent Rights clause. As required by 35 U.S.C. § 202(c)(5), NSF agrees it will not disclose such information to persons outside the Government without the permission of the grantee.

i. *Preference for United States Industry*

Notwithstanding any other provision of this Patent Rights clause, the grantee agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the U.S. unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the U.S. However, in individual cases, the requirement for such an agreement may be waived by NSF upon a showing by the grantee or its assignee that reasonable but unsuccessful efforts have been made to award licenses on similar terms to potential licensees that would be likely to manufacture substantially in the U.S. or that under the circumstances domestic manufacture is not commercially feasible.

j. *March-in Rights*

The grantee agrees that with respect to any subject invention in which it has acquired title, NSF has the right in accordance with procedures at 37 CFR § 401.6 and NSF regulations at 45 CFR § 650.13 to require the grantee, an assignee or exclusive licensee of a subject invention to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances and if the grantee, assignee, or exclusive licensee refuses such a request, NSF has the right to grant such a license itself if NSF determines that:

1. such action is necessary because the grantee or assignee has not taken or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
2. such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the grantee, assignee, or their licensees;
3. such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the grantee, assignee, or licensee; or
4. such action is necessary because the agreement required by paragraph i. of this Patent Rights clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the U.S. is in breach of such agreement.

k. *Special Provisions for Awards with Non-profit Organizations*

If the grantee is a nonprofit organization, it agrees that:

1. rights to a subject invention in the U.S. may not be assigned without the approval of NSF, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the grantee;
2. the grantee will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when NSF deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. § 202(e) and 37 CFR § 401.10;

3. the balance of any royalties or income earned by the grantee with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific or engineering research or education; and
4. it will make efforts that are reasonable under the circumstances to attract licensees of subject inventions that are small business firms and that it will give preference to a small business firm if the grantee determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the grantee is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the grantee. However, the grantee agrees that the Secretary of Commerce may review the grantee's licensing program and decisions regarding small business applicants, and the grantee will negotiate changes to its licensing policies, procedures or practices with the Secretary when the Secretary's review discloses that the grantee could take reasonable steps to implement more effectively the requirements of this paragraph k.4.

I. *Communications*

All communications required by this Patent Rights clause must be submitted through the iEdison Invention Information Management System maintained by the National Institutes of Health unless prior permission for another form of submission is obtained from the Patent Assistant at patents@nsf.gov or at Office of the General Counsel, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230.

28. Cost Sharing and Cost Sharing Records

a. *General*

1. The grantee must cost share in accordance with any amount specified on Line M of the award budget. Cost sharing participation in other projects may not be counted towards meeting the specific cost sharing requirements of the award, and must come from nonfederal sources.
2. 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: a) immediately provide written notification to the Grants and Agreements Officer of the situation; and b) indicate steps it plans to take to secure replacement cost sharing; or c) indicate the plans it has to either continue or phase out the project in the absence of the approved level of cost sharing.
3. 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.

4. Failure by the organization to notify NSF, in accordance with paragraph 2. 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.

b. *Cost Sharing Records*

The grantee must maintain records of all project costs that are claimed by the grantee as cost sharing as well as records of costs to be paid by the Government. Such records are subject to audit. Acceptable forms of cost sharing contributions are those that meet the criteria identified in 2 CFR § 215.23. Unless otherwise specified in the award, approval is given to include unrecovered indirect costs (also known as facilities and administrative costs for colleges and universities) as part of cost sharing or matching contributions. If the grantee's cost participation includes in-kind contributions, the basis for determining the valuation for volunteer services and donated property must be documented.

c. *Cost Sharing Reports*

Unless otherwise required by the award or requested by NSF, the actual cost participation by the grantee, while subject to documentation and audit, need not be reported to NSF. In cases, however, where the cost-sharing amount reflected on Line M of the cumulative award budget is \$500,000 or more, the amount of cost sharing must be documented (on an annual and final basis) and certified by the Authorized Organizational Representative via use of the Notification and Request Module in the NSF FastLane System. Such notifications must be submitted within 90 days:

1. prior to the end of the current budget period to meet the annual notification requirement; and
2. following the expiration of the award to meet the final notification requirement.

The cost share notification is considered due during the 90 day period. The notification becomes overdue the day after the 90 day period ends.

29. Audit and Records

- a. Financial records, supporting documents, statistical records, and other records pertinent to this award shall be retained by the grantee for a period of three years from submission of the final project and expenditure reports specified in Articles 15 and 16.
 1. Records that relate to audits, appeals, litigation or the settlement of claims arising out of the performance of the project shall be retained until such audits, appeals, litigation or claims have been disposed of.
 2. Records relating to projects subject to special project income provisions shall be retained until three years from the end of the grantee's fiscal year in which the award requirement for reporting income expires.
- b. Unless court action or audit proceedings have been initiated, the grantee may substitute microfilm copies of original records.

- c. The Director of the National Science Foundation and the Comptroller General of the U.S., or any of their duly authorized representatives, shall have access to any pertinent books, documents, papers and records of the grantee organization and of the performing organization, if different, to make audits, examinations, excerpts and transcripts. Further, any negotiated contract in excess of the simplified acquisition threshold (currently \$150,000) made by the grantee shall include a provision to the effect that the grantee, the Director of the National Science Foundation, the Comptroller General of the U.S., or any of their duly authorized representatives, shall have access to pertinent records for similar purposes.
- d. In order to avoid duplicate record keeping, NSF may make special arrangements with the grantee to retain any records that are needed for joint use. NSF may request transfer to its custody of records not needed by the grantee when it determines that the records possess long-term retention value. When the records are transferred to, or maintained by NSF, the three-year retention requirement is not applicable to the grantee. In the rare event that this provision is exercised, NSF will negotiate a mutually agreeable arrangement with the grantee regarding reimbursement of costs.
- e. Grantees that are States, Local Governments or Non-Profit Organizations, shall arrange for the conduct of audits as required by OMB Circular A-133 "*Audits of States, Local Governments, and Non-Profit Organizations*" (including colleges and universities.) They shall provide copies of the reports of these audits to the cognizant Federal audit agency. Any Federal Audit of this project deemed necessary by NSF shall build upon the results of such audit(s).
- f. All awards issued by NSF meet the definition of "Research and Development" at OMB Circular A-133 §.105. 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 A-133 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).

30. Site Visits

NSF, through authorized representatives, has the right, at all reasonable times, to make site visits to review project accomplishments and management control systems and to provide such technical assistance as may be required. If any site visit is made by NSF on the premises of the grantee or a contractor under an award, the grantee shall provide and shall require its contractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representatives in the performance of their duties. All site visits and evaluations shall be performed in such a manner that will not unduly delay the work.

31. Suspension or Termination

- a. Any suspension or termination action taken by NSF must be issued by an NSF Grants and Agreements Officer and will be in accordance with this article and [AAG Chapter VII.A.](#)

- b. The award may be suspended or terminated in whole or in part in any of the following situations by:
 - 1. NSF when the grantee has materially failed to comply with the terms and conditions of the award;
 - 2. NSF when the Foundation has other reasonable cause;
 - 3. NSF when ordered by the Deputy Director under NSF's Regulation on Research Misconduct [45 CFR Part 689];
 - 4. NSF and the grantee by mutual agreement (if NSF and the grantee cannot reach an agreement, NSF reserves the right to unilaterally terminate the award); or
 - 5. 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 award, it may suspend or terminate the entire award).
- c. Normally, action by NSF to suspend or terminate an award will be taken only after the grantee has been informed by NSF of any deficiency on its part and given an opportunity to correct it; but NSF may immediately suspend or terminate the award without notice when it believes such action is reasonable to protect the interests of the Government.
- d. 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 award and the appropriate Federal cost principles.
- e. Within 30 days of the termination date, the grantee will furnish a summary of progress under the award and an itemized accounting of costs incurred prior to the termination date or pursuant to d, above. Final allowable costs under a termination settlement shall be in accordance with the terms of the award, including this article, and the appropriate Federal cost principles, giving due consideration to the progress under the award. In no event will the total of NSF payments under a terminated award exceed the award amount, or the NSF pro rata share of the total project costs when cost sharing was anticipated, whichever is less.
- f. A notice of termination other than by mutual agreement and/or the final settlement amount may be subject to review pursuant to Article 32.

32. Termination Review Procedure

- a. A request for review of a notice of termination or settlement should be addressed to the Director, Division of Grants and Agreements, National Science Foundation, 4201 Wilson Blvd., Arlington, VA, 22230. It must be postmarked no later than 30 days after the date of the letter notifying the grantee of the termination or settlement.
- b. The request for review must contain a full statement of the grantee's position and the pertinent facts and reasons in support of such position.

- c. Review of a notice of termination or settlement will be conducted in accordance with [AAG Chapter VII.A.4](#).
- d. Pending resolution of the request for review, the notice of termination shall remain in effect.

33. Nondiscrimination

- a. The award is subject to the provisions of Title VI of the Civil Rights Act of 1964 [42 U.S.C. § 2000d], Title IX of the Education Amendments of 1972 [20 USC §§ 1681 *et seq.*], the Rehabilitation Act of 1973 [29 U.S.C. § 794], the Age Discrimination Act of 1975 [42 U.S.C. §§ 6101 *et seq.*], and all regulations and policies issued by NSF pursuant to these statutes. Specifically, in accordance with these statutes, regulations, and policies, no person on the basis of race, color, national origin, sex, disability, or age shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under the award.
- b. By electronically signing a proposal, the Authorized Organizational Representative is providing the requisite Certification of Compliance with National Science Foundation Nondiscrimination Regulations and Policies. This Nondiscrimination Certification sets forth the nondiscrimination obligations with which all grantees must comply.⁴ These obligations also apply to subrecipients, subgrantees, and subcontractors under the award. The grantee, therefore, shall obtain the NSF Nondiscrimination Certification from each organization that applies to be or serves as a subrecipient, subgrantee or subcontractor under the award (for other than the provision of commercially available supplies, materials, equipment or general support services) prior to entering into the subaward arrangement.

34. Reporting Classifiable Information

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.

⁴ The complete text of the Nondiscrimination Certification is available electronically in the *Grant Proposal Guide*, Chapter II, Exhibit II-6 at http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg.

35. Animal Welfare

- a. Any grantee performing research on vertebrate animals⁵ shall comply with the Animal Welfare Act [7 U.S.C. §§ 2131 et seq.] and the regulations promulgated hereunder 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 grantee 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*" (1996) 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). Further guidance on the use of vertebrate animals in NSF funded projects can be found in the [AAG Chapter VI.B.3](#).
- b. In the event the grantee's multi-project Assurance is cancelled or lapses, the grantee must immediately notify the cognizant Grants and Agreements Officer identified in the award notice.

NOTE--The grantee may request registration of its facility and a current listing of licensed dealers from the Regional Office of the Animal and Plant Health Inspection Service (APHIS), United States Department of Agriculture, for the region in which its research facility is located. 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/>.

36. Research Involving Recombinant DNA Molecules

If this award supports research involving recombinant DNA molecules, the grantee agrees to comply with the requirements of [AAG Chapter VI.B.2](#).

37. Clean Air and Water

(Applicable only if the award exceeds \$100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act [42 U.S.C. § 7413(c)(1)] or the Clean Water Act [33 U.S.C. § 1319(c)] and is listed by the Environmental Protection Agency (EPA), or the award is not otherwise exempt.) The grantee agrees as follows:

- a. To comply with all the requirements of Section 114 of the Clean Air Act [42 U.S.C. § 7414] and Section 308 of the Clean Water Act [33 U.S.C. § 1318], respectively, relating to inspection, monitoring, entry, reports and information, as well as other requirements specified in Section 114 and Section 308 of the Clean Air Act and the Clean Water Act, respectively, and all regulations and guidelines issued thereunder before the award of the grant.
- b. That no portion of the work required by the award will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date that the award was awarded unless and until EPA eliminates the name of such facility or facilities from such listing.
- c. To use its best efforts to comply with clean air standards and clean water standards at the facility in which the award is being performed.

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

- d. To insert the substance of the provisions of this article into any nonexempt subcontract.

38. Human Research Subjects

The grantee is responsible for the protection of the rights and welfare of any human subjects involved in research, development and related activities supported by this award. The grantee agrees to comply with the NSF regulation, entitled, "*Protection of Human Subjects* [45 CFR Part 690]."

39. Investigator Financial Disclosure Policy

If the grantee employs more than 50 persons, the grantee shall maintain an appropriate written and enforced policy on conflict of interest consistent with the provisions of [AAG Chapter IV.A](#).

40. State Sales and Use Taxes

Grantees are reminded that each set of cost principles cited in Article 12b. limits the allowability of taxes to those the organization is required to pay. Grantees must avail themselves of any tax exemptions for which any activities supported by Federal funds may qualify, including any applicable exemptions from state or local sales and use taxes on the purchase of goods and services made with NSF award funds.

41. Debarment and Suspension

Recipients shall fully comply with the requirements stipulated in Subpart C of 2 CFR Part 180, entitled "*Responsibilities of Participants Regarding Transactions*" as supplemented by NSF's regulations at 2 CFR Part 2520 (<http://www.gpo.gov/fdsys/pkg/CFR-2011-title2-vol1/pdf/CFR-2011-title2-vol1-part2520.pdf>). The recipient is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 2 CFR Part 180, entitled "*Covered Transactions*," includes a term or condition requiring compliance with Subpart C. The recipient also is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transaction. The recipient acknowledges that failing to disclose the information required under 45 CFR § 180.335 may result in the termination of the award, or pursuance of other available remedies, including suspension and debarment.

42. Resolution of Conflicting Conditions

Should there be any inconsistency between any special conditions contained in the award and these Grant General Conditions (GC-1), the special conditions in the award shall control. Should there be any inconsistency between these Grant General Conditions (GC-1), any special conditions contained in the award, and any NSF guides, brochures, etc., cited or included by reference in the award, the matter should be referred to the NSF Grants and Agreements Officer for guidance.

Other Considerations

43. Liability

NSF cannot assume any liability for accidents, illnesses or claims arising out of any work supported by an award or for unauthorized use of patented or copyrighted materials. The grantee institution is advised to take such steps as may be deemed necessary to insure or protect itself, its employees and its property.

44. Sharing of Findings, Data, and Other Research Products

- a. NSF expects significant findings from research and education activities it supports to be promptly submitted for publication, with authorship that accurately reflects the contributions of those involved. It expects investigators to share with other researchers, at no more than incremental cost and within a reasonable time, the data, samples, physical collections and other supporting materials created or gathered in the course of the work. It also encourages grantees to share software and inventions or otherwise act to make the innovations they embody widely useful and usable.
- b. Adjustments and, where essential, exceptions may be allowed to safeguard the rights of individuals and subjects, the validity of results, or the integrity of collections or to accommodate legitimate interests of investigators.

45. Government Permits and Activities Abroad

- 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 U.S. are coordinated as necessary with appropriate U.S. and foreign government authorities and that necessary licenses, permits or approvals are obtained prior to undertaking the proposed activities.

46. Sense of the Congress on Use of Funds

Acts making appropriations to NSF provide “It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available in this Act should be American-made” and require the Foundation to notify grantees of that statement.

47. Increasing Seat Belt Use in the United States

In accordance with Executive Order 13043, *Increasing Seat Belt Use in the United States*, dated April 16, 1997, “grantees are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.”