

NATIONAL SCIENCE FOUNDATION (NSF)

Small Business Innovation Research (SBIR)/ Small Business Technology Transfer (STTR) Phase II Grant General Conditions (SBIR II) Effective January 4, 2010

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1. Type of Award

The grant letter specifies a pre-determined fixed amount of NSF support for the project described in the referenced grant proposal. NSF anticipates that the full award amount will be paid without regard to the actual cost subsequently incurred. Payment of this amount, however, is subject to compliance with the award terms and conditions, including Article 14, Project Reporting Requirements, Article 13, Payments, Article 25, Price Reduction for Defective Cost or Pricing Data, and NSF's acceptance of the reports submitted by the Grantee under Article 14. On the basis of its review of these reports and/or other pertinent information, NSF reserves the right to modify the payment schedule or suspend or terminate the award, if NSF determines that such action is appropriate.

This award is not subject to the Federal Commercial Cost Principles (48 CFR Part 31), except insofar as provided under Article 23, Suspension or Termination and Article 24, Termination Review Procedure of these SBIR II Conditions. If estimated total expenditures are significantly less than the award amount, NSF reserves the right to renegotiate the amount and/or duration of this award.

2. Grantee Responsibilities and Federal Requirements

The grantee has full responsibility for the conduct of the project or activity supported under this award and for adherence to the award conditions. A minimum of one-half of the research and/or analytical effort, as measured by the budget must be performed by the grantee on an SBIR Phase II award. On an STTR award, a minimum of 40% of the research, as measured by the budget, must be performed by the grantee, and a minimum of 30% of the research, as measured by the budget, by the collaborating institution.

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.

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. 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 9).

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.

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 (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 to be viewed, and/or downloaded electronically via the NSF FastLane system https://www.fastlane.nsf.gov/fastlane.isp.

3. 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 Officer is required for Significant Project Changes:
 - 1. Transfer of the project effort (see Article 9);
 - 2. Change in objective or scope (see Article 9);
 - 3. Absence or change of PI (see Article 9);
- b. 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.

4. 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.

5. 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 onetime 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 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.3c.

6. Consultant Services

Payments to individuals for consultant services under this grant shall not exceed the daily equivalent of the then current maximum rate paid to an Executive Schedule Level IV Federal employee (exclusive of indirect cost, travel, per diem, clerical services, fringe benefits and supplies).

7. Equipment

a. Purchase

No item of equipment over \$5,000, other than items identified in the approved budget, may be purchased without the advance written approval of the SBIR Program Officer.

b. Title

Title to equipment purchased with grant funds shall pass directly to the Government from the vendor. Within 30 days from the date of delivery by the vendor, the Grantee shall furnish the Foundation Property Management Officer with a full description of the equipment, including model and serial number, acquisition cost (including transportation charges), and the date of acquisition. The Grantee shall be responsible for property control over Government equipment until such time as it is disposed of as directed by the Government.

c. Disposition

Upon expiration of the grant, the Grantee shall provide the SBIR Program Officer with a listing of all equipment purchased with grant funds. This listing should include the acquisition cost and current estimated value of each piece of equipment as well as a recommendation from the Grantee regarding appropriate disposition. If the Grantee wishes to retain the property for continued use, the Grantee should also include a statement of the intended use as well as an indication of whether it is willing to purchase the equipment from the Government. Upon consideration of information provided by the Grantee and other relevant information, the

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

Government will determine appropriate disposition of the equipment and will provide the Grantee with disposition instructions.

8. Rights in Technical Data

The Grantee may retain rights in technical data, including software developed under this grant, except that the Government shall have the right to use such data for Governmental purposes. The Final Technical Report delivered under this grant, including technical data, may be made available to the public by the Government, except for that portion of the report containing technical data properly identified and marked as set forth below. To the extent permitted by law, the Government will not release properly marked technical data (such as data relating to an invention or software) outside the Government, except for evaluation purposes, for a period of four years from the expiration of the Phase II grant or of the Phase I grant, when no Phase II award is made, without approval of the Grantee. The Grantee must properly identify such data and set it off on a separate page in any submission to the Foundation. Such data must be clearly labeled as proprietary and marked with a legend similar to the following:

"The following is information which (name of Grantee) requests not be released to persons outside the Government, except for purposes of evaluation, for a period of four years from the expiration date of Grant No. (the NSF grant number) or the expiration date of a follow-on Phase II grant if awarded, whichever is later."

In addition to the rights vested in the Government to use such technical data during the four year period mentioned above, the Government shall retain a royalty free, irrevocable, world-wide license to use the data after the conclusion of the four year period whether or not the Grantee has sought or obtained patent protection or claimed copyright protection.

9. Significant Project Changes

The grantee is required to obtain prior written approval from the NSF Grants 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 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, 16, 17, 18, 19, , 20, 21, 22, 26, 27, 28, 29, 30, 31, 33, 34, 36, 37, 38, 39, and 40.

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 (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 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.

10. Procurement Standards

Whether or not approval of a procurement is required under Article 9.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 21, Audit and Records) are made a part of any contract or other arrangement whose award amount exceeds the simplified acquisition threshold (currently \$100,000).

11. 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 cost principles. The requirements for prior approval detailed in the governing cost principles are waived.
- 2. Except as provided in the governing 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 limited circumstances under which use of a foreign-flag air carrier is permissible. These circumstances are outlined below:

- Airline "Open Skies" Agreements: A foreign flag air carrier may be used if the 1. 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 example, in 2008, the U.S. entered into an "Open Skies" Agreement with the European Union. This 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 a point in the United States and any point in a Member State or between any two points outside the United States. accordance with the Agreement, however, a U.S.-flag air carrier must be used if: (a) transportation is between points for which there is a city-pair contract fare in effect for air passenger transportation services; or (b) transportation is obtained or funded by the Secretary of Defense or the Secretary of a Military Department. The conditions for use of a Member State airline apply to non-Federal employees as well (e.g., grantees). So, even though grantees are ineligible for city-pair contract fares, they must still use a U.S.-flag air carrier if a city-pair contract fare exists. For information on other "open skies" agreements in which the United refer has entered. please GSA's to http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA BASIC&contentId=24833 &noc=T.
- 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.

Use of a 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.

Use of a 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.

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 Federal Acquisition Regulation 31.2 (48 CFR § 31.2) for commercial firms and those non-profit organizations specifically exempted from the provisions of OMB Circular A-122; and
- c. Certain prior approval requirements contained in these Federal cost principles have been modified by Article 3.

13. Payments

Unless otherwise stated in the grant notice, payments will be made by NSF as follows: Twenty -five percent (25%) advance payment will be made at the time of the award, twenty percent (20%) upon acceptance by NSF of each satisfactory interim report (assumes a 24 month award duration), and the remainder (15%) upon acceptance by NSF of a satisfactory final report as described in Article 14 and/or in the SBIR/STTR Program Solicitation. Request for initial advance payments should be made within 30 days of the date of the award, and must made using NSF SBIR Award Request for Initial Payment be an (http://www.eng.nsf.gov/sbir/sbir request.pdt). Any interested earned on advanced payments may be retained by the grantee and used to further project objectives. Failure to submit an acceptable and timely report will result in withholding of payment and may be grounds for suspension or termination of the award.

14. Project Reporting Requirements

a. General

Payment of the grant amount is conditioned upon the Grantee's acceptance and compliance with the award terms and conditions which include expending the approximate person months proposed, submission of required reports to NSF and NSF's acceptance of the reports. The results of the Grantee's efforts under this grant are to be documented in the form of interim reports (3-5 pages) submitted on a six-month schedule and a final report. The interim reports and the final report must be submitted via the electronic project reporting system in FastLane. The NSF FastLane system may be accessed at http://www.fastlane.nsf.gov/.

A signed_SBIR/STTR Phase II Report Cover Page must be submitted to the SBIR Program Office upon commencement of the grant. The SBIR/STTR Phase II Report Cover Page will

cover the entire performance period of the grant (http://www.eng.nsf.gov/sbir/PII Report Cover.doc). The interim reports and the final report must be approved by the SBIR/STTR Program Officer prior to release of payment. In instances where a report is considered unacceptable, the SBIR/STTR Program Officer will reject the report in FastLane and will provide the Grantee with a written explanation for non-acceptance.

b. Interim Reports

Interim reports will detail: Participants, Activities and Findings, Publications and Products, and Contributions. The report should not exceed 5 pages and must include the following information:

- 1. Details about progress during the reporting period;
- 2. Problems encountered during the reporting period; and
- 3. Status of commercialization activities during the reporting period.

The PI must also include a milestone chart covering the progress for the reporting period, a total estimate of expenditures, cumulative estimated expenditures, level of effort in personmonths by the PI and key personnel (including consultants and subawardees) during the reporting period, and permanent equipment and/or major purchases or supplies during the reporting period. Interim reports are due no later than 30 days after the end of the respective six-month reporting period.

c. Final Report

The Phase II final report will detail: Participants, Activities and Findings, Publications and Products, and Contributions and shall have the following components:

- 1. Cumulative milestone information;
- A technical narrative (not to exceed 10 pages); and
- 3. A commercialization section (not to exceed 10 pages).

The milestone information must cover the actual expenditures for the entire project. The same format used for the interim reports should be used for the final milestone information. The technical narrative must address the following: a summary of the research carried out over the entire duration of the project; the extent to which the stated Phase II objectives were met; problems encountered and resolutions implemented; problems remaining or unfulfilled research objectives; highlight any unexpected results, information or events which may have affected the project; and could these results impact similar or related projects.

The commercialization section must have the following six parts (more details concerning the commercialization section are located at: http://www.eng.nsf.(!:ov/sbirspecs/Reporting/reporting.htm#p2fr):

Part 1: Company Data

Part 2: Funding Commitment(s)

Part 3: Phase IIB Supplement Data

Part 4: Products and/or Processes

Part 5: Company Employment and Revenue

Data Part 6: Company Commercialization Efforts

The Phase II final report is due no later than 90 days after the expiration of the award.

The NSF SBIR/STTR program has developed a telephone interview process (endorsed by the SBIR External Advisory Committee) to gather these commercialization results information on the 3rd, 5th, and 8th anniversary of the Phase II award. The telephone interview is part of the expanded awards management process within the SBIR/STTR program. The information on the company, the current status of commercialization, the products and/or services developed, why commercialization may have failed, intellectual property situation, key strategy and/or investor relationships, and employment statistics will be collected for a database for subsequent analysis. Phase II grantees will be contacted by NSF to schedule an interview at the appropriate times.

d. Project Outcomes Report for the General Public

Unless otherwise specified in the award, the grantee shall submit a Project Outcomes Report for the General Public within 90 days following the expiration date of the award. The Project Outcomes Report must be submitted electronically via Research.gov, which may be accessed at http://www.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.

15. 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.

16. Responsible Conduct of Research

Article 16 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. 18620–1) 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, if applicable, flow down to all subrecipients, or are otherwise appropriately addressed in the subaward instrument.

17. 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
- 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.

18. 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. Standard Treatment

Unless otherwise specified in the award, program income (except as noted in (1) below) received or accrued to the grantee during the period of this award shall be retained and added to the funds committed to the project by NSF and used to further project objectives. Also, unless otherwise specified, the grantee 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.

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.

19. 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.

20. Patent Rights

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.

- 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:

- 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.
- 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;
- 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.

21. 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 specified in Article 14.
 - 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 \$100,000) 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.

22. 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.

23. Suspension or Termination

a. Any suspension or termination action taken by NSF must be issued by an NSF Grants 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 24.

24. 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.

25. Price Reduction for Defective Cost or Pricing Data

- a. If any price, including profit, negotiated in connection with this grant, was increased by any significant amount because (1) the Grantee or its subcontractor furnished cost or pricing data that were not complete, accurate and current as certified in its Certificate of Current Cost Pricing data, (2) a subcontractor or prospective subcontractor furnished the Grantee cost or pricing data that were not complete, accurate and current as certified in its Certificate of Current Cost Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the grant shall be amended to reflect the reduction.
- b. Any reduction in the grant price under paragraph a. above due to defective data from a prospective contractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which the actual subcontract price was not itself affected by defective cost or pricing data.
- c. If the Grants Officer determines under paragraph a. of this clause that a price or cost reduction should be made, the Grantee agrees not to raise the following matters as a defense:
 - 1. The Grantee or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the grant would not have been modified even if accurate, complete and current cost or pricing data had been submitted.
 - 2. The Grants Officer should have known that the cost or pricing data in issue were defective even though the Grantee or subcontractor took no affirmative action to bring the character of the data to the attention of the Grants Officer.
 - 3. The Grantee or subcontractor did not submit a Certificate of Cost or Pricing Data.

Except as prohibited by c.3. of this article, an offset in an amount determined appropriate by the Grants Officer based upon the facts shall be allowed against the amount of a grant price reduction if:

- The Grantee certifies to the Grants Officer that, to the best of the Grantee's knowledge and belief, the Grantee is entitled to the offset in the amount requested; and
- The Grantee proves that the cost or pricing data (or price of amendment) is accurate and that the data was not submitted before such date.

An offset shall not be allowed if:

- The understated data was known by the Grantee to be understated when the Certificate of Cost or Pricing Data was signed; or
- The Government proves that the facts demonstrate that the grant price would not have been increased in the amount to be offset even if the available data had been submitted before the date of agreement of price.
- d. If any reduction in the grant price under this article reduces the price for which payment was made prior to the date of the amendment reflecting the price reduction, the Grantee shall be liable to and shall pay the United States at the time such overpayment is repaid simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the grantee to the date the Government is repaid by the Grantee at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2).

26. 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.² 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.

27. 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.

² 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.

28. Animal Welfare

- a. Any grantee performing research on vertebrate animals³ 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).
- b. In the event the grantee's multi-project Assurance is cancelled or lapses, the grantee must immediately notify the cognizant Grants 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/.

29. 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.

30. 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.

³ 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.

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

31. 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]."

32. 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.

33. State Sales and Use Taxes

Grantees are reminded that the cost principles cited in Article 12 limit 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.

34. 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 45 CFR Part 2520. 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. Recipients may access the Excluded Parties List System at http://epls.arnet.gov.

35. Resolution of Conflicting Conditions

Should there be any inconsistency between any special conditions contained in the award and these General Conditions, the special conditions in the award shall control.

Should there be any inconsistency between any special conditions contained in the award, these General Conditions, and any NSF guides, brochures, etc., cited or included by reference in the award, the matter should be referred to the NSF Grants Officer for guidance.

OTHER CONSIDERATIONS

36. 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.

37. 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.

38. 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.

39. 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.

40. 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."