



NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230

Small Business Innovation Research (SBIR) -- Phase II
Grant General Conditions
10/04

Table of Contents

<i>Article</i>	<i>Subject</i>
1.	Type of Award
2.	Grantee Responsibilities
3.	Significant Project Changes
	a. Change in Objective or Scope or Transfer of the Research Effort
	b. Change of Principal Investigator
4.	Consultant Services
5.	Subaward Requirements
6.	Grant Reporting Requirements
7.	Payments
8.	Rights in Technical Data
9.	Copyrightable Material
10.	Publications
11.	Information Collection
12.	Patent Rights
13.	Equipment
14.	Project Income
15.	Travel
16.	Audit and Records
17.	Price Reduction for Defective Cost or Pricing Data
18.	Site Visits
19.	Suspension or Termination
20.	Termination Review Procedure
21.	Nondiscrimination
22.	National Security: Classifiable Results Originating Under NSF Grants
23.	Animal Welfare
24.	Research Involving Recombinant DNA Molecules
25.	Clean Air and Water
26.	Human Research Subjects
27.	Resolution of Conflicting Conditions

OTHER CONSIDERATIONS

- 28. Liability
- 29. Activities Abroad
- 30. Sharing of Findings, Data and Other Research Products
- 31. Sense of the Congress on Use of Funds
- 32. Increasing Seat Belt Use in the United States

APPENDIX A

Patent Rights (APRIL, 1992)

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. However, payment of this amount is subject to compliance with the award terms and conditions, including Article 6, Grant Reporting Requirements, Article 7, Payments, Article 17, Price Reduction for Defective Cost or Pricing Data, and NSF's acceptance of the reports submitted by the Grantee under Article 6. 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 19, Suspension or Termination and Article 20, Termination Review Procedure of the General 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

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 must be performed by the Grantee. Although the Grantee is encouraged to seek the advice and opinion of the Foundation 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 the Foundation. The Grantee is responsible for notifying NSF about (1) any allegation of scientific misconduct that it concludes has substance and requires an investigation in accordance with NSF misconduct regulations published at 45 CFR 689, and (2) any significant problems relating to the scientific, technical, administrative or financial aspects of the grant.

3. Significant Project Changes

The Grantee is required to notify NSF in writing and obtain appropriate approvals whenever there are significant changes in the project or its direction as set forth below:

- a. *Change in Objectives or Scope or Transfer of the Project Effort.* No change in the phenomenon or phenomena under study or the objectives of the project stated in the proposal or agreed upon modifications thereto or transfer of the project effort may be undertaken without the written approval of NSF. NSF approval of such changes will be by an amendment to the grant signed by the NSF Grants Officer.

b. *Absence or Change of Principal Investigator.* If a named Principal Investigator or Project Director (PI/PD) plans to or becomes aware that he or she will (1) devote substantially less effort to the work than anticipated in the approved proposal, (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 in writing the SBIR program officer and the Grantee's Authorized Organizational Representative. Such changes are subject to NSF approval or other appropriate action including termination.

4. 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). The current rate (as well as prior archived rates) is available on the NSF Web site at: <http://www.nsf.gov/pubs/gpg/faqs.pdf>.

5. Subaward Requirements

If it becomes necessary to transfer, by contract or other means, over \$5,000, after the award is 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 subawardee (except for collaborative/joint arrangements; see GPM Section 313 for a definition.) NSF approval of such changes will be by an amendment to the grant signed by the NSF Grants Officer.

The proposed subaward must be approved prior to its issuance. See also Article 2, Grantee Responsibilities, regarding the minimum amount of effort required to be completed by the Grantee.

6. Grant 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 Phase II Report Cover Page must be submitted to the SBIR Program Office upon commencement of the grant. The SBIR 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 program officer prior to release of payment. In instances where a report is considered unacceptable, the SBIR program officer will reject the report in FastLane and will provide the Grantee with a written explanation for nonacceptance.

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. Problem Encountered during the reporting period.
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 person-months by the PI and key personnel (including consultants and subawardees) during the reporting period, 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
2. A technical narrative (not to exceed 10 pages)
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 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.gov/sbirspeccs/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.

d. Annual Commercialization Report. In addition to the above reports, an annual commercialization report is required to be submitted to the SBIR program for up to five years after the expiration of the award. Failure to submit annual commercialization reports may deter selection for future awards. The commercialization report will cover the amount and type of continuing investment obtained to pursue commercialization and any products, sales, royalties, patents, spin-offs attributable to the SBIR project, as well as any changes in the company's employment levels. Instructions on the specific content and the format, can be found at: <http://www.eng.nsf.gov/sbirspeccs/Reporting/reporting.htm#p2fr> .

7. Payments

Unless otherwise stated in the grant letter, 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 reports (assumes a 24 month award duration), and the remainder (15%) upon acceptance by NSF of a satisfactory final report as described in Article 6 above and/or in the SBIR Program Solicitation. Request for initial advance payments should be made within 30 days of the date of the award, and must be made using an NSF SBIR Award Request for Initial Payment form (http://www.eng.nsf.gov/sbir/sbir_request.pdf). Any interest earned on advance payments may be

retained by the grantee and used to further project objects. 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.

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. Copyrightable Material

a. Subject writing means any material that:

1. is or may be copyrightable under Title 17 of the United States Code; and
2. is produced by the Grantee or its employees in the performance of work under this grant.

Subject writings include such items as reports, books, journal articles, software, databases, sound recordings, video tapes, and video discs.

b. *Copyright Ownership, Government License.* Except as otherwise specified in the grant 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 non-exclusive, nontransferable, irrevocable, royalty-free license to exercise or have exercised for or on behalf of the United States throughout the world all the exclusive rights provided by copyright which rights will be subject to Article 7, Rights in Technical Data. Such license, however, will not include the right to sell copies or photo records of the copyrighted works to the public.

c. *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 the Foundation 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.

10. Publications

a. *Acknowledgment of Support.* The Grantee is responsible for assuring that an acknowledgment of NSF support will appear in any publication 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)."

b. *Disclaimer.* The Grantee is responsible for assuring that every publication of material based on or developed under this grant, 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 two copies of every publication of material based on or developed under this grant, clearly labeled with the grant number and other appropriate identifying information, are sent to the cognizant NSF Program Officer promptly after publication.

d. *Metric System.* Grantees are encouraged to use the metric system of weights and measures in all reports and publications resulting from this NSF grant.

11. Information Collection

Information collection activities performed under this grant 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. However, this requirement is not intended to preclude mention of NSF support of the project in response to an inquiry or acknowledgment of such support in any publication of this information.

12. Patent Rights

Unless otherwise provided in the grant letter, the Patent Rights clause included in Appendix A applies. The Grantee will include that clause in all subawards for experimental, developmental, or research activities.

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

14. Project Income

a. *Definition.* Project income refers to that portion of gross revenues, including royalties, received by or accruing to the Grantee through activities undertaken under this grant, whether received during or after the grant period. It includes, but is not limited to, proceeds from the sale, licensing, lease, rental, or other arrangement for the use, release, dissemination, or other disposal of copyrightable or noncopyrightable materials, properties, and inventions developed or produced under the grant. Income also includes any interest earned on all such revenues and proceeds.

b. *Standard Treatment.* Unless otherwise specified in the grant, project income received or accruing to the Grantee during the period of this grant shall be retained and added to the funds committed to the project by the Foundation and used to further project objectives. The Grantee shall have no obligation to the Foundation with respect to (1) license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions or (2) project income received after the period of this grant.

c. *Records Retention.* The Grantee is required to retain appropriate financial and other records relating to project income earned during the grant period and for three years beyond the end of the grant period.

15. Travel

a. Use of U.S.-Flag Air Carriers

1. The Comptroller General of the United States, by Decision B-138942 of June 17, 1975, as amended March 31, 1981, provided guidelines for implementation of Section 5 of the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C.1517).

2. Any air transportation to, from, between, or within a country other than the United States of persons or property, the expense of which will be assisted by NSF funding, must be performed by a U.S.-flag air carrier if service provided by such a carrier is available.

3. 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, the Foundation or traveler; or

(c) service by a foreign-flag air carrier can be paid for in excess foreign currency.

4. The following rules apply unless their application would result in the first or last leg of travel from or to the United States 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.

(c) If a U.S.-flag air carrier involuntarily reroutes the traveler via a foreign-flag air carrier, the foreign-flag air carrier may be used notwithstanding the availability of alternative U.S.-flag air carrier service.

b. Use of Foreign-Flag Air Carriers.

1. Travel To and From the United States. Use of a foreign-flag air carrier is permissible if:

(a) the airport abroad is 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) the airport abroad is an interchange point, and use of U.S.-flag air carrier service would require the traveler to wait 6 hours or more to make connections at that point, or would extend the time in a travel status by at least 6 hours more than travel by a foreign-flag air carrier.

2. Travel Between Points Outside the United States. 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 extend the time in a travel status by at least 6 hours more than travel by a foreign-flag air carrier; or

(c) the travel is not part of the trip to or from the United States, and use of a U.S.-flag air carrier would extend the time in a travel status by at least 6 hours more than travel by a foreign-flag air carrier.

3. 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 3 hours or less and service by a U.S.-flag air carrier would double the travel time.

16. Audit and Records

a. *Cost or Pricing Data.* The Grants Officer or other duly authorized representatives of the National Science Foundation shall have the right to examine and audit all of the Grantee's books, records, documents and other data, regardless of form (e.g., machine readable media such as disk, tape, etc.) or type (e.g., data bases, applications software, database management software, utilities, etc.) including computations and projections, related to proposing, negotiating, pricing, or performing the grant or amendment, in order to evaluate the accuracy, completeness, and currency of the cost and pricing data. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used.

b. *Technical Performance and Reports.* The Grants Officer or other duly authorized representatives of the National Science Foundation shall have to right to examine and audit books, records, other documents, and supporting materials, for the purpose of evaluating technical performance and reports under this award.

c. *Availability.* The Grantee shall make available at its office at all reasonable times all books, documents, papers, and records pertinent to this award including the materials described in paragraphs a. and b. above, and the financial and other records relating to project income required by Article 13, for examination, audit, or reproduction, until 3 years after final payment under this grant. In addition,

1. If this grant is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement; and

2. Records that relate to 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.

d. The Grantee may transfer computer data in machine readable form from one reliable computer medium to another. The Grantee's computer data retention and transfer procedures shall maintain the integrity, reliability, and security of the original data. The Grantee's choice of form or type of materials described in paragraphs a. and b. above of this article affects neither the Grantee's obligations nor the Government's rights under this article.

e. Notwithstanding any other provision in this Article, the Director of the National Science Foundation and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any pertinent books, documents, papers, and records of the Grantee organization, 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 United States, or any of their duly authorized representatives shall have access to pertinent records for similar purposes.

f. The Grantee shall insert a clause containing all the terms of this article, including this paragraph f. in all subcontracts under this grant that exceed the simplified acquisition threshold (currently \$100,000), altering the clause only as necessary to identify properly the contracting parties and the Grants Officer under the NSF grant. (See Article 4, which requires NSF approval to subcontract.)

17. 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 or 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 or Pricing Data, or (3) any of these parties furnish 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 subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual subcontract or (2) the actual cost to the Grantee, if there was not subcontract, was less than the prospective subcontract cost estimate submitted by the Grantee; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

c.

1. 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:

(a) 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.

(b) 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.

(c) The Grantee or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

2. 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-

(a) 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

(b) The Grantee proves that the cost or pricing data (or price of amendment) and that the data was not submitted before such date.

3. An offset shall not be allowed if-

(a) The understated data was known by the Grantee to be understated when the Certificate of Current Cost or Pricing Data was signed; or

(b) 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 the agreement on 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).

18. Site Visits

The Foundation, 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 the Foundation on the premises of the Grantee or a subcontractor under the grant, the Grantee shall provide and shall require its subcontractors 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 as will not unduly delay the work.

19. Suspension or Termination

a. The grant may be suspended or terminated in whole or in part, when the Foundation believes that the Grantee has materially failed to comply with the terms and conditions of the grant, including failure to provide satisfactory reports as required under Article 6, Grant Reporting Requirements, or when the Foundation has other reasonable cause, or for any reason by mutual agreement between the Foundation and the Grantee upon the request of either party, or when the parties cannot mutually agree to a termination.

b. Normally, action by the Foundation to suspend or terminate a grant will be taken only after the Grantee has been informed by the Foundation of any deficiency on its part and given an opportunity to correct it; but the Foundation may immediately suspend or terminate the grant without notice when it believes such action is reasonable to protect the interests of the Government.

c. 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 the Foundation, the Grantee could not reasonably avoid or eliminate, or which were otherwise authorized by the suspension or termination notice, provided such costs would otherwise be allowable under the terms of the grant and 48 CFR Part 31.

d. Within 30 days of the termination date, the Grantee will furnish a summary of progress under the grant and an itemized accounting of costs incurred prior to the termination date or pursuant to c., above. Final allowable costs under a termination settlement shall be in accordance with the terms of the grant, including this article, and the commercial cost principles contained at 48 CFR Part 31, giving due consideration to the progress under the grant. In no event will the total of NSF payments under a terminated grant exceed the grant amount, or the NSF pro rata share when cost sharing was anticipated, whichever is less.

e. A notice of termination other than by mutual agreement and/or the final settlement amount may be subject to review pursuant to Article 20, Termination Review Procedure.

20. Termination Review Procedure

- a. A request for review of a notice of termination should be addressed to the Director, Division of Grants and Agreements, National Science Foundation, 4201 Wilson Boulevard, Arlington VA, 22230. It must be postmarked no later than 30 days after the date of the letter notifying the awardee of the termination or settlement.
- b. The request for review must contain a full statement of the awardee'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 GPM Section 923.
- d. Pending resolution of the request for review, the notice of termination shall remain in effect.

21. Nondiscrimination

- a. The grant and any program assisted thereby are subject to the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), the regulations issued pursuant thereto by the Foundation (45 CFR 611), and the Assurance of Compliance which the Grantee has filed with the Foundation. No person on the basis of race, color, national origin, or handicap shall be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination under the grant. In addition, if the project involves an education activity or program, as defined by Title IX of the Education Amendments of 1972 (20 U.S.C. 1681-1686), no person on the basis of sex shall be excluded from participation in the project. Further, by acceptance of the grant, the Grantee assures the Foundation that it will comply with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and the Foundation's implementing regulations (45 CFR 605).
- b. The Grantee shall obtain from each organization that applies to be or serves as a subrecipient, subgrantee or subcontractor under the grant (for other than the provision of commercially available supplies, materials, equipment, or general support services) an Assurance of Compliance with Title VI of the Civil Rights Act of 1964. Civil Rights Act assurances may be filed with the Grantee in one of two ways: (1) by written notification that the appropriate Assurance of Compliance form has been executed and filed either with the Foundation or the U.S. Department of Health and Human Services; or (2) by executing and filing with the Grantee an NSF Assurance of Compliance Form. The Grantee shall obtain assurances pursuant to Section 504 of the Rehabilitation Act of 1973, as amended, from subrecipients by incorporating into the subagreement a provision that acceptance of the subagreement constitutes assurance.
- c. The Grantee agrees to comply with the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.) as implemented by the Department of Health and Human Service regulations at 45 CFR 90 and the regulations of the Foundation at 45 CFR 617. In the event the Grantee passes on NSF financial assistance to subrecipients, this provision shall apply to the subrecipients, and the instrument under which the Federal financial assistance is passed to the subrecipient shall contain a provision identical to this provision.

22. National Security: Classifiable Results Originating Under NSF Grants

- a. NSF does not have original classification authority and does not normally support classified projects. It therefore does not expect that results of NSF-supported research projects will be classifiable, except in very rare instances.

- b. Executive Order 12958 [60 Federal Register 19825 (1995)] states that basic scientific research information not clearly related to the national security may not be classified [Section 1.8(b)]. Nevertheless, some information concerning (among other things) scientific, technological or economic matters relating to the national security or cryptology may require classification [Sections 1.5(c) & (e)].
- c. There may therefore be cases when an NSF awardee originates information during the course of an NSF-supported project that the awardee believes requires classification under Executive Order 12958 [Section 1.4(e)].
- d. In such a case, the awardee has the responsibility to promptly:
1. submit the information directly to the U.S. Government agency with appropriate subject matter interest and classification authority, or, if uncertain which agency should receive the information, to the Director of the Information Security Oversight Office, General Services Administration;
 2. protect the information as though it were classified until the awardee is informed that the information does not require classification, but not longer than 30 days after receipt by the agency with subject matter interest or by the General Services Administration; and
 3. notify the cognizant NSF Program Officer.
- e. The Executive Order requires the agency with appropriate subject matter interest and classification authority to decide within 30 days whether to classify the material. If it determines the information to require classification, the awardee shall cooperate with that agency, NSF, or other appropriate agencies in securing all related project notes and papers.
- f. If the information is determined to require classification, the performing organization may wish or need to discontinue the project.

23. Animal Welfare

Any awardee performing research on vertebrate animals shall comply with the Animal Welfare Act [7 U.S.C. 2131 et seq] and the regulations promulgated thereunder by the Secretary of Agriculture [9 CFR, 1.1-4.11] pertaining to the humane care, handling, and treatment of vertebrate animals held or used for research, teaching or other activities supported by Federal awards. The awardee is expected to ensure that the guidelines described in the National Academy of Science (NAS) Publication, "*Guide for the Care and Use of Laboratory Animals*" (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).

NOTE--The awardee 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), USDA, for the region in which its research facility is located. The location of the appropriate APHIS Regional Office, as well as information concerning this program, may be obtained by contacting the Senior Staff Officer, Animal Care Staff, USDA/APHIS, Federal Center Building, Hyattsville, MD 20782.

24. Research Involving Recombinant DNA Molecules

If this award supports research involving recombinant DNA molecules, the awardee agrees to comply with the requirements of GPM Section 712.

25. Clean Air and Water

(Applicable only if the grant 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. 1318) and is listed by EPA, or the grant 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), relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Air Act and the 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 grant will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date that the grant 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 grant is being performed.
- d. To insert the substance of the provisions of this article into any nonexempt subcontract.

26. 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 grant. The Grantee agrees to comply with the NSF regulation, entitled, "Protection of Human Subjects, 45 CFR 690."

27. Resolution of Conflicting Conditions

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

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

OTHER CONSIDERATIONS

28. Liability

The Foundation cannot assume any liability for accidents, illnesses, or claims arising out of any work supported by a grant 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.

29. Activities Abroad

The Grantee should assure that grant activities carried on outside the United States are coordinated as necessary with appropriate Government authorities and that appropriate licenses, permits or approvals are obtained prior to undertaking proposed activities. The Foundation does not assume responsibility for Grantee compliance with the laws and regulations of the country in which the work is to be conducted.

30. 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.

31. Sense of the Congress on Use of Funds

Recent 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 awardees of that statement.

32. 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.”

Appendix A

PATENT RIGHTS (APRIL, 1992)

a. Definitions.

1. INVENTION means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the U.S.C., 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 grant, 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 grant 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 grant 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 grant 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 and 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 granted 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 granted.

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
3. 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 grant sublicenses of the same scope to the extent the grantee was legally obligated to do so at the time the grant was awarded. 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 §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 §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 grant 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 grant) 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 within two months of filing any domestic or foreign patent application.

6. The grantee or its representative will forward to NSF a copy of any U.S. patent covering a subject invention within two months after it is issued.

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 grant or 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 grant 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 Grants with Non-profit Organizations.** If the grantee is a non-profit 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.

1. Communications. All communications required by this Patent Rights clause should be sent to:

Patent Assistant
Office of the General Counsel
National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230