



**NATIONAL SCIENCE FOUNDATION (NSF)  
Grant General Conditions (GC-1)  
Effective January 30, 2023**

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Effective January 30, 2023, new grants and funding amendments to existing grants made to for-profit organizations (other than Small Business Innovation Research and Small Business Technology Transfer grantees) and State, local and Tribal governments, will incorporate by reference, and be subject to, the *Grant General Conditions (GC-1)*, dated January 30, 2023.

The GC-1 will not be applied to NSF cooperative agreements or to NSF fellowship awards made to individuals.

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## 1. Grantee Responsibilities and Federal Requirements

a. The grantee has full responsibility for the conduct of the project or activity supported under this grant and for adherence to the grant terms and conditions. Although the grantee is encouraged to seek the advice and opinion of NSF on special problems that may arise, such advice does not diminish the grantee's responsibility for making sound scientific and administrative judgments and should not imply that the responsibility for operating decisions has shifted to NSF. The grantee is responsible for notifying NSF about: (1) any allegation of research misconduct that it concludes has substance and requires an investigation in accordance with NSF research misconduct regulations published at 45 Code of Federal Regulations (CFR) Part 689; or (2) any significant problems relating to the administrative or financial aspects of the grant.

b. The requirements of this grant are contained in these *Grant General Conditions* unless otherwise specified in the award notice. The applicable Federal administrative standards are incorporated by reference and are contained in 2 CFR §200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. 2 CFR §200 also applies to commercial organizations, including small businesses. These *Grant General Conditions* (GC-1) serve as the Foundation's implementation of 2 CFR §200.

c. By acceptance of this grant, 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 grant including the monitoring of subrecipients (if applicable). Specific guidance on subrecipient monitoring and management can be found in 2 CFR §§200.331-332. A listing of National Policy Requirements the grantee must adhere to, where applicable, is located at: <https://nsf.gov/awards/managing/rtc.jsp>.

d. Documentation for each expenditure or action affecting this grant 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 the grant terms and conditions;
2. is consistent with NSF and grantee policies;
3. represents effective utilization of resources; and
4. does not constitute a project change which requires NSF prior written approval (see Article 8).

Nothing in this article shall be construed to require administrative reviews or documentation that duplicates those already required by existing organizational systems or by applicable Federal standards, e.g., 2 CFR §200.

e. The grantee is responsible for ensuring that the Principal Investigator (PI)<sup>1</sup> and co-PIs receive a copy of the grant terms and conditions, including: the award notice, the budget, these general terms and conditions, any special terms and conditions and any subsequent changes in

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<sup>1</sup> For purposes of the terms and conditions, the term Principal Investigator (PI) and co-PI also includes the term Project Director and co-Project Director.

the grant terms and conditions. These grant terms and conditions are made available to the grantee by NSF in [electronic form](#), 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 grant terms and conditions. Award notices are available electronically via Research.gov at <https://www.research.gov/award-documents-web>. Sponsored Project Offices are able to view, print and/or download NSF award notices for their organizations and PIs and co-PIs can access their individual award notices through use of Research.gov.

## 2. Prior Approval Requirements

a. The grantee must obtain written approval from NSF as specified in the [NSF Prior Approval Matrix for State and Local Governments and For-profit Organizations](#).

Unless otherwise specified in the award notice, no additional NSF prior written approvals beyond those specified in [NSF Prior Approval Matrix for State and Local Governments and For-profit Organizations](#) and these grant terms and conditions are required.

b. Requests for NSF prior written approval in the matrix specified must be submitted via the use of NSF's electronic systems. Those prior approval requirements that do not already have a specific request type in NSF's electronic systems must be submitted via use of the "Other" category in Research.gov.

## 3. Pre-award Costs

a. The grantee may approve pre-award costs incurred within the 90-calendar day period before the start date of the grant. Requests for approval of pre-award costs for periods greater than 90 calendar days must be submitted electronically via NSF's electronic systems. Pre-award expenditures prior to the funding of an increment within a continuing grant 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 a grant is not subsequently made; or (3) if a grant is made for a lesser amount than the grantee anticipated.

d. In accordance with 2 CFR §200.458, if pre-award costs are charged to the grant, these costs must be charged to the initial budget period, unless otherwise specified in the award notice.

## 4. No-Cost Extensions

a. The grantee may authorize a one-time extension of the end date of the grant up to 12 months if additional time beyond the established end date is required to assure adequate completion of the original scope of work within the funds already made available.<sup>2</sup> A single extension, which shall not exceed 12 months, may be made for this purpose and must be made

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<sup>2</sup> The grantee is not authorized to extend an award that contains a zero balance.

prior to the originally established end date. As stipulated in 2 CFR §200.308(e)(2), this one-time extension may not be exercised merely for the purpose of using any unliquidated balances.

b. The grantee shall notify NSF, providing supporting reasons for the extension, and the revised period of performance, at least ten calendar days prior to the end date specified in the grant to ensure accuracy of NSF's award data. All grantee-authorized extensions must be submitted electronically via NSF's electronic systems.

c. Requests for no-cost extensions beyond the above referenced authority must follow the procedures set forth in the NSF *Proposal and Award Policies and Procedures Guide* (PAPPG) [Chapter VI.D.3.c](#).

## **5. Consultant Services (also referred to as Professional Service Costs)**

Costs for professional and consultant services, including those who are members of a particular profession or possess a special skill and who are not officers or employees of the performing organization, are allowable when reasonable in relation to the services rendered and when not contingent upon recovery of costs from NSF. If not included in the award budget, anticipated services must be justified and information furnished on each individual's expertise, primary organizational affiliation, normal daily compensation rate and number of days of expected service. Consultants' travel costs, including subsistence, may be included. If requested, the grantee must be able to justify that the proposed rate of pay is reasonable. Additional information on the allowability of consultant costs is available in 2 CFR §200.459.

## **6. Equipment**

Equipment falls under the umbrella of property, which consists of real property and personal property (tangible and intangible). The standards for managing, tracking, and disposing of property funded by NSF or any property acquired for a project under an NSF grant are outlined in 2 CFR §§200.310-316.

### **a. Title to Equipment – Exempt Property**

Unless otherwise specified in the grant, title to equipment purchased or fabricated with NSF award funds will vest with the grantee upon acquisition. Such equipment is considered exempt property and shall be acquired and used in accordance with paragraph b. below. The grantee holds title to the property in trust consistent with [2 CFR §200.316](#), unless and until the expiration of 120 days from the award end date providing the government has not exercised its conditional interest as further described in paragraph b.7.

### **b. Conditions for Acquisition and Use of Equipment**

1. Grantee Assurance. The grantee will assure that for each purchase of equipment, it is:

- (a) necessary for the research or activity supported by the grant;
- (b) not otherwise reasonably available and accessible;
- (c) of the type normally charged as a direct cost to sponsored agreements; and

(d) acquired in accordance with organizational practice.

2. General Purpose Equipment. Expenditures for general-purpose equipment are typically not eligible for support (see [PAPPG Chapter IX.E.2.b](#)).

3. Equipment Usage. The equipment must remain in use for the specific project for which it was obtained in accordance with [2 CFR §200.313\(c\)\(1\)](#), unless the provision in [2 CFR §200.313\(c\)\(4\)](#) applies.

4. Equipment Sharing. The equipment must be shared on other projects or programs in accordance with [2 CFR §200.313\(c\)\(1\)](#).

5. Property Management Requirements. The grantee shall maintain a property management system that, at a minimum, meets the requirements of [2 CFR §200.313\(d\)](#), which requires a physical inventory every two years, ensures adequate safeguards to prevent loss, damage, or theft of the property, and provides for maintenance procedures to keep the property in good condition.

6. Competition. The grantee must not use equipment acquired with the Federal award to provide services for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute for as long as the Federal government retains an interest in the equipment in accordance with [2 CFR §200.313\(c\)\(3\)](#).

7. Right to Transfer Title. In accordance with [2 CFR §200.313\(e\)](#), NSF may identify items of equipment having an acquisition cost of \$5,000 or more where NSF reserves the right to transfer the title to the Federal Government or a third party named by the Federal Government at any time during the grant period. In cases where NSF elects to transfer the title, disposition instructions will be issued no later than 120 days after the end date of the NSF-supported project for which it was acquired.

c. Requirements for Federally-owned Property

In the event that title to equipment is vested in the Federal Government, such Federally-owned property (FOP) must be identified, tagged or segregated in such a manner as to clearly indicate its ownership by the Federal government. Unless otherwise provided in the grant, such government property must be used only for the performance of the project. An inventory report must be submitted in accordance with paragraph 1. below and a physical inventory of FOP must be conducted every two years pursuant to [2 CFR §200.313\(d\)\(2\)](#).

1. Annual Inventory Report for Federally-owned Property

(a) Submission Requirement: The grantee must submit an annual inventory report by NSF grant number for all FOP having an original acquisition cost of \$5,000 or more in accordance with [2 CFR §200.312\(a\)](#). The annual inventory report should be submitted to the NSF Property Administrator, Division of Administrative Services (DAS), no later than October 15 each year using the NSF Central Property Inventory Repository (CPIR) system.

(b) Content of Annual Inventory Report: The report should include the below information for all FOP purchased or constructed, including land and buildings, under the grant, inclusive of all subawards. In addition, the report should include any FOP acquired through the General Services

Administration (GSA) Federal Excess Personal Property Utilization Program and the Federal Surplus Personal Property Donation Program. In the event that the grantee is in possession of FOP under multiple grants, the reporting must be specific to each NSF grant number. The grantee may use the Office of Management and Budget (OMB)-approved Post-Award Reporting forms for Tangible Personal Property (Standard Form (SF)-428, SF-428A, SF-428B, SF-428C, and SF-428S) accessed on the [Grants.gov](https://www.grants.gov) website.

Required inventory information:

- description of the property;
- serial number or other identification number;
- cost of the property;
- acquisition date;
- use and condition of the property;
- the source of funding for the property (including the Federal Award Identification Number (FAIN));
- who holds title;
- percentage of Federal participation in the project costs for the Federal award under which the property was acquired;
- the location;
- any ultimate disposition data including the date of disposal and sale price of the property; and
- a description of Construction-in-Progress (CIP) and Work-in-Progress (WIP) items and construction costs incurred to date.<sup>3</sup>

## 2. Final Inventory Report for Federally-owned Property

Upon expiration of the grant, the grantee will report all the FOP purchased or constructed under the grant or acquired through the GSA Federal Excess Personal Property Utilization Program and the Federal Surplus Personal Property Donation Program to the NSF Property Administrator for further agency utilization and disposition using the CPIR system. The final inventory report must include the same contents as the annual inventory report described in paragraph c.1 above and include the grantee's disposition request (see [PAPPG Chapter IX.E.3](#)).

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<sup>3</sup> CIP is defined as real property that is in the process of being manufactured or fabricated but is not yet complete. WIP is defined as equipment that is in the process of being manufactured or fabricated but is not yet complete. CIP and WIP consist of the costs of direct materials, direct labor, direct purchased services and indirect costs, including general and administrative and overhead costs. Costs coded as such should not be depreciated.

## 7. Participant Support Costs

a. *Participant support costs* as defined in 2 CFR §200.1 are direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants (but not employees) in connection with NSF-sponsored conferences. NSF prior written approval is required for any additional categories of participant support costs, such as incentives, gifts, souvenirs, t-shirts and/or memorabilia and the request must be submitted via Research.gov. NSF approval of such changes will be by an amendment to the grant. The grantee must account for participant support costs separately. Indirect costs are not allowed on participant support costs (see [PAPPG Chapter II.D.2.f\(v\)](#)).

b. Funds provided for participant support must not be used by the grantee for other categories of expense without specific NSF prior written approval. Such requests must be submitted electronically via Research.gov.

## 8. Project Changes

Consistent with 2 CFR §200.308(c), the grantee is required to obtain NSF prior written approval whenever there are changes in the project as stipulated below.

### a. Subawarding or Transferring Part of an NSF Award (Subaward)

1. If the intention to subaward or transfer part of the project to another organization has been disclosed in the proposal, NSF authorization is not needed unless approval has been specifically withheld in the award notice.

2. If it becomes necessary to subaward or transfer part of an NSF award after a grant has been made, notification of this intent should be submitted via use of NSF's electronic systems and must be electronically signed by an Authorized Organizational Representative (AOR). The request shall include a clear description of the work to be performed and a proposed budget (see [PAPPG Chapter VII.B.4](#) for additional information). NSF approval of such changes will be by an amendment to the grant.

3. The grantee remains responsible for monitoring of the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations and the terms and conditions of the subaward as outlined in 2 CFR §§200.331-332. This includes ensuring necessary documentation for all subawards is maintained for the same retention period as the grantee's and making it available to NSF upon request. The grantee shall include subaward activities in the annual and final annual project reports that are submitted to NSF.

4. Consistent with the requirements specified in 2 CFR §200.332, the grantee must adhere to the requirements for pass-through entities in establishing and managing subawards issued under the grant. In addition, the grantee shall ensure that the following articles, if applicable, flow down to all subrecipients, or are appropriately addressed in the subaward instrument: Articles 5, 6, 7, 9, 10, 11, 12, 17, 18, 19, 20, 21, 25, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 49, 51, 52, 55, 56 and 57. If the grantee issues contracts exceeding \$2,000 for construction, alteration or repair that are within the scope of the Acts found in 2 CFR §200, Appendix II, "*Contract Provisions for Non-Federal Entity Contracts Under Federal*



*Awards*", the appropriate clauses applicable to construction activities also will be included in applicable contracts.

b. Changes 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 via Research.gov. NSF approval of such changes will be by an amendment to the grant.

c. Long-Term Disengagement or Change of PI or co-PI

If a named PI or co-PI 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 in 2 CFR §200.308(c)(3) as a reduction of 25% or more in time devoted to the project); (2) sever his or her connection with the grantee; or (3) be disengaged from the project for a continuous period of more than three months, or otherwise relinquish active direction of the project, he or she shall advise the appropriate official at the grantee, who shall initiate action appropriate to the situation in accordance with the guidelines described in [PAPPG Chapter VII.B.2](#).

## 9. Procurement Standards

The grantee (including for-profit organizations) is responsible for compliance with the procurement standards identified in 2 CFR §§200.317-327.

## 10. Travel

a. Allowability of Travel Expenses

1. Expenses for transportation, lodging, subsistence and related items incurred by project personnel and by outside consultants employed on the project (see [PAPPG Chapter II.D.2.f\(iv\)](#)) who are in travel status on business related to an NSF-supported project are allowable as prescribed in the governing cost principles. Except as noted in paragraph b. below, the requirements for NSF prior written approval specified in 2 CFR §200.475 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 conditions outlined in 2 CFR §200.475(c)(2). See also 2 CFR §200.432.

NSF prior written approval is required for travel costs for dependents and must be requested via Research.gov. NSF approval of such changes will be by an amendment to the grant.

Temporary dependent care costs (as dependent is defined in 26 United States Code (USC) §152) above and beyond regular dependent care that directly results from travel to conferences is allowable as outlined in 2 CFR §200.475(c)(1).

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

1. In accordance with the Fly America Act (49 USC §40118), any air transportation to, from, between, or within a country other than the U.S. of persons or property, the expense of which will be assisted by NSF funding, must be performed by or under a code-sharing arrangement with a U.S.-flag air carrier if service provided by such a carrier is available (see Comptroller General Decision B-240956, dated September 25, 1991). Tickets (or documentation for electronic tickets) must identify the U.S. flag air carrier's designator code and flight number.

2. For the purposes of this requirement, U.S.-flag air carrier service is considered available even though:

(a) comparable or a different kind of service can be provided at less cost by a foreign-flag air carrier;

(b) foreign-flag air carrier service is preferred by, or is more convenient for, NSF or traveler; or

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

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

(a) a U.S.-flag air carrier shall be used to destination or, in the absence of direct or through service, to the farthest interchange point on a usually traveled route.

(b) if a U.S.-flag air carrier does not serve an origin or interchange point, a foreign-flag air carrier shall be used only to the nearest interchange point on a usually traveled route to connect with a U.S. flag air carrier.

d. Use of Foreign-Flag Air Carriers

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

1. Airline "Open Skies" Agreements

A foreign flag air carrier may be used if the transportation is provided under an air transportation agreement between the United States and a foreign government, which the Department of Transportation has determined meets the requirements of the Fly America Act. For information on "open skies" agreements in which the United States has entered, please refer to the [GSA website](#).

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

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

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

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

#### 2. Involuntary Rerouting

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

#### 3. Travel To and From the U.S. on non-European Community Airlines

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

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

#### 4. Travel Between Points Outside the U.S. on non-European Community Airlines

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

- (a) travel by a foreign-flag air carrier would eliminate two or more aircraft changes en route;

(b) travel by a U.S.-flag air carrier would require a connecting time of four hours or more at an overseas interchange point; or

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

#### 5. Short Distance Travel

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

### 11. Rearrangement and Reconversion Costs

a. Costs incurred for ordinary and normal rearrangement and alteration of facilities are allowable as indirect costs.

b. Rearrangement and reconversion costs incurred specifically for the NSF grant aggregating \$25,000 or less to adapt space or utilities within a completed structure to accomplish the objectives of the grant, are allowable and approved, provided the:

1. building has a usable life consistent with project purposes and is architecturally suitable for conversion;

2. rearrangement and reconversion costs are essential to the project supported by the grant; and

3. space involved will be occupied by the project. In situations where the space is rented, in order for the costs of the rearrangement and reconversion to be allowed, the grantee must secure a lease for the length of the project.

c. Rearrangement and reconversion costs exceeding \$25,000 require NSF prior written approval via Research.gov. Note that Appendix II of 2 CFR §200 contains provisions that must be included in contracts made by the grantee.

### 12. Allowable Costs

a. The allowability of costs<sup>4</sup> and cost allocation methods for work performed under this grant, up to the amount specified in the grant, shall be determined in accordance with the governing cost principles as specified below and must conform with NSF policies, grant special provisions and grantee internal policies in effect on the start date of the grant.

b. The cost principles that govern Federal awards can be found in 2 CFR §200, Subpart E.

c. Separate guidance for for-profit organizations can be found in the *Federal Acquisition Regulation*, 48 CFR Part 31.

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<sup>4</sup> Consistent with 2 CFR §200.453(c), for computing devices, charging as a direct cost is allowable for devices that are essential and allocable, but not solely dedicated, to the performance of the grant.

d. Indirect Cost Reimbursement

1. Reimbursement of indirect costs should be calculated by applying the approved, negotiated indirect cost rate(s) to the appropriate base(s).
2. In the event that new U.S. Federally negotiated rate agreements are approved during the award performance period, revised negotiated rates may be applied.
3. Excess indirect costs charged to NSF grants due to use of an incorrect rate will be disallowed.

e. Publication and Printing Costs

In accordance with 2 CFR §200.461, costs for publication or dissemination of research results may be charged to this grant during closeout if the costs are not incurred during the period of performance. If charged to the award during closeout, these costs must be charged to the final budget period, unless otherwise specified by NSF.

- f. Certain prior approval requirements contained in the governing cost principles have been modified by Article 2.

### 13. Payments

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

b. In accordance with 2 CFR §200.305, where appropriate, the grantee is required to maintain advances of Federal funds in interest-bearing accounts. The grantee may retain interest earned on amounts up to \$500 per year for administrative expenses. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either the Automated Clearing House (ACH) network or a Fedwire Funds Service payment. Instructions on submission of remittances is contained in 2 CFR §200.305(b)(9).

### 14. Continuing Grant Increments

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

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

## 15. Project Reporting Requirements

### a. Annual Project Reports

1. Submission Requirement. Annual project reports are required for both standard and continuing grants.<sup>5</sup>

2. Content of Annual Project Reports. Unless otherwise specified in the grant, the Research Performance Progress Report (RPPR), as implemented by NSF in Research.gov, must be used for preparation of annual project reports to address progress in all activities of the project, including any activities intended to address the Broader Impacts criterion that are not intrinsic to the research. The grantee shall include subaward activities in annual project reports that are submitted to NSF.

3. Timing of Annual Project Reports. Annual project reports must be submitted electronically, via Research.gov, no later than 90-days prior to the end of the current budget period to provide sufficient time for review and approval by the cognizant NSF Program Officer. The report becomes overdue the day after the end of the current budget period if it has not been submitted by the PI or co-PI and approved by the cognizant NSF Program Officer.

The report becomes overdue the day after the 90-day period ends. Failure to submit timely reports will delay NSF processing of additional funding and administrative actions, including, but not limited to, no-cost extensions. In the case of continuing grants, failure to submit timely reports will delay processing of funding increments.

It should be noted that the final annual report serves as the project's final report and must be submitted in accordance with paragraph b. below.

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

### b. Final Annual Project Report

1. Submission Requirement. A final annual project report is required for both standard and continuing grants.

2. Content of Final Project Report. The final annual project report is the last annual report of the project and should be written specifically for the most recently completed budget period. It should address progress in all activities of the project in its final year, including any activities intended to address the Broader Impacts criterion that are not intrinsic to the research. This report is not cumulative. By submitting the final annual project report, the PI or co-PI is signifying that the scope of work for the project has been completed and that the PI or co-PI does not anticipate that any further research activities (including a no-cost extension, supplemental funding, or transfer of the grant) need to be completed on the project. Submission of the final annual project

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<sup>5</sup> Submission of an "interim" report via [Research.gov](https://www.research.gov) does not constitute compliance with the annual reporting requirement.

report, however, does not preclude the grantee from requesting any further payments for costs incurred during the period of performance.

3. **Timing of Final Annual Project Report.** Unless otherwise specified in the grant, the final annual project report must be submitted in Research.gov no later than 120-days following the end date of the grant. As reflected in the Project Report System, the report is considered due during the 120-day period. If the report has not been submitted by the PI or co-PI and approved by the cognizant NSF Program Officer within the 120-day period, the report becomes overdue.

4. **Additional Requirements.** The grantee also shall provide to the cognizant NSF Program Officer, within 120-days following the end date of the grant:

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

c. **Update of Current Support in Annual and Final Annual Project Reports**

PIs and co-PIs on active NSF grants must indicate if there has been a change in active other support since submission of the proposal, or the last reporting period in their annual and final annual project report. If there has been a change, the individual must submit a revised current and pending (other) support document as part of their project report.

NSF may consult with the PI or co-PI and the AOR, if necessary, and determine the impact of the new information on the NSF-funded grant, and, where necessary, take appropriate action.

d. **Project Outcomes Report for the General Public**

1. **Submission Requirement.** A project outcomes report is required for both standard and continuing grants.

2. **Content of Project Outcomes Report.** This report serves as a brief summary, prepared specifically for the public, of the nature and outcomes of the project.

**Section Contents:**

a. Describe the project outcomes or findings that address the intellectual merit and broader impacts of the work as defined in the NSF merit review criteria. This description should be a brief (generally, two to three paragraphs) summary of the project's results that is written for the lay reader. PIs or co-PIs are strongly encouraged to avoid use of jargon, terms of art, or acronyms.

b. NSF will automatically include all publications associated with the grant that are reported in annual and final annual project reports. Other products that have resulted from the grant may also be listed. Examples of other products include collections, data sets, software, as well as educational materials.

c. Information regarding anticipated publication of project results, as well as any other information that would be of interest to the public also may be included in this section.

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

The report will be posted electronically by NSF **exactly as it is submitted** and will be accompanied by the following disclaimer:

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

3. Timing of Project Outcomes Report. The project outcomes report must be submitted in Research.gov no later than 120 days following the end date of the grant. The report becomes overdue the day after the 120-day period ends if it has not been submitted by the PI or co-PI. By submitting the project outcomes report, the PI or co-PI is signifying that the scope of work for the project has been completed and that the PI or co-PI does not anticipate that any further research activities (including a no-cost extension, supplemental funding, or transfer of the grant) need to be completed on the project. Submission of the project outcomes report, however, does not preclude the grantee from requesting any further payments for costs incurred during the period of performance. For information about the content of the report, see [PAPPG Chapter VII.D.3](#).

e. Compliance with Reporting Requirements

In accordance with 2 CFR §200.344(i), if the grantee does not submit all required reports within one year of the period of performance end date, NSF must report the grantee’s material failure to comply with the terms and conditions of the grant with the OMB-designated integrity and performance system (currently Federal Awardee Performance and Integrity Information System (FAPIIS)). NSF may also pursue other enforcement actions per 2 CFR §200.339.

## 16. Expenditure Reports

The grantee must submit final payment requests through ACM\$ no later than 120 calendar days after the end date of the grant. This requirement applies to all current grants and funding amendments to existing NSF grants, as well as to all new NSF grants.

NSF uses the payment request entries in ACM\$ to collect the final financial data for awards paid through that system. No additional interim or final financial reporting is required.

For instructions regarding final disbursement reporting, see [PAPPG Chapter VIII.E](#).



## 17. 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. This requirement, however, is not intended to preclude mention of NSF support of the project in response to an inquiry or acknowledgment of such support in any publication of this information.

## 18. Responsible and Ethical Conduct of Research

**The plan to provide appropriate training and oversight in the responsible and ethical conduct of research to faculty and other senior personnel who will be supported by NSF to conduct research will go into effect for new proposals submitted or due on or after July 31, 2023.**

In accordance with Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 USC §1862o–1), as amended, NSF requires that the grantee must have a plan in place to appropriate training and oversight in the responsible and ethical conduct of research (RECR) to undergraduate students, graduate students, postdoctoral researchers, faculty, and other senior personnel who will be supported by NSF to conduct research. Such training must include mentor training and mentorship. Training plans are subject to review, upon request.

The grantee must designate one or more persons to oversee compliance with the RECR training requirement. The grantee is responsible for verifying that undergraduate students, graduate students, postdoctoral researchers, faculty, and other senior personnel 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.

The grantee shall ensure that these RECR requirements flow down to all subrecipients or are otherwise appropriately addressed in the subaward.

## 19. Safe and Inclusive Working Environments for Off-Campus or Off-Site Research

For grants that conduct research off-campus or off site<sup>6</sup>, the grantee is required to have a plan in place for that awarded proposal that describes how the following types of behavior will be addressed:

- Abuse of any person, including, but not limited to, harassment, stalking, bullying, or hazing of any kind, whether the behavior is carried out verbally, physically, electronically, or in written form; or
- Conduct that is unwelcome, offensive, indecent, obscene, or disorderly.

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<sup>6</sup> For purposes of this requirement, off-campus or off-site research is defined as data/information/samples being collected off-campus or off-site, such as fieldwork and research activities on vessels and aircraft.

The plan should also identify steps the grantee will take to nurture an inclusive off-campus or off-site working environment, e.g., trainings; processes to establish shared team definitions of roles, responsibilities, and culture, e.g., codes of conduct; and field support, such as mentor/mentee support mechanisms, regular check-ins, and/or developmental events.

Communications within team and to the grantee should be considered in the plan, minimizing singular points within the communications pathway (e.g., a single person overseeing access to a single satellite phone), and any special circumstances such as the involvement of multiple organizations or the presence of third parties in the working environment should be taken into account. The process or method for making incident reports as well as how any reports received will be resolved should also be accounted for.

The plan must be disseminated to individuals participating in the off-campus or off-site research prior to departure. Grantees are not required to submit the plan for review by NSF, however, the plan is subject to review, upon request.

## **20. Reporting Subawards and Executive Compensation**

**This grant term was extracted verbatim from Appendix A to Part 170. For these purposes, the term “you” means the NSF grantee.**

### **a. Reporting of first-tier subawards.**

1. **Applicability.** Unless exempt as provided in paragraph d. of this award term, you must report each action that equals or exceeds \$30,000 in Federal funds for a subaward to a non-Federal entity or Federal agency (see definitions in paragraph e. of this award term).

### **2. Where and when to report.**

i. The non-Federal entity or Federal agency must report each obligating action described in paragraph a.1. of this award term to <http://www.fsrs.gov>.

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

3. **What to report.** You must report the information about each obligating action that the submission instructions posted at <http://www.fsrs.gov> specify.

### **b. Reporting total compensation of recipient executives for non-Federal entities.**

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

i. the total Federal funding authorized to date under this Federal award equals or exceeds \$30,000 or more as defined in 2 CFR §170.320;

ii. in the preceding fiscal year, you received—

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

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

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

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

i. As part of your registration profile at <https://www.sam.gov>.

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

c. Reporting of Total Compensation of Subrecipient Executives.

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

i. in the subrecipient's preceding fiscal year, the subrecipient received—

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

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

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

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

i. To the recipient.

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

d. Exemptions

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

i. Subawards,

and

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

e. Definitions. For purposes of this award term:

1. *Federal Agency* means a Federal agency as defined at 5 U.S.C. 551(1) and further clarified by 5 U.S.C. 552(f).

2. *Non-Federal entity* means all of the following, as defined in 2 CFR part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization; and,

iv. A domestic or foreign for-profit organization.

3. *Executive* means officers, managing partners, or any other employees in management positions.

4. *Subaward*:

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

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see 2 CFR §200.331).

iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

5. *Subrecipient* means a non-Federal entity or Federal agency that:

i. Receives a subaward from you (the recipient) under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

6. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR §229.402(c)(2)).

## 21. System for Award Management and Universal Identifier Requirements

**This grant term was extracted verbatim from Appendix A to Part 25. For these purposes, the term “you” means the NSF grantee.**

### A. Requirement for System for Award Management

Unless you are exempted from this requirement under 2 CFR §25.110, you as the recipient must maintain current information in the SAM. This includes information on your immediate and highest level owner and subsidiaries, as well as on all of your predecessors that have been awarded a Federal contract or Federal financial assistance within the last three years, if applicable, until you submit the final financial report required under this Federal award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another Federal award term.

### B. Requirement for Unique Entity Identifier

If you are authorized to make subawards under this Federal award, you:

1. Must notify potential subrecipients that no entity (see definition in paragraph C of this award term) may receive a subaward from you until the entity has provided its Unique Entity Identifier to you.

2. May not make a subaward to an entity unless the entity has provided its Unique Entity Identifier to you. Subrecipients are not required to obtain an active SAM registration but must obtain a Unique Entity Identifier.

### C. Definitions

For purposes of this term:

1. *System for Award Management (SAM)* means the Federal repository into which a recipient must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the SAM Internet site (currently at <https://www.sam.gov>).

2. *Unique Entity Identifier* means the identifier assigned by SAM to uniquely identify business entities.

3. *Entity* includes non-Federal entities as defined at 2 CFR §200.1 and also includes all of the following, for purposes of this part:

- a. A foreign organization;
  - b. A foreign public entity;
  - c. A domestic or foreign for-profit organization; and
  - d. A Federal agency.
- 4. *Subaward* has the meaning given in 2 CFR §200.1.
  - 5. *Subrecipient* has the meaning given in 2 CFR §200.1.

## **22. Federal Tax Obligations**

**Article 22 applies only to grants that have cumulative budgets that exceed \$5,000,000.**

In accordance with the *Commerce, Justice, Science and Related Agencies Appropriations Act, 2020*, the grantee affirms that they:

- (1) have filed all required Federal tax returns during the three years preceding the certification;
- (2) have not been convicted of a criminal offense under the Internal Revenue Code of 1986; and
- (3) have not, more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

## **23. Unpaid Federal Tax Liability**

**Article 23 applies only to grantees that are corporations.**

In accordance with the *Financial Services and General Governmental Appropriations Act, 2020*, the grantee affirms that the corporation has no unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

## **24. Criminal Convictions**

**Article 24 applies only to grantees that are corporations.**

In accordance with the *Financial Services and General Governmental Appropriations Act, 2020*, the grantee affirms that the corporation has not been convicted of a felony criminal violation under any Federal law within the preceding 24 months.

## 25. Copyrighted Material

### a. Definition

*Subject writing* means any material that:

1. is or may be copyrighted under Title 17 of the USC; 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, videotapes and videodiscs.

### 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 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. Grants Affected by International Agreements

If the grant 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. In such cases, the standard clauses for Copyrighted Material or Patents Rights will be modified through the addition of the following:

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

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

### 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.

## 26. Public Access to Copyrighted Material

NSF’s policy on public access to copyrighted material ([Public Access Policy](#)) reflects the Foundation’s commitment to making certain that, to the extent possible, the American public, industry and the scientific community have access to the results of federally funded scientific

research. Pursuant to this policy, the grantee must ensure that all articles in peer-reviewed scholarly journals and papers in juried conference proceedings:

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

Either the final printed version or the final peer-reviewed manuscript is acceptable for deposit.

## 27. Program Income

### a. Definition

The following provisions implement applicable portions of 2 CFR §200.307. *Program income* means gross income earned by the grantee that is directly generated by a supported activity or earned as a result of the grant during the period of performance.

Except as otherwise provided in Federal statutes, regulations, or the terms and conditions of the grant, program income does not include rebates, credits, discounts and interest earned on any of them. Note that registration fees collected under NSF-supported conferences are considered program income.

### b. NSF Policy

#### 1. Standard Treatment

Unless otherwise specified in the grant, program income received or accruing to the grantee during the period of the grant is to be retained by the grantee, added to the funds committed to the project by NSF, and thus used to further project objectives. The grantee has no obligation to NSF with respect to program income received beyond the period of the grant. The grantee also shall have no obligation to NSF with respect to program income earned from license fees and royalties for copyrighted material, patents, patent applications, trademarks and inventions produced under an award (see [PAPPG Chapter VIII.D.4](#)). However, Patent and Trademark Amendments (35 USC §18) shall apply to inventions made under a grant.

Efforts should be made to avoid having unexpended program income remaining at the end date of the grant. Program income earned during the project period should be expended prior to requesting reimbursement against the grant. In the event a grantee has unexpended program income remaining at the end of the grant, it must be remitted to NSF by crediting costs otherwise chargeable against the grant. If it is not possible to record the credit via ACM\$, the excess program income must be remitted to NSF electronically or by check payable to the National Science Foundation.



## 2. Special Treatment

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

If, in accordance with the grant terms and conditions program income is designated for deductive treatment, it must be remitted to NSF by crediting costs otherwise chargeable against the grant. Program income in excess of the grant will be remitted to NSF electronically or by check payable to the National Science Foundation.

### c. Records Retention

The grantee is required to retain appropriate financial and other records relating to program income earned during the grant period of performance and for three years beyond the date of submission of the final financial disbursements in ACM\$. For instructions regarding final disbursement reporting, see [PAPPG Chapter VII.E](#).

### d. Reporting Requirements

On an annual basis, the grantee is required to submit a Program Income Reporting Worksheet to NSF in order to report program income earned and expended for any of their grants or to validate that they did not earn and expend program income for any of their grants during the applicable period. The Program Income Reporting Worksheet utilizes the standard OMB-approved Government-wide data elements from the Program Income section of the Federal Financial Report (SF 425) and is due 45 days after the end of the Federal Fiscal Year. The Program Income Reporting Worksheet and related instructions are available through Research.gov (<http://research.gov/programincome>).

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

## 28. 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 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 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 grant, clearly labeled with the grant number and other appropriate identifying information, promptly after publication.

## 29. Intangible Property<sup>7</sup>

The following Intangible Property article (implementing the Bayh-Dole Act, [35 USC §200 et seq.]) shall apply to all awards for scientific or engineering research unless special provisions have been negotiated. The grantee shall include this article in all subawards for scientific or engineering 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 USC §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 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.

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<sup>7</sup> The grantee is reminded that, in view of the U.S. Supreme Court decision in *Stanford v. Roche*, employee assignment agreements should include a present conveyance of rights ("I hereby assign" rather than a promise or intent to assign) in order to effectively convey patent rights to the institution, allowing the institution to meet its responsibility under the Bayh-Dole Act to provide the agency with a license of patented inventions.

5. *Small Business Firm* means a small business concern as defined at section 2 of Public Law 85-536 (15 USC §632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this article, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR §121.3-8 and 13 CFR §121.3-12, respectively, will be used.

6. *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 USC §501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC §501(a)) or any domestic non-profit scientific or educational organization qualified under a State non-profit organization statute.

7. *Statutory Period* means the one-year period before the effective filing date of a claimed invention during which exceptions to prior art exist per 35 USC §102(b) as amended by the Leahy-Smith America Invents Act, Public Law 112-29.

8. *Contractor* means any person, small business firm or nonprofit organization, or, as set forth in section 1, paragraph (b)(4) of Executive Order 12591, as amended, any business firm regardless of size, which is a party to a funding agreement.

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 Intangible Property article and 35 USC §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 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 a patent, a printed publication, public use, sale or other availability to the public 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. If the grantee files a provisional application as its initial patent application, it shall file a non-provisional application within 10 months of the filing of the provisional application. The grantee will file patent applications in additional countries or international patent offices within either ten months of the first filed patent application, or six months from the date when permission is granted by the Commissioner of Patents to file foreign patent applications when such filing has been prohibited by a Secrecy Order.

4. For any subject invention with NSF and grantee co-inventors, where NSF determines that it would be in the interest of the government, pursuant to 35 USC §207(a)(3), to file an initial patent application on the subject invention, NSF, at its discretion and in consultation with the grantee, may file such application at its own expense, provided that the grantee retains the ability to elect title pursuant to 35 USC §202(a).

5. 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. When a grantee has requested an extension for filing a non-provisional application after filing a provisional application, a one-year extension will be granted unless NSF notifies the contractor within 60 days of receiving the request.

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;

2. in those countries in which the grantee fails to file patent applications within the times specified in paragraph c. above, provided, however, that if the grantee has filed a patent application in a country after the times specified in paragraph c. of this article, 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 non-provisional patent application for, to pay a maintenance, annuity or renewal fee on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

e. Minimum Rights to Grantee

1. The grantee will retain a non-exclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the grantee fails to disclose the subject invention within the times specified in paragraph c. above. The grantee's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the grantee is a party and includes the right to award sublicenses of the same scope to the extent the grantee was legally obligated to do so at the time the award was made. The license is

transferable only with the approval of NSF except when transferred to the successor of that part of the grantee's business to which the invention pertains.

2. The grantee's domestic license may be revoked or modified by NSF to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR Part 404. This license will not be revoked in that field of use or the geographical areas in which the grantee has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at discretion of NSF to the extent the grantee, its licensees or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

3. Before revocation or modification of the license, NSF will furnish the grantee a written notice of its intention to revoke or modify the license, and the grantee will be allowed 30 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 grant in order that the grantee can comply with the disclosure provisions of paragraph c. above, to assign to the grantee the entire right, title and interest in and to each subject invention made under the grant, 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. For each subject invention, the grantee will, no less than 60 days prior to the expiration of the statutory deadline, notify NSF of any decision: not to continue the prosecution of a non-provisional patent application; not to pay a maintenance, annuity or renewal fee; not to defend in a reexamination or opposition proceeding on a patent, in any country; to request, be a party to, or take action in a trial proceeding before the Patent Trial and Appeals Board of the US Patent and Trademark Office, including but not limited to post-grant review, review of a business method patent, *inter partes* review, and derivation proceeding; or to request, be a party to, or take action

in a non-trial submission of art or information at the U.S. Patent and Trademark Office, including but not limited to a pre-issuance submission, a post-issuance submission, and supplemental.

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 NSF grant number) 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. Subawards

1. The grantee will include this Intangible Property article, suitably modified to identify the parties, in all subawards, regardless of tier, for experimental, developmental or research work. The subawardee will retain all rights provided for the grantee in this Intangible Property article, and the grantee will not, as part of the consideration for awarding the subaward, obtain rights in the subawardees' subject inventions.

2. In the case of subawards, at any tier, when the prime award by NSF was a contract (but not a cooperative agreement), NSF, subawardee and contractor agree that the mutual obligations of the parties created by this Intangible Property article constitute a contract between the subawardee and the Foundation with respect to those matters covered by this Intangible Property article.

h. Reporting on Utilization of Subject Inventions

Upon request, 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 Intangible Property article. As required by 35 USC §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 Intangible Property article, 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 the NSF [PAPPG Chapter XI.D.1.I](#) 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 such action is necessary:

1. 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. to alleviate health or safety needs which are not reasonably satisfied by the grantee, assignee, or their licensees;
3. 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. because the agreement required by paragraph k. of this Intangible Property article 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. Communications

All communications required by this Intangible Property article must be submitted through the [iEdison Invention Information Management System](#) maintained by the National Institutes of Health unless NSF prior written permission for another form of submission is obtained from the Patent Assistant at [patents@nsf.gov](mailto:patents@nsf.gov) or at Office of the General Counsel, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314.

**30. Cost Sharing or Matching**

a. General

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

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

4. Failure by the organization to notify NSF, in accordance with paragraph 2. above, may result in the disallowance of some or all of the costs charged to the grant; the subsequent recovery by NSF of some or all of the NSF funds provided under the grant; possible termination of the grant; and may constitute a violation of the terms of the grant so serious as to provide grounds for subsequent suspension or debarment.

b. Cost Sharing Records

The grantee must maintain records of all project costs that are claimed by the grantee as cost sharing as well as records of costs to be paid by the Government. Such records are subject to audit. Acceptable forms of cost sharing contributions are those that meet the criteria identified in 2 CFR §200.306. Unless otherwise specified in the grant, approval is given to include unrecovered indirect costs as part of cost sharing or matching contributions. If the grantee's cost participation includes in-kind contributions, the basis for determining the valuation for volunteer services and donated property must be documented.

c. Cost Sharing Reports

The amount of mandatory cost sharing must be documented (on an annual and final basis), certified by the Authorized Organizational Representative, and reported to the cognizant NSF Program Officer via Research.gov. Such notifications must be submitted no later than 90 days prior to the end of the current budget period to meet the annual notification requirement, and no later than 120 days following the end date of the grant to meet the final notification requirement. The cost share notification is considered due during the 90- or 120-day period, respectively. The notification becomes overdue **the day after the respective 90- or 120-day period ends.**

### 31. Audit and Records

a. Financial records, supporting documents, statistical records and other records pertinent to this grant must be retained by the grantee for a period of three years from grant financial closeout as described in [PAPPG Chapter VII.E](#), except as noted in 2 CFR §200.334.

b. The grantee shall arrange for the conduct of audits as required by 2 CFR §200 Subpart F. They shall provide copies of the reports of these audits to the Federal Audit Clearinghouse (see 2 CFR §200.512(b)). Any Federal audit of this project deemed necessary by NSF shall build upon the results of such audit(s).

c. All grants issued by NSF meet the definition of "*Research and Development*" (R&D) at 2 CFR §200.1. As such, auditees should identify NSF grants as part of the R&D cluster on the Schedule of Expenditures of Federal Awards (SEFA). The auditor should test NSF grants for compliance as instructed in Part V, Clusters of Programs. NSF recognizes that some grants may have another classification for purposes of indirect costs. The auditor is not required to report the disconnect (i.e., the grant is classified as R&D for audit purposes but non-research for indirect



cost rate purposes), unless the auditee is charging indirect costs at a rate other than the rate(s) specified in the grant document(s).

### **32. 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 subrecipient under a grant, the grantee shall provide and shall require its subrecipients to provide all reasonable facilities and assistance for the safety and convenience of the NSF representatives 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.

### **33. Termination and Enforcement**

a. Any suspension or termination action taken by NSF must be issued by a cognizant NSF Grants and Agreements Officer and will be in accordance with this article, 2 CFR §200.340, and [PAPPG Chapter XII.A](#).

b. The grant may be suspended or terminated in whole or in part in any of the following situations:

1. By NSF, if the grantee fails to comply with the terms and conditions of a Federal award;
2. By NSF, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;
3. By NSF, with the consent of the grantee, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;
4. By the grantee upon sending to NSF written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if NSF determines in the case of partial termination that the reduced or modified portion of the NSF award will not accomplish the purposes for which the NSF award was made, NSF may terminate the Federal award in its entirety;
5. By NSF, pursuant to termination provisions included in the NSF award; or
6. By NSF, when ordered by the Deputy Director under NSF's Regulation on Research Misconduct [45 CFR Part 689].

c. Normally, action by NSF to suspend or terminate a grant 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. NSF, however, may immediately suspend or terminate the grant 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 grant and the governing cost principles.

e. 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 d, above. Final allowable costs under a termination settlement shall be in accordance with the terms of the grant, including this article, and the governing cost principles, giving due consideration to the progress under the grant. In no event will the total of NSF payments under a terminated grant exceed the grant amount, or the NSF pro rata share of the total project costs when cost sharing was anticipated, whichever is less.

f. When an NSF grant is terminated or partially terminated, both NSF and the grantee remain responsible for compliance with the requirements in 2 CFR §§200.344 and 200.345.

g. A notice of termination other than by mutual agreement and/or the final settlement amount may be subject to review pursuant to Article 34.

h. NSF will report grant terminations to the OMB-designated integrity and performance system in accordance with Federal regulation, but only after the grantee has had an opportunity to exhaust the review procedures contained in PAPPG Chapter XII.B. See also Article 15.e for additional information on FAPIIS.

#### **34. Termination Review Procedure**

a. A request for review of a notice of termination or settlement should be addressed to the Division Director, Division of Grants and Agreements (DGA), National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA, 22314. 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 with respect to the disputed matter and the facts and rationale that support the grantee's position.

c. Review of a notice of termination or settlement will be conducted in accordance with [PAPPG Chapter XII.B.3](#).

d. Pending resolution of the request for review, the notice of termination shall remain in effect.

#### **35. Non-Discrimination Statutes**

The grant is subject to the provisions of *Title VI of the Civil Rights Act of 1964* [42 USC §§2000d et seq.], *Title IX of the Education Amendments of 1972* [20 USC §§1681 et seq.], the *Rehabilitation Act of 1973* [29 USC §794], the *Age Discrimination Act of 1975* [42 USC §§6101 et seq.], *Equal Employment Opportunity* [E.O. 11246], *Limited English Proficiency (LEP)* [E.O. 13166] 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 grant.

### 36. Reporting Classifiable Information

NSF grants are intended for unclassified, publicly releasable research. The grantee 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 a grant, the PI or co-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 or co-PI should promptly notify the cognizant NSF Program Officer.

### 37. Animal Welfare

a. Any grantee performing research on live vertebrate animals<sup>8</sup> shall comply with the *Animal Welfare Act* [7 USC §§2131 et seq.] and the regulations promulgated thereunder by the Secretary of Agriculture [9 CFR §§1.1-4.11] pertaining to the humane care, handling and treatment of live vertebrate animals held or used for research, teaching or other activities supported by Federal grants. The grantee is expected to ensure that the guidelines described in the National Academies of Sciences, Engineering and Medicine (NASEM) Publication, "*Guide for the Care and Use of Laboratory Animals*" are followed and to comply with the *Public Health Service Policy and Government Principles Regarding the Care and Use of Animals* (included as Appendix D to the NASEM Guide). Further guidance on the use of live vertebrate animals in NSF funded projects can be found in [PAPPG Chapter XI.B.3](#).

b. The grantee must include NSF-supported activities with live vertebrate animals as covered activities in their Office of Laboratory Animal Welfare (OLAW) Animal Welfare Assurance. Further, they must promptly report situations involving NSF-supported animal activities to OLAW as required by the Public Health Service (PHS) [Policy on Humane Care and Use of Laboratory Animals](#) Section IV.F.3. The cognizant NSF Program Officer also should be notified.

c. Any changes to, or lapses in, the Institutional Animal Care and Use Committee approved animal use protocols associated with an NSF grant should be reported promptly by the grantee to the cognizant NSF Program Officer.

d. In the event the grantee's multi-project Assurance is cancelled or lapses, the grantee must immediately notify the cognizant NSF Grants and Agreements Officer identified in the award notice.

e. Research facilities subject to the Animal Welfare Act using or intending to use live animals in research and who receive Federal funding are required to register the facility with the Animal and Plant Health Inspection Service (APHIS), U.S. Department of Agriculture (USDA). 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/>.

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<sup>8</sup> In addition to live vertebrate animals covered by the Animal Welfare Act, the requirements specified in this Article also are extended to rats, birds and mice.

### **38. Research Involving Recombinant or Synthetic Nucleic Acid Molecules**

If this grant supports research involving recombinant or synthetic nucleic acid molecules, the grantee agrees to comply with the [Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules](#) (NIH Guidelines) including the procedural requirements and any subsequent revisions as they are published in the Federal Register. Further information on research grants that involve recombinant or synthetic nucleic acid molecules can be found in [PAPPG Chapter XI.B.2](#).

### **39. Clean Air and Water**

(Applicable only if the grant exceeds \$150,000, or a facility to be used has been the subject of a conviction under the *Clean Air Act* [42 USC §7413(c)(1)] or the *Clean Water Act* [33 USC §1319(c)] and is listed by the Environmental Protection Agency (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 USC §7414] and Section 308 of the *Clean Water Act* [33 USC §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 issuance of the grant.
- b. That no portion of the work required by the grant will be performed in a facility listed on the EPA List of Violating Facilities on the date that the grant was issued 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 subaward.

### **40. 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 Part 690]."

### **41. Potential Life Sciences Dual Use Research of Concern (DURC)**

This Article applies to all research, for which NSF grant funds may be used, that potentially falls within the scope of the [US Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern](#), as published in September 2014, and/or would fall under the Department of Health and Human Services [Framework for Guiding Decisions about Proposed Research Involving Enhanced Potential Pandemic Pathogens](#), as published in January 2017, hereafter referred to as the "Policy". See also [PAPPG Chapter XI.B.5](#).

The grantee is responsible for monitoring the research progress and for implementation of all appropriate biosafety and biosecurity risk mitigation measures including compliance with all applicable laws and regulations related to that implementation, including the Policy specified above. While the White House Office of Science and Technology Policy has lifted the research funding pause on [gain of function research](#) as of January 2017, NSF will not consider funding research that would lead to a gain of function for agents associated with the U.S. Government Policy on Dual Use Research of Concern. NSF will not fund research that involves the creation, transfer or use of enhanced potential pandemic pathogens except under special circumstances where the potential benefits to society far outweigh the risks and all other conditions of the Policy are met.

- Each organization involved in the conduct of NSF-supported research that utilizes select agents or other enhanced potential pandemic pathogens, as defined by the Policy, must have a standing Institutional Biosafety Committee (IBC) or other Institutional Review Entity (IRE) whose role is the review of research involving agents covered by the Policy.
- Use of the select agents or other potential pandemic pathogens as defined by the Policy must be registered with the Centers for Disease Control and Prevention or USDA as directed under the [Select Agent Regulations](#).
- In the rare cases where NSF funds research that involves the creation, transfer, or use of enhanced potential pandemic pathogens, then special award conditions will be applied to ensure adequate oversight by the cognizant NSF Program Officer or other NSF official. Award terms and conditions also will specify the establishment of a risk mitigation plan for the research that must be reviewed and approved by the IRE and NSF, as well as the requirement of maintenance of records of institutional review of the research and risk mitigation activities for three years after completion of the project.

#### **42. Investigator Financial Disclosure Policy**

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

#### **43. Whistleblower Protection**

The grantee is notified of the applicability of 41 USC §4712, as amended by Public Law (P.L.) 112-239, providing protection for whistleblowers.

#### **44. State Sales and Use Taxes**

The grantee is reminded that the governing cost principles cited in Article 12 limit the allowability of taxes to those the organization is required to pay. The grantee must avail itself 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 grant funds.

#### **45. Domestic Preferences for Procurements**

The grantee is notified of the applicability of 2 CFR §200.322, entitled *Domestic Preferences for Procurements*.

#### **46. Build America, Buy America**

a. The grantee is subject to the Buy America Sourcing requirements under the Build America, Buy America provisions of the [Infrastructure Investment and Jobs Act](#) (IIJA) (P.L. 117-58, §§70911-70917) when using Federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States regardless of the appropriation.

These sourcing requirements require that all iron, steel, manufactured products, and construction materials used in Federally funded infrastructure projects must be produced in the United States. The grantee must implement these requirements in its procurements, and this article must flow down to all subawards and contracts at any tier. For legal definitions and sourcing requirements, the grantee must consult NSF's Implementation of the Act on the [Build America, Buy America website](#).

b. When supported by rationale provided in IIJA §70914, the grantee must submit a waiver request to the cognizant NSF Program Officer and Grants and Agreements Officer. Non-compliant purchases must not be made in advance of waiver approval. Guidance on the submission of an NSF waiver request is available on the [Build America, Buy America website](#).

#### **47. Recipient Integrity and Performance Matters**

The grantee must fully comply with the requirements stipulated in [Appendix XII to Part 200](#) of 2 CFR §200, entitled "*Award Term and Condition for Recipient Integrity and Performance Matters*." See also Article 33 of these terms and conditions for NSF's responsibilities regarding reporting grant terminations to the OMB-designated integrity and performance system in accordance with Federal regulation. In addition, Article 15.e specifies NSF responsibilities to report in FAPIIS a grantee's failure to submit all required reports.

#### **48. Breach of Personally Identifiable Information**

A grantee that uses or operates a Federal information system or creates, collects, uses, processes, stores, maintains, disseminates, discloses, or disposes of Personally Identifiable Information (PII) within the scope of an NSF grant, must have procedures in place to respond to a breach of PII. These procedures should promote cooperation and the free exchange of information with NSF, as needed to properly escalate, refer and respond to a breach. The grantee must notify the cognizant NSF Grants and Agreements Officer upon learning that a breach of PII within the scope of an NSF grant has occurred.

#### **49. Notification Requirements Regarding Sexual Harassment, Other Forms of Harassment, or Sexual Assault**

The PI and any co-PI(s) identified on an NSF grant are in a position of trust. These individuals must comport themselves in a responsible and accountable manner during the award period of performance, whether at the grantee institution, on-line, or at locales such as field sites, facilities, or conferences/workshops.

For purposes of this term and condition, the following definitions apply:

*Sexual Harassment:* May include but is not limited to gender or sex-based harassment, unwelcome sexual attention, sexual coercion, or creating a hostile environment, as set forth in organizational policies or codes of conduct, statutes, regulations, or executive orders.

*Other Forms of Harassment:* Non-gender or non-sex-based harassment of individuals protected under federal civil rights laws, as set forth in organizational policies or codes of conduct, statutes, regulations, or executive orders.

*Finding/Determination:* The final disposition of a matter involving sexual harassment or other form of harassment under organizational policies and processes, to include the exhaustion of permissible appeals exercised by the PI or co-PI, or a conviction of a sexual offense in a criminal court of law.

*Administrative Leave/Administrative Action:* Any temporary/interim suspension or permanent removal of the PI or co-PI, or any administrative action imposed on the PI or co-PI by the grantee under organizational policies or codes of conduct, statutes, regulations, or executive orders, relating to activities, including but not limited to the following: teaching, advising, mentoring, research, management/administrative duties, or presence on campus.

The grantee is required to notify NSF of: (1) Any finding/determination regarding the PI or any co-PI<sup>9</sup> that demonstrates a violation of grantee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault; and/or (2) if the PI or any co-PI is placed on administrative leave or if any administrative action has been imposed on the PI or any co-PI by the grantee relating to any finding/determination or an investigation of an alleged violation of grantee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.<sup>10</sup> Such notification must be submitted by the AOR to NSF's Office of Equity and Civil Rights at [www.nsf.gov/harassment](http://www.nsf.gov/harassment) within ten business days from the date of the finding/determination, or the date of the placement of a PI or co-PI by the grantee on administrative leave or the imposition of an administrative action, whichever is sooner.<sup>11</sup>

Each notification must include the following information:

- NSF Award Number;
- Name of PI or co-PI being reported;<sup>12</sup>
- Type of Notification: Select one of the following:

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<sup>9</sup> If a co-PI is affiliated with a subawardee organization, the Authorized Organizational Representative of the subawardee must provide the requisite information directly to NSF, as instructed in this paragraph.

<sup>10</sup> Grantee findings/determinations and placement of a PI or co-PI on administrative leave or the imposition of an administrative action must be conducted in accordance with organizational policies and processes. They also must be conducted in accordance with federal laws, regulations, and executive orders.

<sup>11</sup> Such notification must be provided regardless of whether the behavior leading to the finding/determination, or placement on administrative leave, or the imposition of an administrative action occurred while the PI or co-PI was carrying out award activities.

<sup>12</sup> Only the identification of the PI or co-PI is required. Personally identifiable information regarding any complainants or other individuals involved in the matter must not be included in the notification.

- Finding/Determination that the reported individual has been found to have violated grantee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault; or
- Placement by the grantee of the reported individual on administrative leave or the imposition of any administrative action on the PI or any co-PI by the grantee relating to any finding/determination or an investigation of an alleged violation of grantee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.
- Description of the finding/determination and action(s) taken, if any; and
- Reason(s) for, and conditions of, placement of the PI or any co-PI on administrative leave or imposition of administrative action.

The grantee, at any time, may propose a substitute investigator if it determines the PI or any co-PI may not be able to carry out the funded project or activity and/or abide by the grant terms and conditions. The grantee is reminded of its responsibility to obtain prior written approval from NSF in the event the investigator will be disengaged from the project for a period greater than three months. See [PAPPG Chapter VII.B.2.a.](#) for additional information.

In reviewing the notification, NSF will consider, at a minimum, the following factors:

- a. The safety and security of personnel supported by the NSF grant;
- b. The overall impact to the NSF-funded activity;
- c. The continued advancement of taxpayer-funded investments in science and scientists; and
- d. Whether the grantee has taken appropriate action(s) to ensure the continuity of science and that continued progress under the funded project can be made.

Upon receipt and review of the information provided, NSF will consult with the AOR, or designee. Based on the results of this review and consultation, the Foundation may, if necessary, assert its programmatic stewardship responsibilities and oversight authority to initiate the substitution or removal of the PI or any co-PI, reduce the award funding amount, or where neither of those previous options is available or adequate, to suspend or terminate the grant.

Other personnel supported by an NSF grant must likewise remain in full compliance with grantee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault. With regard to any personnel not in compliance, the grantee must make appropriate arrangements to ensure the safety and security of other grant personnel and the continued progress of the funded project. Notification of these actions is not required under this term and condition.



## 50. Post-award Disclosure of Current Support and In-Kind Contribution Information

If an organization discovers that a PI or co-PI on an active NSF grant failed to disclose current support or in-kind contribution information<sup>13</sup> as part of the proposal submission process (see [PAPPG Chapter II.D.2.h\(ii\)](#)), the AOR must submit the following information within 30 calendar days of the identification of the undisclosed current support or in-kind contribution through use of the Notification and Request Module in Research.gov.

### Post-award Disclosure of Project Support Information

- PI/co-PI Name:
- Project Title:
- Award Number (if available):
- Source of Support:
- Primary Place of Performance:
- Project Start and End Date:
- Total Award Amount (including Indirect Costs): \$
- Brief Description of the Major goals of the project:
- Description of any Overlap/Duplication of the project with the NSF award:
- Impact on the ability of the PI/co-PI to carry out the NSF award:
- Person-Month(s) (or Partial Person-Months) Per Year Committed to the Project:
  - Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

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<sup>13</sup> The post-award disclosure requirement applies to current support (including in-kind contributions) that was active as of the date the proposal was submitted to NSF. See [NSF Pre-award and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending Support](#) which has been developed to assist users in determining the types of activities that must be disclosed.

### Post-award Disclosure of In-Kind Contribution Information

- PI/co-PI Name:
- Source of Support:
- Primary Place of Performance:
- Summary of In-kind Contributions:
- Description of any Overlap/Duplication of the project with the NSF award:
- Impact on the ability of the PI/co-PI to carry out the NSF award:
- Person-Month(s) (or Partial Person-Months) Per Year Committed to the Project:
  - Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Enter the applicable year (e.g., 2023, 2024):

Enter the number of person-month(s) (or partial person-months):

- Dollar Value of In-kind Contribution: \$

Upon receipt and review of the information provided, NSF may consult with the AOR, or designee, if necessary. Based on the results of this review, the Foundation will determine the impact of the new information on the NSF-funded grant, and, where necessary, take appropriate action.

### 51. Fee Payments

Payment of fee is allowable only if expressly authorized by solicitation and the terms and conditions of the NSF grant. Payment of profit is not permitted on an NSF grant.

### 52. Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019

Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a

contract (or extend or renew a contract) to procure or obtain the equipment, services, or systems as identified in section 889 of the NDAA for FY 2019.

(a) In accordance with 2 CFR §200.216 and §200.471, for all awards that are issued on or after August 13, 2020, recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

(1) Procure or obtain;

(2) Extend or renew a contract to procure or obtain; or

(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(b) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

(c) See Public Law 115-232, section 889 for additional information.

### **53. Debarment and Suspension**

The grantee shall fully comply with the requirements stipulated in Subpart C of 2 CFR Part 180, entitled "[Responsibilities of Participants Regarding Transactions](#)" as supplemented by NSF's regulations at 2 CFR Part 2520. The grantee 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 grantee also is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transaction. The grantee acknowledges that failing to disclose the

information required under 45 CFR §180.335 may result in the termination of the grant, or pursuance of other available remedies, including suspension and debarment.

#### **54. Resolution of Conflicting Conditions**

- a. If the GC-1 is silent on a specific area covered by 2 CFR §200, the requirements specified in 2 CFR §200 must be followed.
- b. Should there be any inconsistency between GC-1 and the NSF *Proposal and Award Policies and Procedures Guide*, the GC-1 governs.
- c. Should there be any inconsistency between any special condition(s) specified in the award notice and GC-1, the special conditions in the award notice shall govern.
- d. Should there be any inconsistency between GC-1 and any NSF solicitation cited or incorporated by reference in the award notice, the matter should be referred to the cognizant NSF Grants and Agreements Officer for guidance.

#### **Other Considerations**

#### **55. Liability**

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

#### **56. 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 the grantee 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.

#### **57. Government Permits and Activities Abroad**

- a. For grants 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.