

# Grant and Cooperative Agreement

CHOOSE ONE:  
 COOPERATIVE AGREEMENT  
 GRANT

CHOOSE ONE:     EDUCATION     FACILITIES     RESEARCH     SDCR     TRAINING

1. GRANT/COOPERATIVE AGREEMENT NUMBER NRC-HQ-60-17-G-0023	2. SUPPLEMENT NUMBER	3. EFFECTIVE DATE 06/30/2017	4. COMPLETION DATE
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5. ISSUED TO NAME/ADDRESS OF RECIPIENT (No., Street, City/County, State, Zip) UNIVERSITY OF NOTRE DAME DU LAC 940 GRACE HALL NOTRE DAME IN 46556	6. ISSUED BY    U.S. NRC - HQ <b>Mailing Address:</b> Acquisition Management Division Mail Stop: TWFN-8E06M Washington DC 20555-0001
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7. TAXPAYER IDENTIFICATION NO. (TIN)	9. PRINCIPAL INVESTIGATOR/ORGANIZATION'S PROJECT OR PROGRAM MGR. (Name & Phone) [REDACTED]
8. COMMERCIAL & GOVERNMENT ENTITY (CAGE) NO.	

10. RESEARCH, PROJECT OR PROGRAM TITLE  
Sustaining Excellence in Nuclear Science at the University of Notre Dame

11. PURPOSE  
SEE SCHEDULE

12. PERIOD OF PERFORMANCE (Approximately)  
06/30/2017 through 06/29/2020

13A.	AWARD HISTORY	13B.	FUNDING HISTORY
PREVIOUS	\$0.00	PREVIOUS	\$0.00
THIS ACTION	\$450,000.00	THIS ACTION	\$450,000.00
CASH SHARE	\$0.00	<b>TOTAL</b>	\$450,000.00
NON-CASH SHARE	\$0.00		
RECIPIENT SHARE	\$150,000.00		
<b>TOTAL</b>	<b>\$450,000.00</b>		

14. ACCOUNTING AND APPROPRIATION DATA  
2017-X0200-IUPNSE-60-60D099-52-S-164-1148-4110

PURCHASE REQUEST NO.	JOB ORDER NO.	AMOUNT	STATUS
RES-17-0186			

15. POINTS OF CONTACT

	NAME	MAIL STOP	TELEPHONE	E-MAIL ADDRESS
TECHNICAL OFFICER	NANCY V. HEBRON-ISREAL	TFWN10B56	301-415-6996	Nancy.Hebron-Isreal@nrc.gov
NEGOTIATOR				
ADMINISTRATOR	M'LITA R. CARR		301-415-6869	MLita.Carr@nrc.gov
PAYMENTS				

16. THIS AWARD IS MADE UNDER THE AUTHORITY OF:  
Pursuant to Section 31b and 141b of the Atomic Energy Act of 1953, as amended

17. APPLICABLE STATEMENT(S), IF CHECKED: <input type="checkbox"/> NO CHANGE IS MADE TO EXISTING PROVISIONS <input type="checkbox"/> FDP TERMS AND CONDITIONS AND THE AGENCY-SPECIFIC REQUIREMENTS APPLY TO THIS GRANT	18. APPLICABLE ENCLOSURE(S), IF CHECKED: <input type="checkbox"/> PROVISIONS <input type="checkbox"/> SPECIAL CONDITIONS <input type="checkbox"/> REQUIRED PUBLICATIONS AND REPORTS
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<b>UNITED STATES OF AMERICA</b>	<b>COOPERATIVE AGREEMENT RECIPIENT</b>
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CONTRACTING/GRANT OFFICER M'LITA R. CARR	DATE 06/29/2017	AUTHORIZED REPRESENTATIVE	DATE
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# Grant and Cooperative Agreement

ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)	QUANTITY (C)	UNIT (D)	ESTIMATED COST	
				UNIT PRICE (E)	AMOUNT (F)
	<p>CFDA Number: 77.006</p> <p>Payment will be made through the Automated Standard Application for Payment (ASAP.gov) unless the recipient has failed to comply with the program objectives, award conditions, Federal reporting requirements or other conditions specified in 2 CFR 200.</p> <p>Payment:</p> <p style="padding-left: 40px;">ASAP GRANT FUNDS REIMBURSEMENT SYS US TREASURY</p> <p>Period of Performance: 06/30/2017 to 06/29/2020</p>				

## Attachment A - Schedule

### A.1 PURPOSE OF GRANT

The purpose of this Grant is to provide support to the "Sustaining Excellence in Nuclear Science at the University of Notre Dame" as described in Attachment B entitled "Program Description."

### A.2 PERIOD OF GRANT

1. The effective date of this Grant is June 30, 2017. The estimated completion date of this Grant is June 29, 2020.
2. Funds obligated hereunder are available for program expenditures for the estimated period: June 30, 2017 – June 29, 2020.

### A.3 GENERAL

- |                                |  |
|--------------------------------|--|
| 1. Total Estimated NRC Amount: | \$450,000.00   |
| 2. Total Obligated Amount:     | \$450,000.00   |
| 3. Cost-Sharing Amount:        | \$150,000.00   |
| 4. Activity Title:             | Sustaining Excellence in Nuclear Science at the University of Notre Dame |
| 5. NRC Project Officer:        | Nancy Hebron-Isreal  |
| 6. DUNS No.:                   | 824910376  |

### A.4 AMOUNT OF AWARD AND PAYMENT PROCEDURES

1. The total estimated amount of this Award is \$600,000.00 for the three year period; inclusive of \$150,000.00 in cost share.
2. NRC hereby obligates the amount of \$450,000.00 for program expenditures during the period set forth above and in support of the Budget above. NRC is not obligated to reimburse the Grantee for the expenditure of amounts in excess of the total obligated amount.
3. Payment shall be made to the Recipient in accordance with procedures set forth in the Automated Standard Application for Payments (ASAP) Procedures set forth below.

### A.5 BUDGET

Revisions to the grant award budget shall be made in accordance with Revision of Grant Budget in accordance with [2 CFR § 200.308](#).



**ATTACHMENT B - PROJECT DESCRIPTION****Project Title: Sustaining Excellence in Nuclear Science at the University of Notre Dame****1. Faculty Development Program**

This proposal requests funds to develop a program to support four recently-hired faculty members in experimental nuclear physics at the University of Notre Dame (ND). Instead of supporting one new faculty member in nuclear science, this faculty development proposal is geared towards increasing the success for tenure and promotion of four faculty ( ) in their third and fourth years. If this cluster of young research scientists can succeed in obtaining tenure in the next three to four years, a productive center of nuclear science research and education will be sustained for decades to come. Combined with the institutional commitment by ND to hire a senior nuclear scientist in applied nuclear science (the PI of this proposal), and to add a new accelerator facility for applied measurements, the four junior faculty and their students will have more involvement in areas of applied nuclear science that are of particular interest to the NRC. As a result of this timely support in their careers, their students will be better trained to enter the nuclear workforce upon graduation.

Specifically, this faculty development program will have three aspects to it: (a) post-doctoral support to increase their research productivity at this critical juncture, and (b) extra release time and summer support to help develop a new laboratory course in experimental nuclear physics that will enhance the tenure case for each junior faculty member and (c) a structured cohort mentoring program developed for all four junior faculty in nuclear physics.

*(a) Post-doctoral Support*

The research programs of these four junior faculty will be improved by the proposed addition of part-time post-doctoral support to help develop their current research programs. Specifically, two of the faculty work on a single facility (*TwinSol*) at ND, and we propose to provide two years of half-time shared support for a post-doctoral fellow to maintain, operate and supervise student analysis of data from this device. Half support for a post-doctoral fellow (shared between and ) that can dedicate a portion of his/her time to the development of high-quality radioactive beams at *TwinSol*, which is essential for acquiring the data that are necessary to support the research programs of both of these faculty. This post-doctoral fellow would also be responsible for some student supervision which will also save the junior faculty valuable time. The other half of this post-doctoral fellow's support would come from the other users of the *TwinSol* facility and the funding agencies that support their basic research into radioactive nuclear beams. The other two junior faculty ) have complementary research programs in experimental nuclear astrophysics that will also benefit from a half-time shared post-doctoral fellow. This researcher would concentrate his/her efforts on beams with the 5U accelerator at ND. The post-doctoral fellow will take ownership of one of the first experiments with the St. George recoil mass separator, both in its analysis and in supervision of students doing this analysis. The post-doctoral fellow will allow both faculty to perform, to analyze and to publish experimental results at a faster pace. The other half of this post-doctoral position will be supported from start-up package. With university provided startup funds, had previously hired as a post-doctoral fellow; however, he worked only for 1 year and 3 months before he became an assistant professor at Ohio University. The vacated second year of funding would support half the time of another two-year post-doctoral fellow.

*(b) Teaching Relief, and Lab Development*

Junior faculty are given a semester of teaching relief routinely in the Department of Physics as

part of their pre-tenure encouragement for research productivity. Each of these junior faculty have taken one semester of teaching relief already to build some of the instrumentation needed to carry out their research goals. We propose that these four junior faculty receive a second semester of teaching relief before year six of their tenure clock. In the first year of the grant, ██████████ ██████████ (the first two junior hires – see table 1) will receive a semester off from teaching in order to provide them with a productive boost in their research a year before they submit their tenure package. Similarly, ██████████ will take their semester off from teaching the following year. The release from teaching will not only enhance the faculty member’s research productivity, but will also provide more opportunities to travel to disseminate their results at conferences and to write scientific articles, which will help getting them “known” in the community and help with getting strong external review letters.

Timeline for Recent Faculty Hires in Experimental Nuclear Physics at ND		F1	S1	F1	S1	F1	S1	F1	S1	F1	S1	F1	S1	F1	S2
Hire	Rank	3	4	4	5	5	6	6	7	7	8	8	9	9	0
██████████	Asst. Prof	H	X	X	X	X	X	X				T			
	Asst. Prof	H	X	X	X	X	X	X				T			
██████████	Asst. Prof				H	X	X	X	X						T
	Asst. Prof				H	X	X	X	X						T
██████████	Prof								H						
	Prof	H	X	X	X	X	X	X							

Table 1: Timeline of recent faculty hires in experimental nuclear physics at ND. H indicates first semester on campus, and tenure/promotion materials are due during the semester marked T.

As part of the motivation for this teaching relief, the four junior faculty will lead the creation of a laboratory course in nuclear physics to accompany the current undergraduate Nuclear Physics lecture course (developed and taught by Brodeur most recently). The ND physics department has approximately 30 especially strong physics majors per year. The current undergraduate and graduate upper-level laboratory courses are considered too “canned” to be useful by many in the Department of Physics. The plan is to create a laboratory course that is designed for nuclear physics at an undergraduate level, and have material prepared that allows experiments to be expanded upon to yield an appropriate experience for first-year graduate students as well. We also propose to connect the new accelerator for nuclear physics applications into this laboratory course and to tie in several accelerator-based open-ended experiments that could be accomplished there, as well as on the existing accelerator facilities. The successful development of a new course with a progression of modern nuclear physics labs that start with highly structured laboratories but evolve steadily into open-ended research-like experiences would be highly valued in the department. The PI of this proposal has extensive experience in this type of upper-level undergraduate laboratory design with a curriculum that uses active pedagogy.

Some funds are requested for instrumentation of an independent beamline to be used for this laboratory course, and one month of summer salary for each of the four junior faculty is requested to help provide the time necessary for them to focus on the development of the course. The

development and subsequent dissemination of the new nuclear physics laboratory course in an appropriate teaching journal such as the *Physics Teacher* would be positively regarded for the impending tenure decisions of the junior faculty and, in addition, an improved nuclear physics laboratory experience is expected to attract more students into the field.

*(c) A cohort mentoring program*

We propose to construct a cohort mentoring experience for all four recently-hired junior faculty in experimental nuclear physics. We expect the outcome of this deliberate mentoring program to be much stronger tenure and promotion packages from all four junior faculty. In the past, a new physics faculty member at ND has not needed a structured mentoring plan to succeed because nuclear physics faculty were able to conduct regular informal hallway conversations and to offer guidance between annual reviews. With more than 50% of the experimental nuclear faculty as recent hires, a structured mentoring plan is likely to greatly increase the chances of success for all four new faculty. Specifically, in addition to an annual review meeting, we propose to mentor the four new faculty quarterly with respect to their tenure and promotion process. This mentoring program will be coordinated by the PI (██████████) and the co-PI (██████████), and will involve senior faculty (██████████). The specific mentoring goals include grant opportunities identification, research proposal writing, and discussions of research focus, especially the balance between basic nuclear physics and applied nuclear physics. In addition, mentoring will include teaching strategies as well as curriculum development discussions, especially involving the creation of the new laboratory course in experimental nuclear physics. We also intend to send each of the junior faculty to professional development workshops on grant writing, teaching and other topics – both on campus as part of National Center for Faculty Development and Diversity, as well as those organized nationally (such as those led by the American Institute of Physics). Travel money has been included for these workshops and for increased conference participation. In addition, the PI of this proposal (another new member of the faculty) was hired to bring applied nuclear physics to the well-established nuclear astrophysics program at ND. To this end, the PI of this proposal is actively engaged in radioisotope harvesting, ion beam analysis, and environmental applications of nuclear physics. The four junior faculty have all expressed interest in being able to expand their research program and/or teaching into the areas of applied nuclear science that fit the mission of the NRC Faculty Development proposal.

## **2. Selection Process**

Since this proposal is for the development of existing faculty, we include here a brief description of the specific research programs and teaching responsibilities for the four already-hired faculty to be supported by this grant. As can be seen in the attached CVs, these four faculty have already established solid research and teaching careers at ND, with potential for very productive careers. (██████████) (hired 2014): His research interests include studying cluster formation in atomic nuclei and how this is affected by the nuclear medium that is the atomic nucleus. This has many implications for how light elements are created in astrophysical environments including various types of He burning in stars and in explosive He-rich environments. A combination of radioactive beams and novel experimental instrumentation including an “active-target” detector is used to measure the scattering of unstable nuclei with alpha particles. This allows the study of alpha particle resonances, which are sensitive to highly clusterized states. This program uses radioactive beams and active targets at the *TwinSol* facility at ND, and is constantly developing higher-quality radioactive beams, that are purer and more intense, and better analysis techniques for data taken with our active-target detectors. The identification of clusters in nuclei is one of the challenges at the frontiers of nuclear science.

(██████████) (hired 2013): His research focus at the NSL involves precision measurements

using the radioactive ion beams from the *TwinSol* facility. The first component of the program is on precision half-life measurements to test the validity of the Standard Model (SM) of physics. Precision measurements of the half-lives, atomic masses, branching ratios and, in some cases, the Fermi-to-Gamow Teller mixing ratios of super-allowed beta decay transitions have been shown to be powerful probes for some of these features. The second component of the experimental program consists of developing an ion trapping system to measure the Fermi-to-Gamow Teller mixing ratio in nuclei, which has previously only been extracted for five nuclei. A new ion trap is planned for ND in order to complete such measurements. The same ion trap will also be used for measuring the beta-delayed neutron emission branching ratio of very neutron-rich nuclei produced in nuclear fission. These experimental data are especially important for the design of the next generation of nuclear reactors.

██████████ (hired 2013): His research plan involves the study of nuclear reactions of astrophysical interest. Specifically, he investigates nuclear reactions taking place during the He-burning phase of stars. The  $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$  reaction is one of the two that provide neutrons needed for the s-process, but it competes with the  $^{22}\text{Ne}(\alpha, \gamma)^{26}\text{Mg}$  reaction. The s-process is responsible for about half of the elements heavier than iron found in stars. A promising new technique is to use inverse kinematics (i.e., sending the heavy ion beam onto a He target), which has the advantage of directly extracting the reaction products from the target. The recoil separator St. George has been designed to guide the reaction products into a detection system while rejecting almost all of the primary beam. St. George is a ~22m long separator made of 11 quadrupoles, 6 dipoles and, most importantly, a velocity filter (Wien filter). The commissioning of the St. George recoil mass separator is scheduled for completion by the fall of 2016. In addition to using the FN tandem facility at ND for St. George, he is also interested in developing a beamline on the FN tandem for the harvesting of long-lived radioisotopes which cannot be made by other methods for medical applications with Dr. Peaslee.

██████████ (hired 2014): The overarching goal of her research is to explore experimental techniques that allow for direct measurements or experimental constraints of statistical properties of heavy nuclei (e.g., level densities and gamma-ray strength functions). The cross sections of interest can then be extracted from these direct measurements or from the use of this indirect nuclear structure information. Her group's efforts are focused on measurements relevant for the astrophysical processes that lead to production of heavy nuclei in explosive environments. However, these nuclear models are key models for calculating nuclear reaction cross sections for a variety of applications, from fundamental research to stockpile stewardship and nuclear reactors. A post-doctoral researcher working primarily with the 5U accelerator in the NSL would provide an opportunity to expand the scope of her group's research towards inverse kinematics measurements, allowing for precise measurements of proton and alpha capture reactions on heavy nuclei at low energies.

### 3. Program Management

The PI and co-PI would have primary responsibility to manage this project. Since the hiring process is already completed for these four junior faculty, the PI and co-PI will concentrate on the hiring and professional development of the post-doctoral researchers. The PI will lead in building open-ended inquiry into the laboratories and adapting new experiments from the applications accelerator into the curriculum. The work produced by the junior faculty will be reviewed and integrated into a coherent curriculum by the PI and co-PI. To develop the mentoring part of the project, the PI and co-PI will organize and run the quarterly meetings (or half-day retreats), and will help identify on-campus and off-campus opportunities for faculty development workshops. Two other senior personnel (Arahamian and Wiescher) will dedicate some of their time towards



the structured mentoring activities. All four senior faculty are supported by ND to provide this additional mentoring for the lifetime of the grant. The mentoring materials developed as part of this project will be sustained within the Department of Physics for future hires.

#### **4. Evaluation Plan**

The primary review criteria will be the success or failure of this program to assist the four junior faculty in their efforts to obtain tenure and promotion. As such, the basic metrics will be the typical faculty productivity metrics used in tenure and promotion reviews. These include the number and quality of publications produced at the end of the grant compared to the number produced in the three years prior to the grant. Similarly, the number and dollar value of external grants obtained is an important measure of faculty productivity. The number of undergraduate and graduate students mentored in each research laboratory will also be collected. Teaching load and student teaching evaluations will be used to assess teaching effectiveness, and any disseminated product from curriculum development activities will be counted as scholarly productivity. ND's Kaneb Center for Teaching and Learning, a program external to the Department of Physics, will evaluate the cohort mentoring program to learn what the faculty perceived to be the most useful information received from the program and to suggest improvements.

#### **5. Institutional Context**

The Nuclear Physics program at ND boasts a large faculty that is actively engaged in nuclear science research and teaching. The Department of Physics currently has 10 full time tenure-track faculty in experimental nuclear physics, and it is particularly unique in that six of these positions were hired within the last three years (four junior hires and two senior hires.) This unique growth of tenure-track nuclear physics faculty in the past three years has been made possible from a variety of sources, but also significant institutional commitment to growing a robust nuclear science program. This program has National Science Foundation support to operate three accelerators at ND, and a fourth tandem accelerator is being installed this fall to provide opportunities for more applied nuclear science research. There are also seven research faculty associated with the NSL within the Department of Physics, and more than 35 graduate students in nuclear physics, most of whom traditionally have entered the field of nuclear science. Over the last three years, twelve students have successfully finished their PhD projects at the NSL. Presently, six of those PhD recipients hold post-doctoral fellow positions at universities and national laboratories, five work in industry and management, and one works for a government agency. The current level of research activity from the NSL is impressive with 210 publications over the past 3 years, and over \$11M in external funding awarded.

#### **6. Additional Support**

Cost sharing is provided by ND in the form of teaching release provided to each junior faculty member by the Department of Physics (a letter of support from the Department Chair is provided).

### **ATTACHMENT C – STANDARD TERMS AND CONDITIONS**

#### **The Nuclear Regulatory Commission's Standard Terms and Conditions for U.S. Nongovernmental Recipients**

##### **Preface**

This award is based on the application submitted to, and as approved by, the Nuclear Regulatory Commission (NRC) under the authorization [42 U.S.C. § 2051\(b\)](#), pursuant to section 31b and 141b of the Atomic Energy Act of 1954, as amended, and is subject to the terms and

conditions incorporated either directly or by reference in the grant or cooperative agreement. The following also apply:

- Restrictions on the expenditure of Federal funds in appropriation acts, to the extent those restrictions are pertinent to the award.
- Code of Federal Regulations/Regulatory Requirements – [2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards](#).

Any inconsistency or conflict in terms and conditions specified in the award will be resolved according to the following order of precedence: public laws, regulations, applicable notices published in the Federal Register, Executive Orders (E.O.), Office of Management and Budget (OMB) Circulars, the NRC's Mandatory Standard Provisions, special award conditions, and standard award conditions.

Certifications and Representations: These terms incorporate the certifications and representations required by statute, executive order, or regulation that were submitted with the SF424B application through [GRANTS.GOV](#).

### **I. Mandatory General Requirements**

The order of these requirements does not make one requirement more important than any other requirement.

#### **1. Applicability of 2 CFR Part 200**

All provisions of 2 CFR Part 200 and all Standard Provisions attached to this grant/cooperative agreement are applicable to the Recipient and to sub-recipients which meet the definition of "Recipient" in 2 Part [§200.86](#), unless a section specifically excludes a sub-recipient from coverage. The Recipient and any sub-recipients must, in addition to the assurances made as part of the application, comply and require each of its sub-awardees employed in the completion of the project to comply with [Subpart D](#) of [2 CFR Part 200](#) and include this term in lower-tier (sub-award) covered transactions.

Recipients must comply with monitoring procedures and audit requirements in accordance with [2 CFR Part 200, Subpart F—AUDIT REQUIREMENTS](#).

#### **2. Award Package**

The Recipient is obligated to conduct project oversight as may be appropriate, to manage the funds with prudence, and to comply with the provisions outlined in [2 CFR Part 200](#). Within this framework, the Principal Investigator (PI) named on the award face page, is responsible for the scientific or technical direction of the project and for preparation of the project performance reports. This award is funded on a cost-reimbursement basis, not to exceed the amount awarded as indicated on the face page, and is subject to a refund of unexpended grant funds to the NRC.

The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements related to its grant award. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any financial or fiduciary responsibilities or obligations arising under its grant, including sub-contracts and sub-awards, or any other contractual or financial obligation.

The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, State, or Federal authority having proper jurisdiction. See [2 CFR § 200.318\(k\)](#), General Procurement Standards.

### **Subawards**

[Appendix II to Part 200](#) Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

Sub-recipients, sub-awardees, and contractors have no relationship with NRC under the terms of this grant/cooperative agreement. All required NRC approvals must be directed through the Recipient to NRC. See [2 CFR § 200.318](#).

### **Nondiscrimination**

This provision is applicable when work under the grant/cooperative agreement is performed in the U.S. or when employees are recruited in the U.S.

The Recipient agrees to comply with the non-discrimination requirements below:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.), which prohibits discrimination on the grounds of race, color, or national origin in any program or activity receiving federal financial assistance.
- Title IX of the Education Amendments of 1972 (20 U.S.C. §§ 1681 et seq.), which prohibits discrimination on the basis of sex in any education program or activity receiving federal financial assistance.
- Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability in any program or activity receiving federal financial assistance.
- The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), which prohibits discrimination on the basis of age in any program receiving federal financial assistance.
- The Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12101 et seq.), which prohibits recipients from discriminating on the basis of disability in employment (Title I); State and local government services (Title II); and places of public accommodation and commercial facilities (Title III).
- Parts II and III of E.O. 11246, as amended by E.O. 11375, 11478, 12086, 12107, 13279, 13665, and 13672, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year, from discriminating in employment decisions on the basis of race, color, religion, sex, or national origin and requires that government contractors take affirmative action to ensure that equal opportunity is provided in all aspects of their employment.
- E.O. 13166, "Improving Access to Services for Persons with Limited English Proficiency," which clarifies that national origin discrimination under Title VI includes discrimination on the basis of limited English proficiency (LEP) and requires that the recipient take reasonable steps to ensure that LEP persons have meaningful access to programs and activities.
- Any other applicable non-discrimination law(s).

Generally, Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e et seq, provides that it shall be an unlawful employment practice for an employer to discharge any individual or otherwise to discriminate against an individual with respect to compensation, terms, conditions, or privileges of employment because of such individual's race, color, religion, sex, or national origin. However, Title VII, 42 U.S.C. § 2000e-1(a), expressly exempts from the prohibition against discrimination on the basis of religion, a religious corporation, association, educational institution, or society with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities.

Applicants must ensure that individuals selected as beneficiaries of support under this grant meet the legal requirements consistent with Supreme Court Decisions including *Fisher*, *Gratz*, and *Grutter*.

Based on the pre-award compliance review conducted by NRC's Small Business and Civil Rights Office (SBCR), your institution is placed in a periodic status pending resolution of issues/concerns discussed with your Authorized Representative during the review. Within 60 days of the effective award date, SBCR will conduct a periodic review to ensure compliance with applicable Civil Rights statutes. SBCR will notify, within the 60 days, the institution's Authorized Representative as to the results of the review and requirements, if any, for compliance. The institution's cooperation with SBCR is essential. The continued eligibility for Federal financial assistance is conditioned upon compliance with anti-discrimination regulations.

#### **Modifications/Prior Approval**

NRC's prior written approval may be required before a Recipient makes certain budget modifications or undertakes particular activities. If NRC approval is required for changes in the grant or cooperative agreement, it must be requested and obtained from the NRC Grants Officer in advance of the change or obligation of funds. All requests for NRC prior approval, including requests for extensions to the period of performance, must be made, in writing (which includes submission by e-mail), to the designated Grants Officer at least 30 days before the proposed change. The request must be signed by the authorized organizational official. Failure to obtain prior approval, when required, from the NRC Grants Officer, may result in the disallowance of costs, or other enforcement action within NRC's authority.

#### **Lobbying Restrictions**

The Recipient will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limits the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

The Recipient will comply with provisions of 31 U.S.C § 1352. This provision generally prohibits the use of Federal funds for lobbying in the Executive or Legislative Branches of the Federal Government in connection with the award, and requires disclosure of the use of non-Federal funds for lobbying.

The Recipient shall submit, at the time of application, a completed "Certification Regarding Lobbying" form, regardless of dollar value.

If applicable, the Recipient receiving in excess of \$100,000.00 in Federal funding shall submit a completed Standard Form (SF-LLL), "Disclosure of Lobbying Activities" for any persons engaged in lobbying activities, as discussed at 31 U.S. Code § 1352 – Limitation on use of

appropriated funds to influence certain Federal contracting and financial transactions. The form concerns the use of non-Federal funds for lobbying within 30 days following the end of the calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed. If the Recipient must submit the SF-LLL, including those received from sub-recipients, contractors, and subcontractors, to the Grants Officer.

**Debarment And Suspension –** (See [2 CFR Part 180](#); [2 CFR § 200.205](#); [2 CFR § 200.113](#); and [2 CFR Part 200, Appendix II.](#))

The Recipient agrees to notify the Grants Officer immediately upon learning that it or any of its principals:

- (1) Are presently excluded or disqualified from covered transactions by any Federal department or agency;
- (2) Have been convicted, within the preceding three-year period preceding this proposal, of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects the recipient's present responsibility;
- (3) Are presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b); or
- (4) Have had one or more public transactions (Federal, State, or local) terminated for cause or default within the preceding three years.
- (5) The Recipient agrees that, unless authorized by the Grants Officer, it will not knowingly enter into any subaward or contracts under this grant/cooperative agreement with a person or entity that is not included on the System for Award Management (SAM) (<https://www.sam.gov>).

The Recipient further agrees to include the following provision in any subaward or contracts entered into under this award:

#### Debarment, Suspension, Ineligibility, and Voluntary Exclusion

The Recipient certifies that neither it nor its principals is presently excluded or disqualified from participation in this transaction by any Federal department or agency. The policies and procedures applicable to debarment, suspension, and ineligibility under NRC-financed transactions are set forth [2 CFR Part 180](#) and [2 CFR Part 200](#).

#### **Drug-Free Workplace**

The Recipient must be in compliance with The Federal Drug Free Workplace Act of 1988. The policies and procedures applicable to violations of these requirements are set forth in [41 U.S.C. §§ 8101-8106](#).

**Implementation of E.O.13224 – Executive Order on Terrorist Financing**

The Recipient is reminded that U.S. Executive Orders and U.S. law prohibits transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the Recipient to ensure compliance with these Executive Orders and laws. This provision must be included in all contracts/sub-awards issued under this grant/cooperative agreement.

The Recipient must comply with E.O. 13224, Blocking Property and Prohibiting Transactions with Persons who Commit, Threaten to Commit, or Support Terrorism. Information about this Executive Order can be found at:

[Implementation of Executive Order 13224 Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten To Commit, or Support Terrorism amended by E.O. 13268, 13284, and 13372.](#)

**Procurement Standards - 2 CFR §§ 200.318-200.326**

Sections 200.318 - 200.326 set forth standards for use by Recipients in establishing procedures for the procurement of supplies and other expendable property, equipment, real property and other services with Federal funds. These standards are furnished to ensure that such materials and services are obtained in an effective manner and in compliance with the provisions of applicable Federal statutes and executive orders. No additional procurement standards or requirements will be imposed by the Federal awarding agencies upon Recipients, unless specifically required by Federal statute, executive order, or approved by OMB.

**Travel and Transportation**

Travel must be in accordance with the Recipient's Travel Regulations or the U.S. Government Travel Policy and Regulations at: <http://www.gsa.gov/portal/category/21222> and the per diem rates set forth at: <http://www.gsa.gov/portal/content/104877>, absent Recipient's travel regulations. Travel and transportation costs for the grant must be consistent with provisions as established in [2 CFR § 200.473-474](#).

All other travel, domestic or international, must not increase the total estimated award amount for the grant.

The Recipient will comply with the provisions of the Fly America Act (49 U.S.C 40118), as implemented at 41 CFR §§ 301-10.131 through 301-10.143.

Federal funds may not be used to travel to countries identified as "Foreign Policy Restricted Countries", as identified by the U.S. Department of State or the U.S. Agency for International Development.

**Property Standards**

Property standards of this award shall follow provisions as established [2 CFR §§ 200.310-200.316](#).

**Intangible Property**

Intangible and intellectual property of this award shall generally follow provisions established in [2 CFR § 200.315](#).



**Inventions Report** - The Bayh-Dole Act (P.L. 96-517) affords Recipients the right to elect and retain title to inventions they develop with funding under an NRC grant award (“subject inventions”). In accepting an award, the Recipient agrees to comply with applicable NRC policies, the Bayh-Dole Act, and its Government-wide implementing regulations found at Title 37, Code of Federal Regulations (CFR) Part 401. A significant part of the regulations require that the Recipient report all subject inventions to the awarding agency (NRC) as well as include an acknowledgement of federal support in any patents.

**Patent Notification Procedures** - If the NRC or its Recipients, without making a patent search, knows (or has demonstrable reasonable grounds to know) that technology covered by a valid United States patent has been or will be used without a license from the owner, E.O.12889 requires NRC to notify the owner. If the Recipient uses or has used patented technology under this award without license or permission from the owner, the Recipient must notify the Grants Officer. This notice does not imply that the Government authorizes and consents to any copyright or patent infringement occurring under the financial assistance.

**Data, Databases, and Software** - The rights to any work produced or purchased under a NRC federal financial assistance award, such as data, databases or software are determined by [Subpart D](#) of [2 CFR Part 200](#). The Recipient owns any work produced or purchased under a NRC federal financial assistance award subject to NRC’s right to obtain, reproduce, publish or otherwise use the work or authorize others to receive, reproduce, publish or otherwise use the data for Government purposes.

**Copyright** - The Recipient may copyright any work produced under a NRC federal financial assistance award subject to NRC’s royalty-free nonexclusive and irrevocable right to reproduce, publish or otherwise use the work or authorize others to do so for Government purposes. Works jointly authored by NRC and Recipient employees may be copyrighted, but only the part authored by the Recipient is protected because, under [17 U.S.C. § 105](#), works produced by Government employees are not copyrightable in the United States. On occasion, NRC may ask the Recipient to transfer to NRC its copyright in a particular work when NRC is undertaking the primary dissemination of the work. Ownership of copyright by the Government through assignment is permitted under [17 U.S.C. § 105](#).

### **Record Retention and Access**

Recipient shall follow established provisions in [2 CFR §§ 200.333-337](#).

### **Conflict Of Interest**

Conflict of Interest standards for this award will follow the Organizational Conflict of Interest (OCOI) requirements set forth in Section 170A of the Atomic Energy Act of 1954, as amended, and provisions set forth at [2 CFR § 200.112](#), Conflict of Interest.

### **Dispute Review Procedures**

a. Any request for review of a notice of termination or other adverse decision should be addressed to the Grants Officer. It must be postmarked or transmitted electronically no later than 30 days after the postmarked date of such termination or adverse decision from the Grants Officer.

- b. The request for review must contain a full statement of the Recipient's position and the pertinent facts and reasons in support of such position.
- c. The Grants Officer will promptly acknowledge receipt of the request for review and shall forward it to the Director, Office of Acquisition Management Division, unless otherwise delegated, who shall appoint an intra-agency Appeal Board to review a recipient appeal of an agency action, if required, which will consist of the program office director, the Deputy Director of Office of Administration, and the Office of General Counsel, or their designees.
- d. Pending resolution of the request for review, the NRC may withhold or defer payments under the award during the review proceedings.
- e. The review committee will request the Grants Officer who issued the notice of termination or adverse action to provide copies of all relevant background materials and documents. The committee may, at its discretion, invite representatives of the Recipient and the NRC program office to discuss pertinent issues and to submit such additional information as it deems appropriate. The chairman of the review committee will insure that all review activities or proceedings are adequately documented.
- f. Based on its review, the committee will prepare its recommendation to the Director, Office of Administration, who will advise the parties concerned of his/her decision.

### **Remedies for Noncompliance**

Termination of this award will follow provisions as established and described above in "Dispute Review Process" in [2 CFR §§ 200.338-342](#).

### **Performance and Financial Monitoring and Reporting - 2 CFR §§ 200.327-329**

Recipient Financial Management systems must comply with the provisions in [2 CFR § 200.302](#).

- Payment – [2 CFR § 200.305](#)
- Cost Share or Matching – [2 CFR § 200.306](#)
  - Recipients are to be careful with providing excessive cost share or match since at the end of the grant, if the identified match has not been provided, then a portion of the federal share may be required to be returned to the Government.
- Program Income – [2 CFR § 200.307](#)
  - Earned program income, if any, will be added to funds committed to the project by the NRC and Recipient and used to further eligible project or program objectives or be deducted from the total project cost for the grant, as directed by the Grants Officer or indicated in the terms and conditions of the award.
- Revision of Budget and Program Plans – [2 CFR § 200.308](#)
  - The Recipient is required to report deviations from the approved budget and program descriptions in accordance with – [2 CFR § 200.308\(b\)](#) and request prior written approval from the Project Officer and the Grants Officer.
  - The Recipient is not authorized to re-budget between direct costs and indirect costs without written prior approval of the Grants Officer.
  - The Recipient is authorized to transfer funds among direct cost categories up to a cumulative 10 percent of the total approved budget. The Recipient is not allowed to transfer funds if the transfer would cause any Federal appropriation to



be used for purposes other than those consistent with the original intent of the appropriation.

- Allowable Costs – [2 CFR §§ 200.403](#)
- See section [2 CFR §§ 200.330-332](#) for Subrecipient Monitoring and Management.

### **FEDERAL FINANCIAL REPORTS**

Federal Financial Reports (SF-425) are semi-annually, for the periods ending March 31 and September 30. Reports are due within 30 calendar days following the end of the reporting period and must be emailed to the Project Officer at the email addressed indicated in the Notice of Award, and to the Grants Officer at:

[Grants\\_FFR.Resource@nrc.gov](mailto:Grants_FFR.Resource@nrc.gov). (NOTE: There is an underscore between Grants and FFR in the email address.) The SF-425 form and instructions are available at the following URL: [http://www.whitehouse.gov/omb/grants\\_forms/](http://www.whitehouse.gov/omb/grants_forms/).

### **PERFORMANCE PROGRESS REPORTS**

The performance (technical) reports indicated below are subject to [2 CFR §200.328](#).

#### **Faculty Development**

Performance reports must be submitted semi-annually, for the periods ending March 31 and September 30, or any portion thereof, regardless of the award date. Reports are due within 30 days following the end of each reporting period and must be emailed to the Project Officer at the email addressed indicated in the Notice of Award, and to the Grants Officer at: [Grants\\_PPR.Resource@nrc.gov](mailto:Grants_PPR.Resource@nrc.gov). (NOTE: There is an underscore between Grants and PPR in the email address.)

Final Reports - The Recipient is required to submit final reports, both Financial (SF-425) and Performance (SF-PPR, SF-PPR-B, SF-PPR-E) within 90 days of the grant expiration. In addition to these reports, a final SF-428, Tangible property report, is also required, if applicable. The final PPR (for Scholarship, Fellowship, and Trade School and Community College Scholarship awards) must include the names of all students with up to date contact information (mailing address, telephone/cell phone, email address). The reports must be emailed to the Project Officer at the email addressed indicated in the Notice of Award, and to the Grants Officer at: [Grants\\_FFR.Resource@nrc.gov](mailto:Grants_FFR.Resource@nrc.gov) and [Grants\\_PPR.Resource@nrc.gov](mailto:Grants_PPR.Resource@nrc.gov). (NOTE: There is an underscore between Grants and FFR and Grants and PPR in the email addresses.)

For grant awards that are modified to add additional Program Descriptions, the recipient is required to address the applicable grant performance metrics associated with all programs. Further, these metrics should be broken out by individual program (e.g. Program A and Program B). This can be done utilizing Block 10, Performance Narrative, of the SF-PPR form. If this block does not have sufficient space, additional pages will be accepted. Sf-PPR-B and SF-PPR-E should be used to address both programs as well.

#### **Period of Performance** – [2 CFR § 200.309](#)

The recipient may charge to the Federal award only allowable costs incurred during the period of performance and any costs incurred before the NRC or pass-through entity made the Federal award that was authorized by the NRC or pass through entity.

Unless otherwise authorized in [2 CFR Part 200](#) or by special award condition, any extension of the award period can only be authorized by the Grants Officer in writing. Assurances of funding from other than the Grants Officer shall not constitute authority to obligate funds for programmatic activities beyond the expiration date.

The NRC Grant Officer may authorize a no cost extension of the period of performance. The recipient must submit a no cost extension request no less than 30 days prior to the award end date. Any request for a no cost extension after the grant has expired will not be approved. However, the NRC has no obligation to provide any additional prospective or incremental funding. Any modification of the award to increase funding and/or to extend the period of performance is at the sole discretion of the NRC.

### **Automated Standard Application For Payments (ASAP) Procedures**

Unless otherwise stated, Recipient payments are made using the Department of Treasury's Automated Standard Application for Payment (ASAP) system, [ASAP.gov](#), through preauthorized electronic funds transfers. To receive payments, Recipients are required to enroll with the Department of Treasury, Financial Management Service, and Regional Financial Centers, which allows them to use the on-line method of withdrawing funds from their ASAP established accounts. The following information is required to make ASAP withdrawals: (1) ASAP account number – the award number found on the cover sheet of the award; (2) Agency Location Code (ALC) – 31000001; and Region Code. Recipients enrolled in the ASAP system do not need to submit a "Request for Advance or Reimbursement" (SF-270).

## **II. Audit Requirements**

### **Audits**

Organization-wide or program-specific audits are performed in accordance with the Single Audit Act of 1996, as amended, and as implemented by [2 CFR Part 200, Subpart F—AUDIT REQUIREMENTS](#). Recipients are subject to the provisions of this subpart if they expend \$750,000 or more in a year in Federal awards. See [2 CFR 200.501](#).

The Form SF-SAC and the Single Audit Reporting packages for fiscal periods ending on or after January 1, 2008 are submitted online, as follows:

1. Create the recipient's online report ID at:  
<http://harvester.census.gov/fac/collect/ddeindex.html>;
2. Complete the Form SF-SAC;
3. Upload the Single Audit;
4. Certify the Submission; and
5. Click "Submit."

Organizations expending less than \$750,000 a year are not required to have an annual audit for that year but must make their grant-related records available to NRC or other designated officials for review or audit.

## **III. Programmatic Requirements**

The recipient is responsible for providing documentation to the NRC that tracks each student's progress in achievement of the academic program for which federal funds were provided. This includes: (1) ensuring the service agreement is signed by the student prior to providing support; (2) providing the NRC with student contact information upon student entry into the program, upon completion or withdrawal from the program, and upon request by the NRC; and (3) monitoring the student's fulfillment of the service agreement for the duration of the award. The NRC shall be notified immediately if a student is not fulfilling the academic program or the service agreement.

### **Grant Performance Metrics**

The Office of Management and Budget requires all Federal Agencies providing funding for educational scholarships and fellowships as well as other educational related funding to report on specific metrics. These metrics are part of the Academic Competitiveness Council's (ACC) 2007 report and specifically relates to Science, Technology, Engineering, and Mathematics (STEM) curricula.

As part of the OMB requirements indicated above (for metric reporting), the recipient shall address the following questions and submit responses with the required progress reports:

### **Faculty Development Metrics:**

1. How many Faculty have been sponsored by NRC funding?
  - a. Response is the number of faculty sponsored, for this reporting period and cumulative to the grant.
2. How many items have the sponsored faculty produced, for example, Professional Journal articles, publications, patents, or conference reports?
  - a. Response is the type and number of items (not a bibliography), for this reporting period and cumulative to the grant.

### **Unsatisfactory Performance**

Failure to perform the work in accordance with the terms of the award and maintain at least a satisfactory performance rating may result in designation of the Recipient as high risk and the assignment of special award conditions. Further action may be required as specified in the standard term and condition entitled "Remedies for Noncompliance."

Failure to comply with the award provisions may result in a negative impact on future NRC funding. In addition, the Grants Officer may withhold payments; change the method of payment from advance to reimbursement; impose special award conditions; suspend or terminate the grant.

### **Other Federal Awards With Similar Programmatic Activities**

The Recipient will immediately notify the Project Officer and the Grants Officer in writing if after award, other financial assistance is received to support or fund any portion of the program description stated in the NRC award. NRC will not pay for costs that are funded by other sources.

### **Prohibition Against Assignment By The Recipient**

The Recipient will not transfer, pledge, mortgage, or otherwise assign the award, or any interest to the award, or any claim arising under the award, to any party, banks, trust companies, or other financing or financial institutions without the written approval of the Grants Officer.

### **Site Visits**

The NRC, through authorized representatives, has the right to make site visits to review project accomplishments and management control systems and to provide technical assistance as required. If any site visit is made by the NRC on the premises of the Recipient or contractor under an award, the Recipient shall provide and shall require his/her contractors to provide reasonable access to all facilities and provide necessary assistance for the safety and convenience of the Government representative in the performance of his/her official duties.

## **IV. Additional Requirements**

### **Criminal and Prohibited Activities**

The Program Fraud Civil Remedies Act ([31 U.S.C. §§ 3801-3812](#)), provides for the imposition of civil penalties against persons who make false, fictitious, or fraudulent claims to the Federal government for money (including money representing grant/cooperative agreements, loans, or other benefits).

False statements ([18 U.S.C. § 287](#)), provides that whoever makes or presents any false, fictitious, or fraudulent statements, representations, or claims against the United States shall be subject to imprisonment of not more than five years and shall be subject to a fine in the amount provided by 18 USC §287.

False Claims Act ([31 U.S.C. § 3729 et seq.](#)), provides that suits under this Act can be brought by the government, or a person on behalf of the government, for false claims under federal assistance programs.

Copeland "Anti-Kickback" Act ([18 U.S.C. § 874](#)), prohibits a person or organization engaged in a federally supported project from enticing an employee working on the project from giving up a part of his compensation under an employment contract.

### **American-Made Equipment and Products**

Recipients are encouraged to purchase American-made equipment and products with funding provided under this award.

### **Increasing Seat Belt Use in the United States**

E.O. 13043, amended by E.O. 13652, requires Recipients to encourage employees and contractors to enforce on-the-job seat belt policies and programs when operating company-owned, rented or personally-owned vehicle.

### **Federal Leadership of Reducing Text Messaging While Driving**

E.O. 13513 requires Recipients to encourage employees, sub-awardees, and contractors to adopt and enforce policies that ban text messaging while driving company-owned, rented vehicles or privately owned vehicles when on official Government business or when performing any work for or on behalf of the Federal Government.

### **Federal Employee Expenses**

Federal agencies are barred from accepting funds from a Recipient to pay transportation, travel, or other expenses for any Federal employee unless specifically approved in the terms of the award. Use of award funds (Federal or non-Federal) or the Recipient's provision of in-kind goods or services, for the purposes of transportation, travel, or any other expenses for any Federal employee may raise appropriation augmentation issues. In addition, NRC policy prohibits the acceptance of gifts, including travel payments for Federal employees, from Recipients or applicants regardless of the source.

### **Minority Serving Institutions (MSIs) Initiative**

Pursuant to E.O.s 13230 and 13270, [amended by E.O. 13316](#) and [13385](#), 13532, 13592, 13555, 13515, and 13621, NRC is strongly committed to broadening the participation of MSIs in its financial assistance program. NRC's goals include achieving full participation of MSIs in order to advance the development of human potential, strengthen the Nation's capacity to provide high-quality education, and increase opportunities for MSIs to participate in and benefit from Federal financial assistance programs. NRC encourages all applicants and Recipients to include meaningful participations of MSIs. Institutions eligible to be considered MSIs are listed on the Department of Education website: <http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst.html>

### **Research Misconduct**

Scientific or research misconduct refers to the fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. It does not include honest errors or differences of opinions. The Recipient organization has the primary responsibility to investigate allegations and provide reports to the Federal Government. Funds expended on an activity that is determined to be invalid or unreliable because of scientific misconduct may result in a disallowance of costs for which the institution may be liable for repayment to the awarding agency. The Office of Science and Technology Policy at the White House published in the Federal Register on December 6, 2000, a final policy that addressed research misconduct. The policy was developed by the National Science and Technology Council ([65 FR 76260](#)). The NRC requires that any allegation be submitted to the Grants Officer, who will also notify the OIG of such allegation. Generally, the Recipient organization shall investigate the allegation and submit its findings to the Grants Officer. The NRC may accept the Recipient's findings or proceed with its own investigation. The Grants Officer shall inform the Recipient of the NRC's final determination.

### **Publications, Videos, and Acknowledgment of Sponsorship**

Publication of the results or findings of a research project in appropriate professional journals and production of video or other media is encouraged as an important method of recording and reporting scientific information. It is also a constructive means to expand access to federally funded research. The Recipient is required to submit a copy to the NRC and when releasing information related to a funded project include a statement that the project or effort undertaken was or is sponsored by the NRC. The Recipient is also responsible for assuring that every publication of material (including Internet sites and videos) based on or developed under an award, except scientific articles or papers appearing in scientific, technical or professional journals, contains the following disclaimer:

"This **[report/video]** was prepared by **[Recipient name]** under award **[number]** from **[name of operating unit]**, Nuclear Regulatory Commission. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the view of the **[name of operating unit]** or the US Nuclear Regulatory Commission."

**Trafficking In Victims Protection Act Of 2000 (as amended by the Trafficking Victims Protection Reauthorization Act of 2003)**

Section 106(g) of the Trafficking In Victims Protection Act Of 2000 (as amended as amended, directs on a government-wide basis that:

“...any grant, contract, or cooperative agreement provided or entered into by a Federal department or agency under which funds are to be provided to a private entity, in whole or in part, shall include a condition that authorizes the department or agency to terminate the grant, contract, or cooperative agreement, without penalty, if the recipient or any subrecipient, or the contractor or any subcontractor (i) engages in severe forms of trafficking in persons or has procured a commercial sex act during the period of time that the grant, contract, or cooperative agreement is in effect, or (ii) uses forced labor in the performance of the grant, contract, or cooperative agreement.” (See 22 U.S.C. §7104(g).)

**EXECUTIVE COMPENSATION REPORTING**

2 CFR § 170.220 directs agencies to include the following text to each grant award to a non-federal entity if the total funding is \$25,000 or more in Federal funding.

Reporting Subawards and Executive Compensation.

*a. Reporting of first-tier subawards.*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates \$25,000.00 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111–5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. *Where and when to report.*

i. You 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.*

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 award is \$25,000.00 or more;

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 <http://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 subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

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 \$300,000.00, 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. *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;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

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

3. *Subaward*:

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 Sec. \_\_.210 of the attachment to OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations")

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



4. *Subrecipient* means an entity that:

- 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.

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

i. *Salary and bonus.*

ii. *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.

v. *Above-market earnings on deferred compensation which is not tax-qualified.*

vi. Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.00.