ORP Procedure 12

Responsible Conduct of Research (RCR) Education Policy

Applicability: Policy is effective January 4, 2010, and is applicable to any undergraduate, graduate, or postdoctoral researcher/educator/fellow appointed to an NSF-sponsored award on or after (insert date first NSF Award subject to Sec 7009 is accepted).

Background: Following is the applicable excerpt from the NSF Proposal & Award Policies & Procedures Guide (PAPP):

B. Responsible Conduct of Research (RCR)
   1. Background
      The responsible and ethical conduct of research (RCR) is critical for excellence, as well as public trust, in science and engineering. Consequently, education in RCR is considered essential in the preparation of future scientists and engineers. Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 U.S.C. 1862o–1) requires that “each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project.”
      The language specified below provides NSF’s implementation of Section 7009.

   2. Institutional Responsibilities
      a. An institution must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. As noted in GPG Chapter II.C.1.e, institutional certification to this effect is required for each proposal.
      b. While training plans are not required to be included in proposals submitted to NSF, institutions are advised that they are subject to review, upon request.
      c. An institution must designate one or more persons to oversee compliance with the RCR training requirement.
      d. Institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research have received training in the responsible and ethical conduct of research.
Policy: Pursuant to NSF’s implementation of Section 7009 of the America COMPETES Act (42 U.S.C. 1862o-1), as of (insert date first NSF Award subject to Sec 7009 is accepted), all undergraduate student, graduate student and postdoctoral researchers/educators/fellows (Appointees) must complete a mandatory Responsible Conduct of Research education program pursuant to the ESF Campus RCR Education Plan prior to appointment on any NSF award.

The senior scientific personnel for any research project are an integral resource in the training of students and postdoctoral researchers relative to the responsible conduct of research, through on-going mentoring and project activities. While not mandatory, it is recommended that all individuals serving as PI or other Senior Personnel on an NSF award complete the Responsible Conduct of Research education program pursuant to Part 1 of the ESF Campus RCR Education Plan. This recommendation is made so that the senior researchers are familiar with the Appointee education program and materials.

If an Appointee has previously completed an NSF-compliant RCR training course, within the previous two years at either ESF or another higher education institution, that individual may request a waiver of the mandatory education program by forwarding formal documentation of such training for approval to the Dean of Research.

Any Appointee already appointed to an NSF award as of the policy effective date will have 90 days to complete mandatory Responsible Conduct of Research education pursuant to the ESF Campus RCR Education Plan.

Responsibilities:

Principal Investigators and other Senior Personnel are responsible for ensuring that all Appointees to an NSF-funded program complete the online portion of the ESF Campus RCR Education Plan, prior to appointment to the NSF-funded program. It is also the PI’s responsibility to provide on-going mentoring to each Appointee with respect to responsible conduct of research, as well as maintaining personal exemplary standards of research conduct as a positive example to the Appointee.

The Dean of Research is the designated individual to oversee compliance with the ESF Campus RCR Education Plan; and verifying that each Appointee on an NSF-funded program has completed the required RCR training program. The Dean of Research is also responsible for approval of waiver requests to the policy.

ESF Campus RCR Education Plan: The Office of Research Programs has developed a three-part program of education to meet the NSF RCR education requirement:

Part 1: Successful completion of selected modules of an NSF-compliant, on-line RCR program; and
Part 2: Discipline specific hands-on/face-to-face experience and/or training by the PI and other Senior Investigators during the first 90 days of the Appointee’s NSF project activities. Materials supplemental to the online training program will be made available to senior investigators through the Office of Research Programs website to assist in this training activity; and

Part 3: Discipline specific on-going RCR mentoring by the PI and other Senior Investigators during the service period of the Appointee.

Part 1 Program
The program offers online RCR core modules that are customized to various discipline categories:

- Biological/Biomedical Sciences
- Engineering Sciences
- Physical Sciences
- Social Sciences
- Research Administration

All Appointees supported by NSF funds will be required to complete chapters and pass tests, within their discipline category, covering the following RCR core areas. We estimate that this should take between one and a half and three hours to complete:

- Introduction to RCR
- Authorship and Publication
- Collaborative Research
- Data Acquisition and Management
- Conflict of Interest
- Mentoring
- Research Misconduct
- Peer Review

Modules covering research with human subjects and research with animals will not be required as these topics are introduced in the overview chapter of the on-line program and if anyone is doing such research, they will be completing the educational program as required by an IRB and IACUC.

Part 2 Program
The program requires the PI and other Senior Personnel to provide hands-on/face-to-face experience and/or training over the course of the first 90 days after the Appointee’s first date of service in the following areas:

- Authorship and Publication
- Collaborative Research
- Data Acquisition and Management
- Conflict of Interest
- Mentoring
- Research Misconduct
- Peer Review
Within 10 days of satisfactory completion of Part 2 training, under the supervision of the PI and/or other Senior Personnel, the **Part 2 Certification of Training Form** must be completed and submitted to the Office of Research Programs by the PI.

### Part 3 Program

The program requires the PI and other Senior Personnel to provide on-going, informal mentoring to each Appointee with respect to the responsible conduct of research, as well as maintaining personal exemplary standards of research conduct as a positive example to the Appointee. While no formal certification is required for this part of the program, The RF of SUNY and SUNY-ESF consider this to be an important obligation of the PI and Senior Investigators as a normal course of research project management.