

Responsible Conduct of Research (RCR) Training

1. Purpose

Education in the ethical and responsible conduct of research (RCR) is an essential component of training for individuals engaged in any field of research. The purpose of this policy is intended to ensure that all faculty and students engaged in research and other sponsored and unsponsored projects receive RCR information to help comply with University of South Alabama policies and procedures and the following federal funding agencies:

- 1.1 The National Science Foundation's (NSF) implementation of the requirements of Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Act (42 U.S.C. 1862o-1) found in the NSF Award and Administration Guide: Chapter IV
- 1.2 The National Institutes of Health (NIH) requirements found in NOT-OD 10-019
- 1.3 The U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) program

The applicability criteria below may expand to cover other groups of researchers and sponsors in the future.

2. Applicability

All students (both undergraduate and graduate) and postdoctoral fellows involved in the conduct of research, **regardless of whether or not they receive external funding**, must complete the appropriate institutionally-endorsed RCR training.

Although RCR training is **mandated by federal law** for those supported by NSF, NIH, and USDA NIFA as stated in Section 1 above, University policy requires all faculty engaged in research and other sponsored and unsponsored projects complete online and in-person RCR training.

3. Definitions

Responsible Conduct of Research (RCR): RCR is defined by the NIH "... as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research."

4. Policy

The Principal Investigator(s) (PI)/Project Supervisor is responsible for fostering and maintaining integrity and ethics in research, assuring oversight and supervision of students and other research personnel. The Principal Investigator(s) is responsible for informing students and trainees engaged in research activities of RCR requirements and directing them to institutional resources available to satisfy the requirements.

4.1 USA Faculty Involved in Research and Other Sponsored and Un-sponsored Programs

All faculty engaged in sponsored programs are required to complete RCR training. The following training plan must be adhered to:

- 4.1.1 Complete **online** RCR instruction as defined in the RCR Training Plan, Section 4.6.1 below, and refresher RCR instruction every four years. An automated email notification/reminder will be generated regarding completion of online training,

AND

- 4.1.2 Attend **face-to-face** RCR training sessions coordinated by the Office of Research Compliance and Assurance, as defined in the RCR Training Plan, Section 4.6.2 below.

4.2 National Science Foundation RCR Training Requirement

- 4.2.1 NSF requires USA to certify in each application for funding that it has a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research for undergraduates, graduate students, and postdoctoral researchers who are supported by NSF to conduct research. NSF's policy took effect on January 4, 2010.

4.3 National Institute of Health Requirement

- 4.3.1 NIH requires all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award, research education grant, and dissertation research grant receive training in Responsible Conduct of Research. The following programs apply: D43, D71, F05, F30, F31, F32, F33, F34, F37, F38, K01, K02, K05, K07, K08, K12, K18, K22, K23, K24, K25, K26, K30, K99/R00, KL1, KL2, R25, R36, T15, T32, T34, T35, T36, T37, T90/R90, TL1, TU2, and U2R. This policy also applies to any other NIH-funded programs supporting research training, career development, or research education that require instruction in responsible conduct of research as stated in the relevant funding opportunity announcements.
- 4.3.2 NIH Principal Investigators are responsible for including information about their RCR training plan in every New (Type 1) and Renewal (Type 2) application, as well as Type 5 Continuation applications. Detailed requirements for each type of application were published in [NIH Notice NOT-OD-10-019](#), Requirement for Instruction in the Responsible Conduct of Research.

4.3.3 NIH indicates frequency of RCR instruction as follows:

Instruction must be undertaken at least once during each career stage (see below), and at a frequency of no less than once every four years. It is highly encouraged that initial instruction during pre-doctoral training occurs as early as possible in graduate school. Individuals at the early career investigator level (including mentored K awardees and K12 scholars) must receive instruction in responsible conduct of research at least once during this career stage. Senior fellows and career award recipients (including F33, K02, K05, and K24 awardees) may fulfill the requirement for instruction in responsible conduct of research by participating as lecturers and discussion leaders. To meet the above requirements, instruction in RCR may take place, in appropriate circumstances, in a year when the trainee, fellow or career award recipient is not actually supported by an NIH grant.

“Career stage” includes the undergraduate, post-baccalaureate, predoctoral, postdoctoral, and faculty levels.

4.4 National Institute of Food and Agriculture (NIFA)

- 4.4.1 Terms and conditions state: “By accepting a NIFA award the grantee assures that program directors, faculty, undergraduate students, graduate students, postdoctoral researchers, and any staff participating in the research project receive appropriate training and oversight in the responsible and ethical conduct of research.” NIFA’s policy was effective February 2013.
- 4.4.2 NIFA Principal Investigators are responsible for ensuring that each individual participating in the research project obtains the required training in a timely manner.
- 4.4.3 On a quarterly basis, the Office of Research Compliance and Assurance will ask NIFA Principal Investigators to provide a list of all individuals who participated in the research project. The office will match this list against CITI records to ensure that all individuals completed training.

4.5 Key Differences Among the Three Agencies’ Policies

- 4.5.1 NSF requirements apply to research grants. Per NSF policy, students who receive only scholarship or stipend support to enroll in an academic program through such NSF are not required to receive RCR training. However, students must take RCR training if they receive NSF scholarship or stipend support to engage in research, or if conducting research is included in their academic program.
- 4.5.2 NIH requirements apply to education and training grants.
- 4.5.3 NIFA requirements apply to *all* individuals *participating* in the research project, not just postdoctoral researchers and students financially supported by the grant.

4.6 USA RCR Training Plan

Outlined below are the specific RCR Training requirements.

4.6.1 RCR Online (web-based) Training

The Office of Research Compliance and Assurance has partnered with the Collaborative Institutional Training Initiative (CITI) program to ensure that USA affiliated researchers have the opportunity to participate in online RCR education.

The CITI online training education can be accessed at: <http://www.citiprogram.org>

The University of South Alabama's CITI online training is comprised of various learning RCR modules:

- Biomedical RCR (Nursing, Biomedical Sciences, etc.)
- Social and Behavioral RCR (Psychology, Social work, etc.)
- Physical Sciences RCR (Engineering, Natural Sciences, etc.)
- Humanities RCR (History, Philosophy, etc.)

Successful completion of additional training is required for specific research activities involving (i) human subjects, (ii) animal care and use, and (iii) biological hazard safety. These training requirements are enforced and overseen by the appropriate institutional review committee.

4.6.1.1 The RCR online instruction designated for **students** conducting research consists of the following modules:

- Authorship
- Collaborative Research
- Conflict of Interest
- Data Management
- Mentoring
- Peer Review
- Research Misconduct

4.6.1.2 The RCR online instruction designated for **faculty engaged in research and other sponsored and unsponsored programs** consists of the following modules:

- Data Management
- Research Misconduct

NOTE: An additional module is also required for all non-PHS funded faculty or if you have not previously completed the module as follows:

- Conflict of Interest

Supplemental training modules are available, but not required, for completion by both student and faculty learner groups.

4.6.2 RCR Face-to-Face Instructional Training

Beginning fall 2019, **faculty engaged in research and other sponsored and unsponsored projects** are **required** to attend designated RCR class room instruction to further enhance online training in areas of:

- Data Management and Statistical Analysis
- Research Misconduct
- Conflict of Interest

Each fiscal year, the RCR educational outreach training program will be publicized. All faculty are strongly encouraged to participate in RCR educational outreach. A complete list of topics and registration details will be available on the [Research Education and Learning Portal](#) website.

RCR educational sessions are highly beneficial for anyone engaged in research, and all faculty, students, and trainees are strongly encouraged to attend and participate in the program in addition to training required by federal policy.

Additionally, completion of institutionally endorsed graduate courses/programs satisfies training requirements for students/trainees, to include:

- GIS 501: Responsible Conduct of Research
- EG 501: Research Integrity and Seminar
- Marine Sciences Annual Integrity Workshop

Course instructors may utilize case studies from the CITI RCR learning modules.

5. Procedures

The following procedures outline institutional RCR training compliance with this policy.

5.1 Faculty Engaged in Research and Other Sponsored and Unsponsored Projects: Training Requirements

The Office of Research Compliance and Assurance will monitor sponsored research faculty training compliance as defined above in Section 4.6, USA RCR Training Plan. This information will be obtained from Sponsored Projects Administration and Cayuse reporting.

5.2 NSF Funded Participants

- 5.2.1 The Office of Research Compliance and Assurance requires RCR training to be completed within one month (30 days) of the start of the student or trainee's participation in the project.
- 5.2.2 NSF FastLane award documents are reviewed the first and fifteenth of each month to identify NSF funded projects involving support for students and trainees. Research Compliance is responsible for implementing and monitoring compliance with the plan. Additionally, in order to validate compliance with NSF RCR training requirements, the Office of Research Compliance will monitor to ensure completion of training within the required time period. Thereafter, the project will be monitored at minimum every three months for new activity.

5.3 NIH Funded Participants

- 5.3.1 The Office of Research Compliance and Assurance monitors sponsored project awards monthly to identify NIH funded projects that must comply with completion of RCR training.

NIH requires the inclusion of face-to-face instruction for grant funded personnel and trainees, such as workshops, academic course hours, University training programs, etc. While online instruction can be valuable supplement to RCR training, it is not considered sufficient as the sole means of instruction.

- 5.3.2 NIH indicates that instruction should involve substantive contact hours (face-to-face) and acceptable programs generally involve at least eight hours.

6. Enforcement

The Office of Research Compliance and Assurance is responsible for monitoring the required RCR training and verifying completion of online and face-to-face instruction. Failure to fulfill these requirements in accordance with this policy may subject individuals to sanctions (such as prohibition from participation in research or scholarly activities)

Noncompliance with the NSF/NIH requirements for RCR training may result in withholding student/trainee payments or funding expenditures.

7. Related Documents

- 7.1 Related Regulations and/or Policies
 - [National Science Foundation, America COMPETES Act, section 7009](#)
 - [National Institute of Health, NIH Policy on Responsible Conduct of Research Education](#)
 - [USDA, National Institute of Food and Agriculture](#)

7.2 Other Related Documents and/or Procedures

- [USA Guidelines: NIH Instruction in the Responsible Conduct of Research](#)
- [USA Guidelines: Mentoring Plans in Research, Career Development and Training Proposals](#)
- [USA Research Compliance Website: NSF/NIH Resources](#)
- [USA Research Compliance Website: RCR Standards](#)

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