

Southern Illinois University Carbondale

Responsible Conduct of Research Training Matrix

Meeting Responsible Conduct of Research Training Requirements - NSF, NIFA, and NIH

The National Science Foundation (NSF) requires all undergraduates, graduates, and post-doctoral fellows who conduct research supported by NSF funds engage in responsible conduct of research (RCR) training. All applications submitted from SIUC to NSF require certification that plans are in place to provide appropriate training in and oversight of RCR training. Certification of compliance with the requirements is given by the Office of Sponsored Projects Administration (OSPA) on behalf of the Chancellor.

The National Institutes of Health (NIH) requires that all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, or dissertation research grant (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, as well as 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) must receive RCR training. This requirement also applies to all faculty, including new faculty, mid-career faculty and senior faculty, and professional and scientific employees receiving funding from these sources.

The National Institute of Food and Agriculture (NIFA) has also implemented policies mandating instruction in RCR. By accepting a NIFA award, the university assures that principal investigators, program/project 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 and that documentation of such training will be maintained. Grantees are advised that the documentation of the training is subject to NIFA review upon request.

Frequency: Instruction must be undertaken at least once during each career stage, and at a frequency of no less than once every four years.

Meeting NSF Training Requirements

NSF expects institutions to be able to verify that students receiving NSF funds to conduct research receive RCR training. The institution is expected to determine curriculum, taking into consideration the types of research conducted at the institution and the needs of the students who intend to pursue basic or applied research careers.

The RCR training requirement applies to new proposals submitted, or due, on or after January 4, 2010, to conduct research, which excludes, for example, conference, symposium, workshop, or travel proposals.

Mandatory:

In order to meet requirements, all undergraduate, graduate students, and post-doctoral researchers who will be supported by NSF to conduct research are required to successfully complete the training and training assessments covering the following RCR core areas:

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

The above listed topics are covered within the CITI online RCR training. Optional modules offered in the CITI online RCR program include:

- Plagiarism
- Collaboration Between Academics
- Case Study – Data Management
- Using Animal Subjects in Research
- Research Involving Human Subjects

It is strongly suggested that affected personnel complete the optional CITI modules, as well as the mandatory modules. Estimated time to complete the required modules is 1½ to 3 hours.

Accessing the Training

You will need to create an account in the CITI program before you can access the training. For detailed instructions for registration and training module selection, see the [OSPA website](#).

Results

Your score must be 80% or greater to receive a certification of training. If your score is less than 80%, you will be allowed to retake the quiz. Your results will automatically be forwarded to the Officer of Sponsored Projects Administration (OSPA). **Please be sure to print and retain a copy of the certification for your files.**

Questions

If you have any questions or need help with accessing the training, please contact Mandy King, Research Compliance Coordinator, mlking@siu.edu, 453-4530

Training for Research Involving Humans or Animals

Individuals conducting research involving humans or animals, hazardous chemicals and biohazards will also be required to take the training components required by the Human Subjects Committee (HSC), the Institutional Animal Care and Use Committee (IACUC) or Center for Environmental Health and Safety (CEHS). More information on those requirements may be found on the Animal Research and Human Subjects Research sections of the OSPA website, as well as the CEHS website.

Meeting NIFA Training Requirements

The NIFA training requirements can be met by following the same training guidelines as for NSF, which are noted above. The required training is offered as an online training course available through CITI. For detailed instructions for registration and training module selection, see the [OSPA website](#).

Meeting NIH Training Requirements

NIH specifies that online courses can be a valuable supplement but they are not considered adequate to address NIH RCR requirements except in special instances of short-term training programs or unusual and well-justified circumstances. Acceptable training plans generally include a **minimum of eight substantive hours of face-to-face instruction over the following subject matter:**

- Conflict of interest – personal, professional, and financial
- Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
- Mentor/mentee responsibilities and relationships
- Collaborative research including collaborations with industry
- Peer review
- Data acquisition and laboratory tools: management, sharing and ownership
- Research misconduct and policies for handling misconduct
- Responsible authorship and publication
- Social Responsibility

Training may be given as a semester-long series or investigators may develop their own training format. The following mechanisms meets the NIH requirements:

Mandatory:

- **Option 1:** Enrollment in **PHRM 540, Responsible Conduct of Research**, a semester long pass/fail course offered every other fall.

PHRM 540, Responsible Conduct of Research. Requirements for successful completion of PHRM 540 will be outlined in the course syllabus. **Students who do not meet these requirements must re-take the course to ensure compliance with RCR requirements.**

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- **Option 2:** Independent training led by the Principal Investigator or other faculty (copies of instructional materials and training logs must be properly documented and made available upon request). Sample training materials may be found here: <http://www.research-ethics.net/>. A sample training log for recording training provided for affected personnel can be found on the OSPA website

Elective:

Investigators may find the CITI training in RCR described above www.citiprogram.org to be a helpful supplement to either Mandatory Option 1 or Option 2 for meeting the NIH requirements. **NOTE:** Again, online coursework alone does not meet the Responsible Conduct of Research Training requirements set forth by NIH.

NIH guidance documents also indicate that “Training faculty and sponsors/mentors are highly encouraged to contribute both to formal and informal instruction in responsible conduct of research. Rotation of training faculty as course directors, instructors, and/or discussion leaders may be a useful way to achieve the ideal of full faculty participation in formal responsible conduct of research courses over a period of time.”

Applicability: This requirement applies to the following programs: 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.

Meeting RCR Training Requirements

Faculty are encouraged to collaborate with other faculty within their departments and across departmental/college lines in order to develop and deliver meaningful RCR training. RCR training requirements should not be considered a burden on the sponsored project or the PI. The agencies that require RCR training view the training as a critical part of the learning and experience of the affected personnel. Failure to meet RCR training requirements can lead to a loss of sponsored research funding and other sanctions.