

Responsible and Ethical Conduct of Research (RCR) Training

Policies

[National Science Foundation \(NSF\)](#)

[National Institute of Food and Agriculture \(NIFA\)](#)

[National Institutes of Health \(NIH\)](#)

Forms

None

Related Links

[CITI RCR Training](#)

[MU School of Medicine Responsible Conduct of Research Seminar Series](#)

Overview

Formal instruction in the responsible and ethical conduct of research (RCR), [as defined by federal agencies and by various scientific societies](#), covers the following content areas:

- Mentor/trainee responsibilities
- Data acquisition, management, sharing, and ownership
- Research ethics and the role of the scientist
- Collaborative science
- Peer review
- Publication practices and responsible authorship
- Research misconduct
- Conflicts of interest and commitment
- Research involving animals
- Research involving human subjects
- Safe laboratory practices

To date, the National Science Foundation, the National Institute of Food and Agriculture, and the National Institutes of Health have set forth specific RCR requirements for recipients of research funding.

National Science Foundation (NSF)

Effective January 4, 2010, [all undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research](#) ("participant") must receive appropriate training in the responsible and ethical conduct of research. NSF requires this training only for projects that are research in nature.

Each institution applying for NSF funds must have in place a plan to provide the training and oversight. Such plans are subject to review upon request by NSF. The University of Missouri utilizes the Collaborative Institutional Training Initiative (CITI) program to provide RCR training that meets the requirements of the NSF policy. The MU Office of Sponsored Programs Administration (OSPA) oversees compliance by way of payroll and training reports.

National Institute of Food and Agriculture (NIFA)

Effective for awards subject to the NIFA's February 2013 Research Terms and Conditions (and those issued subsequently), program directors, faculty, undergraduate students, graduate students, postdoctoral researchers, and any staff participating in the research project ("participant") must receive appropriate training and oversight in the responsible and ethical conduct of research. NIFA requires this training only for projects that are research in nature.

Each institution applying for NIFA funds must assure that the appropriate individuals receive training and must maintain documentation of such training. Documentation of training is subject to review upon request by NIFA. The University of Missouri utilizes the CITI program to provide RCR training that meets the requirements of the NIFA policy. OSPA oversees compliance by way of payroll and training reports.

National Institutes of Health (NIH)

Current NIH policy concerning training in the responsible and ethical conduct of research is effective with all new and renewal applications submitted on or after January 25, 2010, and for all continuation (Type 5) applications with deadlines on or after January 1, 2011. Under NIH policy, all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive instruction in RCR. Unlike NSF and NIFA policies where CITI RCR training alone meets sponsor requirements, RCR training for applicable NIH projects must meet additional criteria ([NOT-OD-10-019](#)):

While online courses can be a valuable supplement to instruction in responsible conduct of research, online instruction is not considered adequate as the sole means of instruction. A plan that employs only online coursework for instruction in responsible conduct of research will not be considered acceptable, except in special instances of short-term training programs, or unusual and well-justified circumstances. Instruction should involve substantive contact hours between the trainees/fellows/scholars/participants and the participating faculty. Acceptable programs generally involve at least eight contact hours.

New NIH applications (proposals) must include a plan for instruction in responsible conduct of research and must describe how participation will be monitored. Renewal applications, in addition to the criteria for new applications, must describe past and future changes that address any weaknesses in the current instruction. Applications lacking a plan for instruction in responsible conduct of research will be considered incomplete and may be delayed in the review process or not reviewed.

Information on the nature of the instruction in the responsible conduct of research and the extent of fellow and faculty participation also must be provided in the annual progress report submitted as a prerequisite to receiving non-competing continuation support.

Risk

Instances of RCR non-compliance may result in a participant's discontinued participation on the sponsored research project, possibly leading to the student's inability to complete academic goals or the researcher's inability to complete project objectives. In addition, the associated costs are deemed unallowable unless RCR training is completed. The department responsible for the sponsored project is responsible for the unallowable expenses.

Procedure

Principal Investigator (PI) – The PI is responsible for identifying individuals under his or her supervision who are subject to sponsor-specific RCR training requirements and for ensuring that those participants complete appropriate training. The PI must provide appropriate oversight in the ethical and responsible conduct of research for all personnel participating in the research project.

For NSF- and NIFA-funded research projects, the PI should refer the participant(s) to the [CITI RCR Training page](#) on the MU Office of Research website to access and complete training. Alternatively, participants may substitute a qualified MU course for the CITI RCR training with the approval the University's Research Integrity Officer.

For applicable NIH-funded projects, the PI guides participants in instruction as outlined the project plan and monitors and reports throughout the life of the award. PIs may utilize the [MU School of Medicine Responsible Conduct of Research Seminar Series](#) or other program that meets the requirements of NIH policy.

Participant – Completes CITI RCR training within 30 days of notification and/or completes an alternate prescribed course of study, as determined by sponsor policy and the PI.

OSPA Senior Grants and Contracts Administrator (SGCA) – For NSF- and NIFA-funded research projects, the SGCA notifies the PI of the RCR training requirement.

OSPA Compliance Team – The Compliance Team regularly runs a report to identify all students on NSF-funded research projects and personnel on NIFA-funded research projects who have not completed RCR training. For all participants newly identified on the report, the Compliance Team notifies the participant by email of the pending RCR training requirement; the Compliance Team copies the PI and the OSPA Post-award Team on the email notification. For all participants on the report, the Compliance Team sends a follow-up email monthly until OSPA receives notification from CITI that the participant has completed training.

OSPA Post-award Team – In the event that RCR training is not completed, the OSPA Post-award Team works with the Department to transfer unallowable costs to a non-grant account.

Departmental Research Administrator (DRA) – The DRA assists the PI to ensure all required RCR training is complete and works with the OSPA Post-award Team to transfer unallowable costs.

Responsibilities

Below is an outline of responsibilities as they relate to procedure.

Principal Investigator:

- Bears responsibility for all programmatic and financial aspects of an award.
- Ensures appropriate participants on applicable research projects complete required RCR training.
- Provides a non-grant account MoCode if any costs are deemed unallowable.

Participant:

- Completes appropriate RCR training timely.

Office of Sponsored Programs Administration:

- Monitors RCR training status of qualifying participants on NSF- and NIFA- funded research projects, as defined by respective policies.
- Notifies PI and participant of pending RCR training requirement.
- Monitors allowable and unallowable costs related to fulfillment of RCR training requirement.

Departmental Research Administrator:

- Assists to meet all requirements as described above.

Need Help?

If you have questions or comments related to this procedure, write to ospa@missouri.edu or (573-882-5600) or ospa@missouri.edu

Related Topics

None

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