

THE UNIVERSITY OF ARIZONA

Institutional Plan to Provide Responsible Conduct of Research (RCR) Training Required by the National Institutes of Health, the National Science Foundation, and the National Institute of Food and Agriculture

The responsible and ethical conduct of research is critical for excellence, as well as public trust, in the advancement of knowledge through research and scholarship in all disciplines. Consequently, the National Institutes of Health (NIH), the National Science Foundation (NSF), and the National Institute of Food and Agriculture (NIFA) consider Responsible Conduct of Research (RCR) education essential in the preparation of future scientists and engineers. Each agency has particular requirements for RCR instruction. This institutional plan outlines the programming in place at the University of Arizona (UA) designed to meet those requirements.

The University of Arizona RCR Certificate Program

The University of Arizona offers certificate programs in RCR education designed to meet NIH, NSF, and NIFA guidelines. Details regarding each certificate can be found on pages 2-4 of this document. The certificate program consists primarily of a workshop series designed to cover the broad range of topics covered under the rubric of RCR.

The Value of RCR

Fulfillment of federal requirements in Responsible Conduct of Research (RCR) training is just one, albeit very useful, component of training generations of University of Arizona researchers in the highest professional standards. Professional excellence in research includes a dedication to integrity. Education in the responsible conduct of research meets more than just regulatory standards and requirements. It also promotes ethical professional values and behaviors.

Workshop Topics

The RCR workshop topic areas include but are not limited to:

- Animal Subjects Protection**
- Collaborative Science
- Conflict of Interest
- Data Acquisition, Management, Sharing and Ownership
- Lab Safety**
- Human Subjects Protection**
- Mentor/Trainee Relationships
- Peer Review
- Publication Practices and Responsible Authorship
- Research Misconduct

****Special Note:** At the University of Arizona, research with human subjects, animals, and biological, chemical and/or radioactive agents require specific training requirements that are additional to and are not satisfied by the RCR training

requirements described in this Institutional Plan for RCR training. See <https://research.arizona.edu/compliance/training> for more information.

Workshop Schedule

Visit <https://research.arizona.edu/research-compliance/rcr/workshops> for the current schedule of workshop offerings.

Training Completion Deadline

The certificate program must be initiated within 30 days of the post-award date and completed within one calendar year after the post-award date. See specific requirements on pages 3 and 4 for additional instructions.

Tracking and Verification of Hours

Principal Investigators are responsible for ensuring that all students and postdoctoral researchers associated with the relevant award complete the RCR training requirements as described above. Individuals should keep documentation of the RCR training they receive, including all workshops and face-to-face discussions with faculty mentors.

IMPORTANT: Beginning in September 2014 completion of the RCR Certificate will be tracked through the university's enterprise learning management system, UAccess Learning.

Monitoring Compliance

The University of Arizona, through the Office of the Senior Vice President for Research, is responsible for certifying that the RCR training plan is in place and verifying certificate completion. Beginning in September 2014 UAccess Learning will be the primary tool for this verification.

Consequences of Noncompliance

Noncompliance with the NIH requirements for RCR training may result in the forfeiture of research funds and sanctions against future NIH or other federal agency research funding, in addition to any institutional sanctions pursuant to relevant UA personnel or other policies.

NIH RCR Certificate

NIH RCR Policy

NIH requires all trainees, fellows, participants, and scholars supported by NIH training grants, career development awards, and dissertation research grants to receive instruction in the responsible conduct of research. For the complete NIH policy, please visit <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-055.html>.

Contact Hours Required

The University of Arizona requires a minimum of nine (9) hours of RCR instruction to earn the NIH RCR Certificate. However, more hours are encouraged.

Instructional Format

At least 7.5 hours must be comprised of live instructional formats such as workshops, academic course hours, and face-to-face discussions with faculty mentor(s) and peers. The University of Arizona encourages NIH-funded scholars, trainees, and fellows to participate in as much live instruction as possible. No more than 1.5 hours of supplemental online instruction in RCR may count toward the RCR Certificate.

Earning the Certificate

UA offers an NIH RCR Certificate to acknowledge fulfillment of the NIH requirement. Earning the certificate requires a minimum of nine (9) hours of RCR instruction, which may be fulfilled either through an approved course for academic credit or the workshop-based curriculum below. Up to three (3) hours of RCR instruction led and facilitated by faculty mentors on a more informal basis may count toward the certificate. The workshop-based curriculum consists of the following:

Core Workshop: 1.5 hrs

- Introduction to the Responsible Conduct of Research (choose one of the following):
 - o Introduction to RCR (face-to-face workshop)
 - o Online Introduction to RCR (CITI)

Five Elective Workshops: 7.5 hrs

- Select from RCR Workshop Series (see 2014-2015 schedule below)
- Up to three (3) hours of supplemental instruction from faculty mentor(s) may count toward the elective requirement.

NSF RCR Certificate

Training Requirement and Scope

Consistent with National Science Foundation (“NSF”) policy¹ and the America COMPETES Act, the University of Arizona (the “University”) mandates that all postdocs, undergraduate and graduate students, faculty, and senior personnel supported by NSF to conduct research must complete a NSF Responsible Conduct of Research (“RCR”) Certificate. Completion of the NSF RCR Certificate requires engaging in online instruction in 1) the responsible and ethical conduct of research, and 2) mentoring and mentorship best practices.

Oversight

The Research Integrity and Training Office, a unit of Research, Innovation & Impact, is responsible for monitoring compliance with this plan and the NSF requirements.

¹ NSF Responsible and Ethical Conduct of Research Policy: <https://new.nsf.gov/policies/papppg/23-1/ch-9-recipient-standards#b-responsible-and-ethical-conduct-of-research-recr-9c7>

NSF RCR Certificate

To complete the University's NSF RCR Certificate, learners must complete the following two (2) online courses:

1. Responsible Conduct of Research (RCR) – Basic (offered through the [CITI Program](#))
2. MENTOR Institute Training Level 1 (Offered through the [EDGE Learning system](#))

Completion of the Certificate will be tracked through the EDGE Learning system and UAccess Analytics ([Analytics Access and Provisioning Information](#)).

Deadline for Completion of NSF RCR Certificate and Scope of Requirement

For faculty and senior personnel named on all NSF proposals submitted on or after July 31, 2023:

- A completed NSF RCR Certificate must be on file in EDGE Learning no later than 30 days after the Notice of Award.

For students and postdoctoral researchers supported on all NSF grants, regardless of submission date:

- A current NSF RCR Certificate of completion must be on file in EDGE Learning no later than 30 days after first being paid on the grant.

Notifications and Consequences for Noncompliance

Monthly Notification to PIs: The Principal Investigator ("PI") on an NSF grant that is subject to the RCR requirements will be notified via an automated email from UAccess Analytics at the beginning of each month if anyone being paid on the grant and subject to the training requirement has not completed the RCR Certificate.

30-Day Noncompliance Escalation: If any individual subject to the training requirement is more than 30 days past due completing the NSF RCR Certification, then the Research Integrity & Training Office will notify the PI and the PI's Department Head and Associate Dean for Research of the noncompliance.

60-Day Noncompliance Escalation: If any individual subject to the training requirement is more than 60 days past due completing the NSF RCR Certification, then the Research Integrity & Training Office will notify the PI, the PI's Department Head, Associate Dean for Research, and Dean of the noncompliance. The Research Integrity & Training Office will instruct the PI's college leadership to hold off on approving any new NSF proposals from the PI until the NSF RCR Certificate has been completed by all individuals who are out of compliance with the training requirement.

Frequency of Instruction

Ethical standards and best practices in research and mentoring are constantly evolving. The University therefore requires that students and trainees renew their NSF RCR Certificate at each subsequent stage of their training. For example, a student who completes their undergraduate degree, graduate degree, and a postdoctoral fellowship at the University, and who is supported by NSF during each of those stages, will be required to complete the NSF RCR Certificate a total of 3 times – once for each stage.

Faculty and senior personnel are required to complete the NSF RCR Certificate once but are strongly encouraged to engage in supplemental continuing RCR education throughout their career.

Instructional Format

The mandatory components of the NSF RCR Certificate are offered in an online self-paced format. Supplemental training and continuing education in the responsible and ethical conduct of research is offered through live synchronous workshops during the fall and spring semesters.

Supplemental Continuing RCR Education

The University strongly encourages continuing RCR education beyond the minimum requirements of the certificate. The Research Integrity and Training Office offers numerous workshops on the responsible and ethical conduct of research for the University research community. The workshop schedule is posted online approximately 30 days before the start of the fall and spring semesters. Please visit the RCR Program webpage for more information and to register for workshops: <https://research.arizona.edu/research-compliance/rcr>.

NIFA RCR Certificate

NIFA RCR Policy

NIFA requires that all program directors, faculty, undergraduate students, graduate students, postdoctoral researchers, and any staff participating in a research project funded by NIFA receive RCR training. Documentation of the training is subject to review by NIFA upon request. For the complete policy, please see Article 7 of NIFA's research terms and conditions: <https://www.nifa.usda.gov/grants/regulations-and-guidelines/research-misconduct/responsible-ethical-conduct-research>

Earning the Certificate

The NIFA RCR Certificate may be earned by completing the requirements for the NSF RCR Certificate outlined above.