

TEXAS A&M UNIVERSITY- SAN ANTONIO

National Science Foundation Responsible Conduct of Research Training Plan for Students and Faculty Members

I. Introduction

The <u>America COMPETES Act of 2007</u> directed that the National Science Foundation require that each institution that applies for financial assistance from NSF for science and engineering research or education certify that the institution has a plan 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.

In responding to this requirement, the NSF published a revision to its NSF Proposal & Award Policies and Procedures Guide requiring that beginning January 4, 2010, institutions must certify that, at the time of proposal submission, the institution has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who are supported by NSF. 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.

II. Purpose

The purpose of this document is to outline Texas A&M- SA's plan for the implementation of the NSF training requirement for the responsible conduct of research. The Office of Research developed the following training plan.

III. General Standards

All members of Texas A&M – SA are responsible for ethical conduct of research. This is critical for excellence, as well as public trust, in all research, but specifically in science and engineering. Consequently, education in the responsible and ethical conduct of research is considered essential in the preparation of future scientists and engineers. As mentors, faculty members play an important role in shaping the next generation of researchers and are expected to instill these same high ethical standards in their students and postdoctoral researchers.

A&M- SA's RCR program is based on the core elements as identified by the NIH Office of Research Integrity.

- 1. Academic Fraud and Research Misconduct
- 2. Conflict of Interest and Conflict of Commitment
- 3. Human Subjects Protections
- 4. Use and Care of Animals
- 5. Data Acquisition, Management, Sharing and Ownership
- 6. Publication Policies and Responsible Authorship
- 7. Mentoring and Trainee Responsibilities
- 8. Peer Review
- 9. Collaborative Science
- 10. Research Misconduct

IV. The Program

A. NSF RCR Training Plan for Undergraduates

Identification of Undergraduate Students

- Office of the Provost and SRS will keep a list of students paid from NSF awards. At least once annually, a report will be generated to list all of these students.
- As they are identified in the report, students are contacted by the Office of Research Compliance and informed that they must participate in RCR training.

Training

- For undergraduate students supported by NSF grants, principal investigators will be responsible for ensuring that these students complete the required to read a handout, Introduction to the Responsible Conduct of Research (RCR): A Summary for Undergraduate Researchers
- The handout is located on the Office of Research Compliance website:

Documenting Training

• Undergraduate students will be directed to reply via email to attest that they have read the handout.

B. NSF RCR Training Plan for Graduate Students

Identification of Graduate Students

- All graduate students receiving NSF support will receive notification that RCR training is required.
- Office of the Provost and SRS keeps a record of all graduate students paid from NSF awards. At least once annually, a report listing all of these students will be generated.
- As they are identified in the report, graduate students are contacted by the Office of Research Compliance and informed that they must complete the CITI training.

Training

- All graduate students receiving NSF support are required to take online RCR training through CITI: https://www.citiprogram.org/
- Graduate students must also read and certify that they have read and understood the handout, Introduction to the Responsible Conduct of Research (RCR): A Summary for Undergraduate Researchers.
- The handout is located on the Office of Research Compliance website:

• PI's are encouraged to provide mentoring to the graduate students on a regular basis.

Documenting Training

- Graduate students must submit completed CITI training record to Office of Research Compliance.
- Graduate students will be reminded of the training requirement until they have successfully completed the training.
- Failure to complete RCR may disqualify a student from participating in research activities.

C. NSF RCR Training Plan for Postdoctoral Researchers

Identification of Postdoctoral Researchers

- Office of the Provost and SRS will keep a list of all Postdoctoral Researchers paid from NSF awards. At least once annually, a report listing all of these students will be generated.
- As they are identified in the report, postdocs are contacted by the Office of Research Compliance and informed that they must participate in RCR training.

Training

- Postdocs supported by an NSF award are required to take online RCR training through CITI: https://www.citiprogram.org/
- Complete TrainTrag section 2113357
- Postdocs are encouraged to seek mentorship from their faculty advisors.
- Attend in-person Ethics seminar offered by Office of Research Compliance. For more information on the seminars contact rani.muthukrishnan@tamusa.edu.

Documenting Training

- Graduate students must submit completed CITI training record to Office of Research Compliance.
- Postdocs will be reminded of the online training requirement until they have successfully completed the training.
- Failure to complete RCR may disqualify a student from participating in research activities.

D. NSF RCR Training Plan for Faculty and Researchers

Effective July 31, 2023, NSF has implemented new requirements for training in the responsible and ethical conduct of research. Previously, this training was only required for students and postdoctoral scholars. Faculty and other Senior Personnel supported by NSF to conduct research are now required to complete this training. Everyone required to complete this training will be asked to complete online CITI training. NSF has also expanded the training topics, which must now include mentor training and

mentorship.

Identification of Researchers and Faculty

- Office of the Provost and SRS will provide a list of all Faculty and researchers with NSF awards.
- The awardees are contacted by the Office of Research Compliance and informed that they must participate in RCR training.

Training

- Faculty and Researchers need to complete online CITI: https://www.citiprogram.org/
- Complete <u>TrainTrag section 2113357</u>
- Complete CITI RCR Refresher course. <u>2 Refresher (ID: 420506)</u>
- Faculty and Researchers are encouraged to participate in the RCR seminar offered by the Office of Provost. For schedule, contact rani.muthukrishnan@tamusa.edu.
- Faculty are encouraged to provide mentorship to their undergraduate and graduate students, and postdoctoral associates.

Documenting Training

- Faculty members must submit completed CITI training record to Office of Research Compliance.
- Faculty members will be reminded of the online training requirement until they have successfully completed the training.
- Failure to complete RCR may disqualify a student from participating in research activities.

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