

School of Education and Social Policy

Responsible Conduct of Research Training

Updated September 2019

Purpose

The purpose of this document is to outline the School of Education and Policy (SESP) plan for meeting the National Science Foundation's (NSF) requirement for training in the responsible conduct of research (RCR).

Background

The federal America Competes (America Creating Opportunities to Meaningfully Promote Excellence In Technology, Education and Science) Act of 2007 requires that at a minimum, all students (undergraduate and graduate) and postdoctoral scholars with salary support from NSF receive training in the responsible conduct of research. This requirement became effective for all NSF projects submitted and awarded on or after January 4, 2010, including competitive renewals and supplements.

NSF expects each institution to determine the content and delivery method that will meet that institution's specific needs for RCR training. Northwestern University and individual investigators are not required to submit a training plan or evidence of compliance in progress reports. However, training plans and appropriate verification of training compliance must be available upon audit.

Some institutions have elected to meet the RCR requirement solely via web-based delivery - provided either by the Collaborative Institutional Training Initiative (CITI) or custom-developed modules. At Northwestern, the expectation is that for graduate students and postdoctoral fellows, web-based training (WBT) must be combined with instructor-led training (ILT). For Northwestern undergraduate researchers CITI Program's web-based RCR training modules are considered adequate. Individual schools at Northwestern University are charged with the responsibility to develop a plan to provide appropriate training and oversight in RCR.

SESP Implementation

Undergraduate researchers funded on NSF awards in SESP

In SESP, we will follow the Northwestern RCR recommendation for undergraduate students supported by NSF:

- Undergraduate researchers must complete the following WBT modules available via CITI's "RCR Course for Undergraduate Students" and obtain a passing grade of at least 80% on the accompanying quizzes:
 - Introduction to the Responsible Conduct of Research
 - Authorship
 - Collaborative Research
 - Conflicts of Interest
 - Data Management
 - Mentoring
 - Peer Review
 - Plagiarism
 - Research Misconduct
- All undergraduate students supported on NSF grants must complete the online CITI RCR course within 60 days after their salary is first charged to the NSF grant.
- It is the responsibility of the project PI of NSF grants to inform the undergraduate students about the RCR requirement.
- Training is accessed and managed through Northwestern University's training management system, Learn@Northwestern. Undergraduate students supported by NSF grants will receive notifications about required training assignments from the Learn@Northwestern system. The SESP Dean's Office will assist project PIs in tracking and achieving compliance.
- Undergraduate payees who have not completed the training within 60 days will be asked to cease work on the grant until training is completed.
- Salary costs for students who have not completed the required training within 60 days are unallowable and will be removed from the grant and charged to the faculty member's non-sponsored, "faculty" account.

The web-based CITI module alone satisfies the Northwestern RCR expectation for undergraduate researchers.

Graduate Students and Postdoctoral Fellows funded on NSF awards in SESP

PhD students and postdocs with NSF funding require **both** the web-based CITI course (WBT) and instructor-led training (ILT).

Web-Based Training via CITI:

NSF-funded graduate students and post-docs are required to successfully complete the WBT CITI modules **at their earliest convenience upon receiving salary funding from NSF.**

For graduate students and post-docs, the WBT CITI training component can be met as follows:

- Graduate students and post-docs must complete the following modules of the online CITI course and obtain a passing grade of at least 80% on the accompanying quizzes:
 - Introduction to the Responsible Conduct of Research
 - Authorship
 - Collaborative Research
 - Conflicts of Interest
 - Data Management
 - Mentoring
 - Peer Review
 - Research Misconduct
 - Plagiarism
 - Research Involving Human Subjects
- It is the responsibility of the project PI of NSF grants to inform the NSF graduate students and post-docs about the RCR requirements.
- Instructions for accessing CITI's WBT modules can be found [here](#) or via the following URL: <https://www.researchintegrity.northwestern.edu/training-2/responsible-conduct-of-research-rcr-training/online/>
- The SESP Dean's Office will assist project PIs in tracking and achieving compliance.

Instructor-Led Training (ILT) Requirement:

The ILT Seminar, listed as LRN_SCI 519 in CAESAR and in Learn@Northwestern, is a 4-hour, mandatory seminar with required readings assigned in advance. This seminar will be offered via SESP up to two times per year depending on the number of trainees. Seminar topics include:

- Conflict of Interest
- Human Subject Research

- Mentor/mentee responsibilities and relationships
- Collaborative Research
- Peer Review
- Data acquisition, management, sharing and ownership
- Research misconduct
- Responsible authorship and publication
- The societal impacts of research

Graduate students will register for the ILT Seminar through CEASAR. The course number is LRN_SCI 519.

Postdoctoral trainees will register for the F2F Seminar through Learn@Northwestern. The course is listed as LRN_SCI 519.

If the ILT Seminar is not completed within one year of the trainee first being charged to the grant, all salary charges for the trainee will be removed from the grant and charged to the PIs non-sponsored, "faculty" account until RCR training is complete. If the graduate student or postdoc leaves the NSF project before the one year training deadline is met, all salary charges will be removed from the grant and transferred to the PIs non-sponsored, "faculty" account.