

## Revised NSF RECR Training plan

RECR training remains an important element in ensuring Northwestern's research is conducted with the highest level of integrity. In an effort to standardize the RCR training required for NSF trainees, Northwestern developed the plan below that went into effect on September 1, 2015. Plan revised August 31, 2023, to include faculty and senior personnel effective August 1, 2023, and subsequently revised on October 1, 2025 to incorporate research security training.

### NSF RECR Training Plan

- The requirement is 100% compliance with the NSF requirements for RCR training.
- All centers/schools and applicable departments must have a written plan to address how NSF RCR training will be conducted.
- Plans must include the following:
  - Who is required to complete the training
  - Training identified by audience - undergraduates, graduate students, post docs, faculty and senior personnel
  - Topics covered
  - Timeframe for completion
  - Method of delivery
  - Process for dealing with non-compliance
- Training conducted at prior institutions does not fulfill Northwestern's requirements
- Plans had to be on file with the Office for Research Integrity (ORI) by September 1, 2015 and updated annually

### Undergraduate students

1. Must reflect the current University-wide requirement in place:  
<https://researchintegrity.northwestern.edu/training/responsible-conduct-of-research-training/>
2. Topics to be covered:
  - a. Authorship
  - b. Collaborative research
  - c. Conflicts of interest
  - d. Data management
  - e. Mentoring
  - f. Peer review
  - g. Plagiarism
  - h. Research misconduct
  - i. Introduction to RCR
  - j. Introduction to Export Compliance
  - k. Export Compliance for Researchers
  - l. Introduction to Undue Foreign Influence Impacts and Concerns in Academia
  - m. Research security
3. Completed within 60 days of salary first charged to award
4. Online CITI RCR training and Northwestern's research security module are both required
5. Salary removed if training not completed within 60 days

**Graduate students and post-doctoral trainees**

1. Must reflect the University's requirements:  
<https://researchintegrity.northwestern.edu/training/responsible-conduct-of-research-training/>
2. Topics to be covered:
  - a. Conflict of Interest-personal, professional and financial
  - b. Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
  - c. Mentor/mentee responsibilities and relationships, mentor training and mentorship
  - d. Collaborative research including collaborations with industry
  - e. Peer review
  - f. Data acquisition and laboratory tools; management, sharing and ownership
  - g. Research misconduct and policies for handling misconduct
  - h. Responsible authorship and publication
  - i. The scientist as a responsible member of society, contemporary ethical issues, and the environmental and societal impacts of scientific research
  - j. Introduction to RCR
  - k. Plagiarism
  - l. Introduction to Export Compliance
  - m. Export Compliance for Researchers
  - n. Introduction to Undue Foreign Influence Impacts and Concerns in Academia
  - o. Research security
3. Completed within one year of salary first being charged to award or before the award closes
4. A minimum of 4 hours of in-person instruction along with Northwestern's research security module are required, in addition to optional supplemental online content; exceptions must be approved by ORI for exceptional circumstances
5. If RCR training is not completed within one year of trainee first being charged on the award or before the award closes, all salary charges for that trainee will be removed and charged to a non-sponsored account until RCR training is complete. If someone leaves before the one-year deadline and has not at a minimum completed the CITI RCR training along with Northwestern's research security module, all salary charges will be removed from the award.

**Faculty and senior personnel**

1. Must reflect the current University-wide requirement in place:  
<https://researchintegrity.northwestern.edu/training/responsible-conduct-of-research-training/>
2. Topics to be covered:
  - a. Authorship
  - b. Collaborative research
  - c. Conflicts of interest
  - d. Data management
  - e. Mentoring, mentor training and mentorship
  - f. Peer review
  - g. Plagiarism
  - h. Research misconduct

- i. Introduction to RCR
  - j. Research, Ethics, and Society
  - k. Introduction to Export Compliance
  - l. Export Compliance for Researchers
  - m. Introduction to Undue Foreign Influence Impacts and Concerns in Academia
  - n. Research security
- 3. Completed within 6 months of effective date, joining Northwestern faculty, or being listed as PI or senior personnel on NSF award
  - 4. Online CITI RCR training and Northwestern's research security module are currently required, however supplemental training may be required at a later date