Introduction
The America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act established guidelines that require research and education proposals to present a plan for "appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers." This plan is intended to demonstrate that Wesleyan University is in compliance with this regulatory requirement.

Definition of Responsible Conduct of Research
Wesleyan uses the NIH definition of Responsible Conduct of Research to guide the institution's RCR plan:

> *Responsible conduct of research is defined as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research* (NIH NOT-OD-10-019).

Who Needs to Receive Training?
Wesleyan students, graduate students, and postdoctoral fellows conducting research are required to complete RCR training. This includes all students enrolled in Undergraduate Research, Advanced Research Seminar, or a senior thesis tutorial in the sciences or mathematics (astronomy, biology, chemistry, college of integrative sciences, college of the environment, computer science, earth & environmental science, mathematics, molecular biology and biochemistry, neuroscience & behavior, physics, or psychology), as well as various courses in the social sciences, arts, and humanities, and students who have received IRB approval to work with human subjects.

In addition, any student, graduate student, and postdoctoral fellow who is paid through NSF or NIH grants is required to complete RCR training.

Training Policy
RCR training is provided through the following methods:
1. Online CITI RCR training program
2. Face-to-face instruction
3. As a component in specific courses

1. Online CITI RCR Training:
To meet the RCR training requirement undergraduate students, graduate students, post-doctoral fellows, and/or faculty members (depending on funder requirements) will utilize the Collaborative Institutional Training Initiative (CITI) site (https://www.citiprogram.org/). Wesleyan is a subscribing institution, so the course is free for Wesleyan users.

This online training program alone meets the NSF requirements, but does not meet NIH requirements, which specifically state that online training alone is not sufficient.

Users will select their course work from the following list based on position or field of research:

- Biomedical Responsible Conduct of Research Course
- Social and Behavioral Responsible Conduct of Research Course
- Physical Science Responsible Conduct of Research Course
- Humanities Responsible Conduct of Research Course
- Responsible Conduct of Research for Engineers
- Responsible Conduct of Research for Administrators

PIs are responsible for identifying which training program is most appropriate for students and postdoctoral fellows who work in their labs, and for notifying students and postdoctoral fellows of the need to complete RCR training. PIs are required to retain a copy of certificates of completion for all research team members; these documents are subject to audit.

Researchers identified as subject to RCR training are required to complete the appropriate CITI modules for the research being undertaken. Each individual is reminded to keep a copy of his/her certificate of completion.

Instructions to enroll in online CITI RCR training:
1. Go to: https://www.citiprogram.org/
2. Under "Log in through my institution" click "Log in via SSO"
3. Click on Wesleyan University then follow the instructions to set up your account
4. Under "Main Menu" select "Add a Course or Update Learner Groups"
5. Select "Yes, I need/want to take the course on Responsible Conduct of Research (RCR)" then click "Next"
6. Select the Responsible Conduct of Research "course" closest to the subject matter of the research you are participating in (biomedical, physical science, social and behavioral, humanities, etc), then click "Next"
7. Click on the title of the course to begin the coursework.
8. Complete this course early within the semester in which you are conducting research.

2. Face to face instruction (required of NIH) will include:
Substantial face-to-face discussions are required and 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. A combination of didactic and small-group discussions (e.g. case studies) and participation of research training faculty members in instruction in responsible conduct of research will be considered. The subject area that will be covered includes, but is not limited to:

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
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 in biomedical research, and the environmental and societal impacts of scientific research

3. *Instruction as a Component of Specific Courses:*
   - Astronomy/E&ES component for RCR is covered in Astronomical Pedagogy Seminar.
   - Graduate Pedagogy discussions include a provision for RCR training.
   - Wesleyan offers courses in all divisions each semester that can be found by searching with keyword "ethics."
   - Responsible Conduct of Research is also handled on a case-by-case basis in individual investigator labs as it pertains to the research being conducted.
   - On-campus training from campus offices – Institutional Review Board, Faculty Career Development Center, etc. on ethics in research as offered.

Notification of Training Requirement
Students working on NSF or NIH funded research will be notified directly by the PI. In addition, upon registering for an Advanced Research Seminar or for a Senior Thesis Tutorial or Undergraduate Research in the natural sciences or mathematics, undergraduate and graduate students will receive an auto-generated daily email notifying them of the requirement to complete the online CITI RCR training. Students will continue to receive daily emails they have completed the CITI RCR training and a positive service indicator has been added to the student record.

A list of post-docs will be sought from each department annually and the aforementioned email will be sent from Academic Affairs.

Summer Research
Over the summer term, the aforementioned email will be sent from Academic Affairs to all undergraduates and graduate students participating in summer research on campus who have not completed the RCR training within the past three years.

The pre-proposal checklist includes RCR. PIs check a box to indicate that they understand RCR requirements as part of receiving grant funding.

Academic deans will remind faculty in their respective divisions about RCR as appropriate.

Posting of Policies
Information on Responsible Conduct of Research is available on the Wesleyan University website: http://wesleyan.edu/acaf/support/RCR.html. Links to this page are available from the Academic Affairs website under Faculty Support, from the Institutional Review Board site, from the Psychology Department's Ethics Committee page, from the Institutional Animal Care and Use Committee's webpage, and from the website for the Office of Corporate Foundation and Government Grants.

Responsibilities
The Office of Academic Affairs maintains overall responsibility for compliance with Wesleyan's RCR training and maintains the public website with information about RCR.

The Associate Provost has direct, day-to-day oversight of compliance questions and chairs a Research Compliance Committee that meets at least once each semester.

Project Investigators (PIs) who conduct research in the sciences are responsible for ensuring that student researchers they supervise complete RCR training.

The Office of Corporate, Foundation and Government Grants supports compliance efforts.