

Carnegie Mellon University
RESPONSIBLE CONDUCT OF RESEARCH
EDUCATION PLAN

Carnegie Mellon University promotes the responsible conduct of research through high standards of ethics and accountability in planning, conducting and reporting research. The responsible conduct of research is demonstrated through behavior that meets generally accepted standards. These standards are set forth by state and federal regulations, institutional policies, professional codes of conduct and personal convictions.

A number of avenues exist at CMU for formal learning about the ethical conduct of research and the standards within this research community. Topics covered in the education programs include:

- Authorship and Publication
- Collaboration
- Conflict of Interest
- Data Acquisition and Management - collection, accuracy, security, access
- Export Control Compliance
- Human Subject Research
- Intellectual Property
- Mentor / Trainee Responsibilities
- Peer Review
- Research Misconduct
- The Scientist as a Member of Society
- Use of Animals in Research

Individuals at CMU seeking formal education in research ethics have the following options available to them:

- Education regarding the use of Human Subjects in research (required for anyone working on an IRB approved protocol) via the on-line CITI program
- Education regarding the use of animals in research (required for anyone working on an IACUC approved protocol) via an on-line CITI program as well as within individual laboratories/departments.
- General RCR education via the CITI on-line program (required for some NSF funded researchers)
- The Responsible Conduct of Research Seminar Series
- Department/program specific education
- Various orientation programs
- Occasional programs sponsored by the Office of Research Integrity and Compliance

The “Responsible Conduct of Research Seminar Series” is offered each semester. This is a series of approximately eight related but stand-alone sessions on topics within RCR. Each session is part lecture and part discussion. The sessions may include the following topics:

1. Introduction to RCR / Overview / Roadmap
2. Authorship and Publication
3. Collaboration
4. Conflict of Interest
5. Data: collection accuracy, security, access
6. Export Control Compliance
7. Intellectual Property
8. Mentor / Trainee Responsibilities
9. Peer Review
10. Research involving Human Subjects
11. Research Misconduct
12. The Scientist & Society
13. Who owns it? (copyrights, plagiarism, attribution)

Each session is led by one or two CMU faculty and/or staff members. Occasionally an outside speaker presents. Attendees at each session receive a certificate of attendance.

The Office of Research Integrity and Compliance (ORIC) monitors compliance with the NSF requirement for RCR education of students and post-doctoral fellows supported by NSF funds. Many departments with NSF funding require all students and post-docs to complete the on-line RCR training. The Office of Sponsored Programs reminds recipients of NSF funds of the education requirement at the time of award. ORIC reminds Investigators and Business managers on an annual basis. Additionally ORIC periodically obtains reports that identify all individuals supported by NSF research funds and then verifies that RCR education has been completed. In the event an individual is identified as being supported by NSF funds but not having completed education, the PI and related business manager are immediately notified.

ORIC is always available for consultation regarding and assistance with programs geared to promoting responsible conduct of research.