

NJIT OFFICE OF RESEARCH
Guidelines on
RESPONSIBLE CONDUCT OF RESEARCH

1. PURPOSE

Responsible Conduct of Research (RCR) 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**.

Ethical and responsible conduct of research is critical for excellence, as well as public trust, 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.

2. FEDERAL REQUIREMENTS

Federal requirements require Responsible Conduct of Research (RCR) training for scholars funded by NSF, USDA and NIH. Those requirements are detailed below:

NSF - The recent America COMPETES Act includes a requirement that beginning with proposals submitted on or after January 4, 2010, all undergraduate students, graduate students, and postdoctoral researchers who will be supported by National Science Foundation (NSF) to conduct research" receive training in the Responsible Conduct of Research (RCR).

NIH - NIH requires that all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive instruction in responsible conduct of research. This policy will take effect with all new and renewal applications submitted on or after January 25, 2010, and for all continuation (Type 5) applications with deadlines on or after January 1, 2011.

USDA - Effective for awards subject to the February 2013 Research Terms and Conditions, the U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) has mandated that program directors, faculty, undergraduate students, graduate students, postdoctoral researchers, and any staff participating in the research project receive appropriate training and oversight in the responsible and ethical conduct of research (RCR). Any award issued after February 1, 2013 must comply with this requirement.

NJIT RCR training program includes both interdisciplinary general and program-specific RCR content. The phased program is intended to provide quality training experiences while offering flexibility for the learner.

The purpose of this document is to outline NJIT's plan for the implementation of the training requirement for the responsible conduct of research. The Office of Research developed the following training plan.

3. GENERAL RCR PROTOCOL

All members of the NJIT community are expected to follow the Standards Code of Ethical Conduct, as adopted by the State of New Jersey. Additionally, all members of the NJIT community engaged in research are expected to conduct their research with integrity and intellectual honesty all the times.

NJIT'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

The following programs are available for compliance with NJIT RCR training.

3.1. Basic Online RCR training

Research personnel associated with research grants and contracts are required to complete an online RCR training program provided by the Collaborative Institutional Training Initiative (CITI).

If you are not registered with CITI, you will need to visit the [CITI registration information page](#).

This requirement must be completed within the first 6 months of support/employment/participation on the award.

All covered individuals must complete basic training even if supported/employed less than 12 months.

Documentation of basic training: Documentation of completion of this component will be maintained by the ORC. Additionally, a completion certificate is available for printing via CITI. A copy of this certificate should be maintained by the individual completing the training and the PI. PI should attach this documentation to the [RCR training documentation form](#) he/she keeps on each covered individual.

Online support with FAQ and submission of comments will be provided through the Office of Research webpage on RCR Compliance.

3.2. NJIT RCR Workshops

RCR Workshops covers all topics (as mentioned above) throughout the academic year by the Office of Research. All students and postdoctoral researchers are required to attend these workshops. The goal of

these workshops is to provide an opportunity for discussion of case studies and decision-making skills. The workshop topics include: Research Misconduct; Management of Data and Responsible Authorship; Mentoring and Peer Review; and Collaboration and Conflict of Interest. The workshop is offered as a three-day series of presentations and discussions just prior to the beginning of the Fall semester each year.

Workshop training at NJIT: one-day, 3-4 hours trading sessions with lectures and case studies covering the material of on-line course. This may be given to all RA or Post-Docs, Research Professors as a part of the orientation program.

The RCR workshops are augmented by monthly meetings of the RCR Support Group. The support group meetings are open sessions to discuss general questions or situations within the RCR Support Group in confidential and unidentifiable manner.

3.3. NJIT RCR Committee Hearings

Periodic RCR Committee meetings will be scheduled to formally hear any specific case with violation or non-compliance to recommend actions to be taken to address issues towards the intuitional compliance. Legal and university representatives may be requested to join the hearing to address any specific situation of non-compliance or misconduct.

4. RCR COMPLIANCE FOR RESEARCH PERSONNEL

4.1. RCR Plan for Undergraduate Students

1. Training

Undergraduate students are required to follow 3.1 or 3.2 programs, or complete a Professional Ethics course (PHIL 334 or equivalent) with a minimum of “C” grade. (PHIL334 http://humanities.njit.edu/academics/undergraduate/PHIL_334_ENGINEERING_ETHICS.pdf)

2. Identification of Undergraduate Students

- The register office will provide a report to the Research Office of the registered students at the beginning of the semester and also at the end.
- The report provide at the end of the semester will include only the students who successfully complete the course. This will serve as the official documentation for certification.

4.2. RCR Plan For Graduate Students

1. Training

For the Spring Semester, the Research will organize

- Workshops covering the core elements such as Academic Fraud and Research Misconduct, Conflict of Interest and Conflict of Commitment, Human Subjects Protections, Use and Care of Animals, Data Acquisition, Management, Sharing and Ownership, Publication Policies and Responsible Authorship and Mentoring and Trainee Responsibilities.
- Attendance will be mandatory for all graduate students involved in research projects.
- The participants will be asked to register via e-mail and signed the attendance sheet at the end of each workshop.
- The list of registers and the list of attendees will be compared. The non-attendees will be sent reminders for the next workshops

2. Identification of Graduate Students

- The Research Office will obtain a report of all graduate students currently receiving support from research projects.

4.3. RCR Plan For Postdoctoral Researches

1. Training

For the Spring Semester, the Research will organize

- Workshops covering the core elements such as Academic Fraud and Research Misconduct, Conflict of Interest and Conflict of Commitment, Human Subjects Protections, Use and Care of Animals, Data Acquisition, Management, Sharing and Ownership, Publication Policies and Responsible Authorship and Mentoring and Trainee Responsibilities.
- Attendance will be mandatory for all graduate Postdoctoral Researches involved in research projects.
- The participants will be asked to register via e-mail and signed the attendance sheet at the end of each workshop. The list of registers and the list of attendees will be compared. The non-attendees will be sent reminders for the next workshops

2. Identification of Postdoctoral Researches

- Research Office will obtain a report of all Postdoctoral researches currently receiving support from research projects.

Questions should be directed to irb@njit.edu.