

Responsible Conduct of Research

Basic Principles

- The NSF guidance to require responsible conduct of research training resulted from a directive in section 7009 of the America COMPETES Act. The NIH requirement has been in place for students on certain types of training grants for some time. The more recent guidance expands the set of trainees impacted by this requirement to include a broad range of NIH D, K, R, T, and U grant categories, including individual funding through fellowships and career development awards.
- The institution is responsible for certification that the training plan is in place and for verifying that the students and postdocs have completed the training.
- Instruction is expected to be completed at least once in each stage of training (undergraduate, graduate, postdoctoral). It is expected that training will be optimized for the career stage of the trainees.
- Instruction should involve substantive contact hours between the trainees/fellows/scholars/participants and the participating faculty.
- Content (topics, examples, case studies) should be tailored to fit specific disciplinary areas. Format should include both didactic instruction and discussion components.
- Peer reviewers for NIH proposals will evaluate the plans for instruction in responsible conduct of research as part of the overall proposal review, including assessment of format, subject matter, faculty participation, duration, and frequency of training. The detailed plan must be submitted as part of the proposal.
- Standard responsible conduct of research education covers:
 - Conflict of interest – personal, professional, and financial
 - Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
 - Mentor/mentee responsibilities and relationships
 - Collaborative research, including collaborations with industry
 - Peer review
 - Data acquisition and laboratory tools; management, sharing and ownership
 - Research misconduct and policies for handling misconduct
 - Responsible authorship and publication
 - The scientist as a responsible member of society, contemporary ethical issues in biomedical/social science/engineering research, and the environmental and societal impacts of scientific research