

SAMPLE “RESPONSIBLE CONDUCT OF RESEARCH” ATTACHMENT

MED.255 is required for Stanford affiliates supported by NIH grants

Training in the Responsible Conduct of Research - Limited to 1 page

Formal Training:

When I was a graduate student at [Institution], I completed a quarter long course of [Course Number and Title]. The class offered an examination of ethical and practical scientific issues, including the collection and treatment of data, attribution of credit, plagiarism, fraud, and peer review. Career issues, including how to apply for grants and positions in industry or academia were also discussed.

You are required to take a class in RCR if you receive NIH funding.

Instruction must be undertaken at least once during each career stage, at a frequency of no less than once every four years, and at least once during the early career investigator (K) level.

Document past instruction, as well as current and/or planned instruction.

At Stanford University, I will continue training in the responsible conduct of research by attending the course of "Responsible Conduct of Research" (Med 255). This course will be taken at least once during each career stage, at a frequency of no less than once every four years. The 9-hour course was developed by the Stanford Center for Biomedical Ethics, through collaborations with scientists, clinicians, and law faculty from throughout Stanford University. It is comprised of 7 sections that are designed to engage participants in case-based discussions of ethical issues commonly encountered in, and raised by, current biomedical research, introduce participants to methods of analysis of ethical issues and policies relevant to the conduct of research. Sessions are taught in a flipped classroom format, with online video lectures by faculty members, and case-based discussion sections led by faculty and senior research scholars from the Center for Biomedical Ethics.

The topics covered by session are:

1. Responsible authorship and publication, mentoring and collaborative research
2. Peer review
3. Conflicts of interest (personal, professional and financial, including industry relationships)
4. Regulatory basics for human and animal subjects
5. Research misconduct
6. Data acquisition and laboratory tools, management, sharing and ownership
7. The socially responsible scientist

NOTE: You should also add a section on your mentor's role in your RCR instruction outside of any formal course as part of their mentorship.

Informal Training:

In my mentor Dr. Astaire's lab, I am receiving training in the responsible conduct of research through individual meetings with my mentor (Mentor's name) and collaborator (Collaborator's name) on a [weekly, biweekly, monthly, etc.] basis. Each is the head of their own research/clinical group and has had ample training on the Responsible Conduct of Research. Additionally, the members of the lab have group meetings, which provide consistent forums to evaluate and critique experimental data. These discussions also offer the opportunity to address ethical issues such as responsible authorship, sharing of data and reagents, and data management. We are also provided informal instruction from various faculty and scientists in the responsible conduct of research in laboratory interactions and other situations. I also plan to attend the monthly classic papers in research ethics seminar offered by faculty at the Stanford Center for Biomedical Ethics.

Five Instructional Components Outlined in the NIH Policy

For mentored career development awards, describe a plan to acquire instruction in the responsible conduct of research. For independent career awards, describe a plan to obtain or provide instruction in the responsible conduct of research.

*Your attachment should contain a description of plans for obtaining instruction in the responsible conduct of research. This section should document prior instruction or participation in RCR training during the applicant's current career stage (including the date instruction was last completed) and propose plans to either receive instruction or participate as a course lecturer, etc., in order to meet the once every four-year requirement. The plan should address how applicants plan to incorporate the five instructional components outlined in the NIH Policy on Instruction in the Responsible Conduct of Research: **SAMPLE "RESPONSIBLE CONDUCT OF RESEARCH" ATTACHMENT**. MED.255 is required for Stanford affiliates supported by NIH grants.*

1. Format: Substantial face-to-face discussions among the participating trainees/fellows/scholars/participants; 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 are highly encouraged.

2. Subject Matter: While there are no specific curricular requirements for instruction in responsible conduct of research, the following topics have been incorporated into most acceptable plans for such instruction:

- 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. Faculty Participation: Training faculty and sponsors/mentors are highly encouraged to contribute both to formal and informal instruction in responsible conduct of research. Informal instruction occurs in the course of laboratory interactions and in other informal situations throughout the year.

4. Duration of Instruction: 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.

5. Frequency of Instruction: Reflection on responsible conduct of research should recur throughout a scientist's career: at the undergraduate, post-baccalaureate, predoctoral, postdoctoral, and faculty levels. Instruction must be undertaken at least once during each career stage, and at a frequency of no less than once every four years. Individuals at the early career investigator level (including mentored K awardees and K12 scholars) must receive instruction in responsible conduct of research at least once during this career stage. Senior fellows and career award recipients (including F33, K02, K05, and K24 awardees) may fulfill the requirement for instruction in responsible conduct of research by participating as lecturers and discussion leaders. The role of the mentor in RCR instruction must be described.

Renewal Applications: Where applicable, describe the RCR instruction activities undertaken during the project period as well as future plans.

Information on MED255 is available at: <https://med.stanford.edu/bioethics/education/rcr.html>

Additional NIH resources are available online:

<https://oir.nih.gov/sourcebook/ethical-conduct/responsible-conduct-research-training>