

SAMPLE Proposal Plan for Instruction in the Responsible Conduct of Research at CSU

All trainees are encouraged to participate in Responsible Conduct of Research training managed by the CSU Research Integrity and Compliance Review Office (RICRO). **All trainees funded by the NIH, NSD or USDA-NIFA are required to do so.**

“Colorado State University (CSU) is committed to excellence, setting the standard for public higher education in teaching, research and service for the benefit of the citizens of Colorado and the United States. In alignment with the **CSU Principles of Community**, we are committed to developing a culture of shared values:

- being accountable
- engaging in civic responsibilities
- promoting freedom of expression
- demonstrating inclusiveness and diversity
- encouraging innovation
- acting with integrity and mutual respect
- providing opportunity and access to all

Responsible conduct of research includes all scholarly and inquiry activity associated with the mission of CSU. Although the nature of such research varies by discipline, training in ethics and responsible conduct is an essential component of the education of all members of the academic community.

All trainees engaged in research and scholarly inquiry at the undergraduate, graduate or postdoctoral level will be required to take RCR training during their time at CSU.

Graduate students, postdoctoral fellows and undergraduate students engaged in research are required to receive formal training in the following nine core areas:

1. Ethics and social responsibility in research,
2. Conflict of interest & Commitment
3. Use of animal/human subjects and safe laboratory practices
4. Mentor/mentee responsibilities
5. Collaborative research
6. Data acquisition, management, sharing and ownership
7. Research misconduct
8. Responsible authorship, publication and peer review
9. Financial management and responsibilities

The training content and effort shall be appropriate for the educational and responsibility level of a trainee and the discipline in which one is being trained.”
<https://www.research.colostate.edu/ricro/rcr/>

All masters students/doctoral students/postdocs in the Department of XYZ are required to take face-to-face RCR training as part of their formal and informal training experience in the first year of their program. This requirement can be fulfilled by completing 1CR of GRAD544: Responsible Conduct of Research, GRAD 575: Ethical Issues in Big Data Research, or any of another 14 courses offered at CSU. All of these courses include at least 8-hr of contact time. Under the current model, the face-to-face training must be repeated again after 4-years.

CSU is implementing continuous RCR compliance, whereby trainees take the face-to-face training in their first year and complete a course or workshop in one of the RCR competency areas each year thereafter. These courses and workshops are offered across campus on topics such as grant writing, mentoring, fiscal responsibility, science communication and data management. This model maintains engagement with RCR tenets and allows trainees interaction with faculty across campus. The trainee’s advisor, mentor faculty, and the RICRO office monitor RCR training requirement completion.

The CSU online RCR Training Course is available as a supplement and refresher to the initial course (<http://rcr.colostate.edu/training.html>). For those students who are deeply interested in this area, CM/PHIL666: Science and Ethics (3CR), taught by Bernard Rollin, University Bioethicist, delves deeper in to ethical issues of research on humans and animals; biosafety; fraud and deception in science; genetic engineering. Syllabi for the face-to-face courses can be found on the CSU RCR website <https://www.research.colostate.edu/ricro/rcr/courses-and-education/>.

With respect to Social Responsibility in Research, CSU actively encourages trainees to participate in outreach with local K-12 schools in activities ranging from “Biochemistry is Elementary” to coaching Science Olympiad. Through these interactions, our students are encouraged to talk with younger students about their research and convey the impact that it can have on society.

Finally, and most importantly, faculty are encouraged to infuse discussion of topics relevant to RCR into lab meetings, journal clubs, courses, research focus group meetings and one-on-one discussions with trainees. In all aspects of research, there is potential for missteps ranging from inaccurate citation of previous work to inappropriate “enhancement” of data. CSU is committed to providing the tools necessary to help trainees navigate these areas to maintain integrity in research.