California State University, Fullerton

Responsible Conduct of Research Training Plan

Developed by

Research Compliance
Office of Research and Sponsored Projects

Background and Rationale

Training in responsible and ethical research practices is an integral part of preparing academic professionals to conduct research. The National Science Foundation (NSF), the National Institutes of Health (NIH), and the United States Department of Agriculture (USDA) have requirements for training in the Responsible Conduct of Research (RCR).

NSF: Effective January 4, 2010, proposals submitted to NSF must include certification from the institutional official that "*the institution has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers supported by NSF to conduct research.*"

Federal Register Notice announcing NSF's final implementation published on August 20, 2009: http://edocket.access.gpo.gov/2009/E9-19930.htm

NIH: Effective January 25, 2010 "*… 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*". In addition, an 8-hour face-to-face training is required for those receiving NIH funding.

NIH RCR training requirement policy update published on November 24, 2009: http://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html

USDA-NIFA: Effective April 2013, USDA NIFA released their revised research terms and conditions/agency terms and conditions. These terms and conditions introduced a new requirement for responsible conduct of research (RCR) on USDA NIFA awards. "*… grantee assures 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 and that documentation of such training will be maintained*"

The table below highlights who on the research team CSUF is requiring to complete the training by the sponsor type:

	Graduate Undergraduate Postdoc	Stipend Recipients	Fellows / Trainees	Staff	PI /co-PI Key Personnel
NSF	X	X	X	♦	♦
NIH	X	X	X	♦	♦
USDA/NIFA	X	X	X	X	X
Other Sponsors	♦	♦	♦	♦	♦

X *Required*
♦ *Recommended but not required*

California State University, Fullerton Policy for Training in Responsible Conduct of Research (RCR): CSUF supports training to ensure the highest ethical and professional standards for conducting research. RCR training is intended to promote awareness of principles and practices that facilitate ethical and responsible research across all areas of research and scholarship. The Associate Vice President (AVP) of the Office of Research and Sponsored Projects (ORSP) and the Research Compliance Office, in concert with faculty and staff, developed the RCR Training Plan. ORSP maintains oversight of this plan. The plan's flexibility permits training to be appropriate for each individual's discipline and career stage.

It is the responsibility of the Principal Investigator ("PI") of a given research project to review the specified training(s) required for their research.

Training Plan: This working document describes the plan developed by ORSP to provide training in RCR. As noted in the table above, all research personnel highlighted in the table under the specified funder who is engaged in research are required to receive RCR training in addition to the required trainings specific to the project (i.e. IRB, IACUC and/or any other specialized training)

General Training Objectives: The terminal objective is to enhance scientific integrity by training the researcher (i.e., student, post-doctoral fellow, staff or faculty) in the accepted standards and norms of science. The objectives of RCR training are as follows:

   a) Increase awareness of ethical dimensions of research and scholarship;
   b) Develop and refine the skills needed to question, analyze, and resolve ethical dilemmas.
   c) Learn relevant legal, institutional and professional standards;
   d) Know where to access various campus, national and internet resources that address ethical and responsible research practices; and,
   e) Facilitate discourse with peers and with faculty about ethical dimensions of research within their discipline.

Training Content: RCR training generally includes coverage of the following topics, although this list is not meant to be exhaustive nor comprehensive:

   Research Misconduct (Fabrication, Falsification, Plagiarism)
   Research Subject Protection (animal and human)
   Conflict of Interest
   Collaborative Research
   Data Management
   Plagiarism
   Mentoring
   Peer Review
   Authorship
   Publication
   Biosafety/security
   Whistleblowing

CSUF's plan for training in RCR includes most, if not all, of these topics; however,

content may vary depending on the needs of the trainee and relevance to the discipline or project.

Training: The Collaborative Institutional Training Initiative (CITI) Program is a leading provider of research education training. It provides online training on a variety of topics related to research including the required training for CSUF's requirement for RCR Training. Completion of the appropriate CITI on-line training will meet the minimum RCR training requirement for all trainees.

In addition, those funded through designated NIH support are expected to complete at least 8 hours of additional "contact time" as part of ongoing training per NIH guidelines. This "contact time" can be obtained in a variety of ways. Training may be offered within a specific center, laboratory, department and college. Opportunities for RCR training may be available through existing courses and within the research setting.

Project PIs are responsible for ensuring that appropriate project staff and eligible trainees begin training as soon as possible and complete the required training within 30 days of joining the project. This requirement includes any hands-on, specialized training, e.g., learning to properly handle animals from the Director of Animal Care.

Training Opportunities:

a. University

- The Office of Research and Sponsored Projects will assist in identifying resources that are available for RCR training, including CITI online courses.

- Other, specialized training for research involving the use of animals or human research subjects are the responsibility of the Institutional Animal Care and Use Committee (IACUC), and the Institutional Review Board (IRB), respectively. Field and lab safety training, and other types of safety training, are the responsibility of Environmental Health and Safety (EHS).

b. Department/College

Courses offered by the department that include coverage of topics associated with RCR may be used. Other methods for obtaining RCR training include:

- Departmental meetings
- Laboratory or center journal club or research meetings
- Seminar series and discussion groups
- Professional association communications

If any of these methods are used to satisfy the training requirements, appropriate documentation and record keeping of such activities must be maintained by the PI(s) and copies should be transmitted to the Office of Research Compliance.

c. Supplementary Education

Supplementary education may be offered by the PI or a faculty member identified by the PI. For guidance on developing RCR educational resources or courses, please visit

the Office of Research Integrity , Research Ethics.Net, Online Ethics Center and Ethics in Science and Engineering National Clearing House.

Prior Training: CITI RCR certificates acquired within the past 3 years are acceptable; verification of training completion should be submitted to the project's PI or faculty supervisor identified by the PI, who will be responsible for forwarding detailed completion reports to the Office of Research Compliance. PDF copies may be sent by email to researchcompliance@fullerton.edu. Training must be renewed every 3 years and a new CITI certificate or other documentation must be provided to the Research Compliance Office.

Responsibilities:

a) The Faculty Research Committee will be informed of training requirements and associated institutional responsibilities and may be asked to provide input to guide decisions related to compliance requirements.

b) The AVP for the Office of Research and Sponsored Projects will identify and obtain the resources necessary to provide training in responsible and ethical research practices.

c) The Office of Research and Sponsored Projects will develop and maintain the RCR Training Plan, identify RCR training options, and facilitate documentation.

d) Research Compliance staff will identify and notify persons required to complete training.

e) Research Compliance staff will verify compliance with minimal training requirements and notify PIs, staff, and students of instances of non-compliance.

f) Departments/Colleges will work with PIs and other appropriate faculty members to identify or create programs and discipline-specific research ethics resources/materials that meet the needs of their research teams or trainees as necessary.

g) The Principal Investigator(s) will be responsible for:

- o Working with Research Compliance staff to identify trainees required to complete RCR training associated with funding requirements.
- o Verifying that trainees have completed baseline RCR training requirements as described in this plan and that documentation is up-to-date.
- o If appropriate, providing additional RCR training.
- o Documenting any additional training received when such training is required, e.g. for use of animals, biosafety, and for providing documentation to the Office of Research Compliance.

h) Appropriate Project or Research Staff/Trainees are responsible for:
- o Accessing and completing baseline RCR training, and retaining a copy of documentation of training.
- o Maintaining documentation of additional training.

RCR Plan Assessment: The primary objective is to enhance scientific integrity by training researchers and scholars in the accepted standards and norms of science. RCR training is intended to promote awareness and understanding of conventions within and across disciplines. The success of the RCR Training Plan will be assessed periodically by the Office of Research and Sponsored Projects.