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California State University, San Bernardino

**Responsible Conduct of Research Training Plan**

Office of Academic Research Office of Research Compliance

# 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 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: [https://www.govinfo.gov/content/pkg/FR-2009-08-20/html/E9-](https://www.govinfo.gov/content/pkg/FR-2009-08-20/html/E9-19930.htm) [19930.htm](https://www.govinfo.gov/content/pkg/FR-2009-08-20/html/E9-19930.htm)

**NIH**: Effective January 25, 2010 “…any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive instruction in responsible conduct of research.” These are listed as: **D43, D71, F05, F30, F31, F32, F33, F34, F37, F38, K01, K02, K05, K07, K08, K12, K18, K22, K23, K24, K25, K26, K30, K99/R00, KL1, KL2, R25, R36, T15, T32, T34, T35, T36, T37, T90/R90, TL1, TU2, and U2R**

proposals and renewals must address the training plan for instruction in RCR.

NIH RCR training requirement policy update published on November 24, 2009: <https://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”

**California State University, San Bernardino Policy for Training in Responsible Conduct of Research:** CSUSB supports training to ensure the highest ethical and professional standards for conducting research. Responsible Conduct of 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 Provost for Research (AVP) and the Research Compliance Officer (RCO), in concert with faculty and staff, developed the RCR training plan. The AVP and RCO maintain oversight of this plan. The plan’s flexibility permits training to be appropriate for the discipline and career stage. CSUSBs Interim RCR Training policy can be found [here](https://www.csusb.edu/academic-research/research-compliance/responsible-conduct-research-rcr).

Any individual (i.e. student, post-doctoral fellow, staff, faculty) engaged in research is encouraged to complete RCR Training, however, project funding may *require* specific RCR training. Both the National Science Foundation (NSF) and the National Institutes of Health (NIH) have requirements for training in the Responsible Conduct of Research. Any researcher involved in an NSF or NIH funded project must complete the online CITI training course entitled, “Responsible Conduct of Research – Basic” module and additional face to face training as appropriate.

It is the responsibility of the individual investigator to verify with their funding agency what additional training is required for their research. Please view the RCR Training Plan for additional information.

1. **2. Training Plan**: This working document describes the plan developed by CSUSB ORSP to provide training in RCR. All students, staff and faculty engaged in research are encouraged to receive appropriate training.

1. **2.1 General Training Objectives:** The terminal objective is to enhance scientific integrity by training the learner in the accepted standards and norms of science. The enabling objectives of RCR training are as follows:
   1. Increase awareness of ethical dimensions of research/scholarship;
   2. Develop and refine the skills needed to question, analyze, and resolve ethical dilemma.
   3. Learn relevant legal, institutional and professional standards;
   4. Know where to access various campus, national and internet resources

that address ethical and responsible research practices; and,

* 1. 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, though this list is not meant to be exhaustive nor comprehensive:

1. Research Misconduct (Fabrication, Falsification, Plagiarism)
2. Research Subject Protection (human and animal subjects)
3. Conflict of Interest
4. Collaboration Data Management Mentoring
5. Peer Review
6. Authorship
7. Publication
8. Biosafety/security
9. Whistleblower Protections

CSUSB’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 audience**: As noted above, some students, post-doctoral researchers and faculty are required to complete training depending on stipulations from the funding agency. However, any individual (i.e. student, post-doctoral fellow, staff, faculty) engaged in research is eligible and encouraged to complete RCR training.

# Training:

Completion of the CITI Online training program will meet the minimum training requirement for all trainees. Undergraduate, graduate, doctoral, and post-doctoral researchers who receive NSF support are encouraged to complete additional RCR training, in addition to the web-based tutorial. Those funded through designated NIH support are expected to complete at least eight (8) hours of “contact time” as part of ongoing training as per the [NIH update.](https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html) This “contact time” training can be obtained in a variety of ways. The Office of Research and Research Compliance Officer can assist in identifying resources such as, lectures, case study discussions, etc. that are appropriate for RCR training. Likewise, 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.

The faculty supervisor is responsible for ensuring that eligible trainees begin training within 30 days of the project’s start and for ensuring that all training is completed prior to the project’s completion.

# RCR training opportunities:

1. University
   * The Office of Research and Office of Research and Sponsored Programs will assist in identifying resources that are available for RCR training.
   * Training in human subjects research protections will be provided by the Institutional Review Board through the [CITI Program](https://www.csusb.edu/institutional-review-board/human-subjects-ethics-training).
   * Training in animal subjects research and animal welfare protections will be provided by the [CITI Program](https://www.csusb.edu/institutional-review-board/human-subjects-ethics-training). Additional training will be provided by vivarium staff.
   * Training in biological related research activities and safety will be provided by the Office of Environmental Health and Safety.
   * Training in radiological related research activities and safety will be provided by the Office of Environmental Health and Safety.
2. 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 and 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 and available on request.

1. Supplementary Education

Supplementary education may be offered by the faculty member. For guidance on developing RCR education, please visit the following websites:

* + [Office of Research Integrity](https://ori.hhs.gov/general-resources)
  + [Research Ethics.Org](http://research-ethics.org/)
  + [Online Ethics Center](https://www.onlineethics.org/)
  + [Ethics in Science & Engineering Clearing House](http://www.umass.edu/sts/digitallibrary/)
  + [CITI Research Ethics and Compliance Training](https://about.citiprogram.org/en/homepage/)

# Prior training

CITI certificates acquired within 4 years are acceptable; verification of training completion should be submitted to the project’s faculty PI who will be responsible for forwarding on to the Research Compliance Officer.

# Responsibilities:

1. 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.
2. The Associate Provost for Research and the Research Compliance Officer will identify resources necessary to provide training in responsible and ethical research practices maintain the RCR training plan, and maintain documentation of RCR training.
3. The Office of Sponsored Programs Administration will notify the PI’s at orientation that students conducting research are required to complete RCR training.
4. The Office of Research and Sponsored Programs will notify the faculty investigator the RCR plan at the proposal stage.
5. Research Compliance Officer will verify compliance with minimum training requirements, provide periodic reminders of RCR training requirements to PI’s, and notify PIs and students of noncompliance.
6. The PI must retain the original RCR training and certification records of their students.
7. The department/college will work with faculty to identify and/or create program and discipline-specific research ethics resources/materials that meet the needs of their trainees as necessary.
8. Faculty/Principal Investigators are responsible for:
   1. Working with Research Compliance Officer to identify trainees required to complete RCR training associated with funding requirements.
   2. Verifying that trainees have completed baseline RCR training requirements as described in this plan.
   3. Documenting additional RCR training received when such additional training is required and providing documentation to the Office of Research and Sponsored Projects upon request.

If appropriate, providing such training.

* 1. Trainees are responsible for:
     1. Accessing and completing baseline RCR training, and retaining a copy of documentation of training.
     2. Maintaining documentation of additional training.

# RCR Plan Assessment:

The primary objective is to enhance scientific integrity by training 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 RCR training plan will be assessed periodically by the Office of Research and Sponsored Projects.

**RCR (Formal) Course Training Classes**

**Procedures:**