

# **Black Hills State University's Institutional Training Plan for the Responsible Conduct of Research**

## **Background**

Responsible Conduct of Research (RCR) is the recognized set of ethical and professional standards for conducting research. Black Hills State University is committed to maintaining the integrity essential for research conducted by faculty, students, and staff regardless of discipline or funding source.

In response to a mandate in the America COMPETES act, effective January 4, 2010, NSF requires that, at the time of proposal submission to NSF, BHSU's Authorized Organizational Representative must certify that BHSU has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who will be supported by NSF to conduct research. Training plans are not required to be included in the proposal submitted to NSF, but are subject to review upon request from NSF. NIH has enacted a similar policy for all individuals supported through any NIH training, career development award, research education grant, and dissertation research grant.

If an NSF or NIH proposal submitted after January 4, 2010 is awarded, all undergraduates, graduate students, or postdoctoral researchers working on the award for any amount of time must receive training in the Responsible Conduct in Research. NSF recommends RCR training every four years pre-PhD and at every career stage post PhD. BHSU's plan requires that all PIs complete the same RCR training as their students and postdoctoral researchers working on the project. Even though RCR training is not specifically required by NSF or NIH, the agencies have made it clear that they expect RCR to include a strong mentoring component, so it is important that PIs are familiar with the RCR training that their students and postdoctoral researchers have taken and integrate RCR training into their research programs.

## **BHSU Plan for Responsible Conduct of Research Training**

All students (undergraduate and graduate) and postdoctoral researchers participating in research must participate in RCR training. Faculty PIs or mentors are also required to complete RCR training. If the research involves human subjects or animals, training and certification in these areas is required in compliance with federal regulations.

There is no single way to conduct research or creative activities, but a number of common instructional topics in RCR have been identified:

- Data Acquisition, Management, Sharing, and Ownership
- Human Subjects
- Animal Subjects
- Conflicts of Interest and Commitment
- Peer Review
- Collaboration
- Publication/Authorship
- Mentorship
- Research Misconduct
- Lab Safety

Faculty PIs have the primary responsibility for ensuring that students participating in research complete the required RCR training. BHSU's RCR training will include the following components:

**A. On-line Modules**

All trainees must complete one of the RCR courses appropriate to their discipline through the Collaborative Institutional Training Initiative (CITI). The online training should take between 2-3 hours to complete and can be found at <http://www.citiprogram.org>. The available courses include:

- RCR in Biomedical Research
- RCR in Social and Behavioral Science Research (Includes Educational Research)
- RCR in Physical Science Research
- RCR in Humanities Research
- RCR in Engineering Research

**B. Individual Training by Principal Investigator (PI)/Project Director (PD)**

All student and postdoctoral researchers must be provided continuing education in RCR topics specific to their research setting. Such training will be overseen by the PI/PD and will consist of interactive discussions during group meetings and/or one-on-one discussions on the topic between the PI/PD and the trainee. The PI/PD will maintain a record of training sessions provided to each student or postdoctoral researcher. The records may be used for proof of training if requested by the campus ORA or NSF.

**C. Responsibilities of the Principal Investigator**

- a. The PI is responsible to ensure that the online RCR training requirement is specified in the offer letter for any student or postdoctoral researcher being hired for a position under the affected research project.
- b. Undergraduate students who are appointed to the research project must also be informed of the RCR training requirement.
- c. The PI is responsible to complete the on-line RCR training.
- d. The PI is responsible to ensure that informal instruction occurs throughout the research training experience. It is up to the individual PIs to determine the appropriate approach(es) to informal instruction (lab meetings, reviewing articles, discussing case studies from the CITI program, etc.).
- e. The PI is responsible to ensure that the students and postdoctoral researchers are aware of the university's policies on conflict of interest, human and animal subjects in research, laboratory practices, and research misconduct.

**RCR TRAINING THROUGH THE CITI PROGRAM MUST BE COMPLETED WITHIN 30 DAYS OF ANY STUDENT OR POSTDOCTORAL RESEARCHER'S START DATE ON THE PROJECT.**

**Oversight and Contacts**

The Office of Sponsored Programs will track and record names, start dates, and RCR training completion dates of all affected students and postdoctoral researchers when payroll authorizations are processed. Copies of certifications for all students who successfully complete RCR training will be retained in the Office of Sponsored Programs. Certifications are also available via the CITI website.

Oversight of the Responsible Conduct of Research Training is a responsibility shared by the Principal Investigator and the university, and is coordinated by the Chief Research Officer and the Office of Grants and Sponsored Programs.

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### **Additional Resources**

There are a number of excellent online resources available to support RCR training.

[http://ori.dhhs.gov/education/products/rcr\\_general.shtml](http://ori.dhhs.gov/education/products/rcr_general.shtml)

<http://researchintegrity.asu.edu/rcr>

<http://www.onlineethics.org/>