

**THE COLLEGE OF IDAHO PLAN for TRAINING IN  
THE RESPONSIBLE CONDUCT OF RESEARCH (RCR)**

**Background:** Both the National Science Foundation (NSF) and the National Institutes of Health (NIH) have announced requirements for certification in Responsible Conduct of Research (RCR) at institutions where research is funded by either agency. Details of RCR training differ somewhat between NSF and NIH, but they concern a core set of goals and values: 1) An institution must provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates (also graduate students and postdoctoral researchers) who will be supported by federal research funds; 2) One or more persons at each institution must oversee compliance with the RCR training requirements, and; 3) Institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF (or NIH) funds to conduct research have received training in the responsible and ethical conduct of research.

RCR is defined here as *practicing scientific investigation with integrity, including awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research*. The plan below outlines the roles and responsibilities of faculty, students, and administrators responsible for oversight of RCR training for NSF- or NIH-supported research at The College of Idaho.

**A) TRAINING UNDERGRADUATE STUDENTS IN THE RESPONSIBLE CONDUCT OF RESEARCH**

1. Faculty Responsibility and assurances: Faculty Principal Investigators (PIs) have primary responsibility for training the undergraduate students involved in NSF/NIH-funded research. Any PI who submits a research proposal that involves undergraduate students must sign the Grant Proposal Submission Form to certify that if the grant is awarded, the PI will participate in appropriate RCR training, as described below.
  - a. By the 3<sup>rd</sup> week of each semester or summer term each NSF/NIH-funded PI must provide a list of the students required to complete RCR training to the Office of Academic Affairs (OAA) at The College of Idaho. The list must include student ID numbers and the requirements they must fulfill.
  - b. The PI will enroll each student required to complete RCR training by registering at [www.citiprogram.org](http://www.citiprogram.org) and selecting “Idaho INBRE Program” as the participating institution. The College’s affiliation with INBRE provides access to all C of I students for whom RCR training is required or desirable.
  - c. The PI must ensure that each student will have completed the modules by the end of the term (or summer) and submit completion forms to the OAA. The PI may also provide additional guidance on the conduct of responsible research appropriate to the project and the student’s interests and professional goals, as certified on the RCR completion form.

The OAA will facilitate this process by contacting Human Resources for a list of all students receiving NSF/NIH-funded wages or stipends, and by sending reminder emails to all NSF/NIH-funded PIs to ensure that all NSF/NIH-funded students are accounted for.

2. Student participation, required forms and timing: To fulfill the RCR training requirement all undergraduate students receiving wages or stipends, or receiving dedicated academic research credit for participating in NSF/NIH-funded research, or volunteers who consume supplies or regularly utilize equipment purchased with NSF funds must complete the online tutorials at [www.citiprogram.org](http://www.citiprogram.org) and any additional training appropriate to their research and professional goals. The required online modules include training on 1) Plagiarism, 2) Data Management, 3) Responsible Authorship, 4) Peer Review, 5) Mentor/ Trainee Responsibilities, 6) Animal Use, 7) Conflict of Interest, 8) Collaborative Research, and 9) Human Subjects.

Online training must be completed within the semester or summer that the student begins work on the NSF/NIH-funded research. Progress and completion of online modules (score  $\geq 80\%$  correct) is documented by the tracking function of [www.citiprogram.org](http://www.citiprogram.org). When the student completes the RCR modules, the student will meet with the faculty member to ensure that any questions the student has concerning the content of the modules can be addressed. The PI may provide additional guidance on the conduct of research appropriate to the project and the student's research interests and professional goals.

Upon completion of RCR training, both students and the PI will sign the RCR completion form and submit it to the OAA. The signed forms will be maintained by the OAA for at least three years beyond the termination date of any covered grant award.

Students engaged in research using human participants also need to take the NIH course on Protecting Human Research Participants (<http://phrp.nihtraining.com/users/login.php>), or human subjects training at [www.citiprogram.org](http://www.citiprogram.org) as required by the College of Idaho Institutional Review Board.

3. Lab safety: When a student's research involves laboratory or field procedures that carry risk of injury, pose environmental or personal hazards, or involve handling of hazardous materials or pathogens, students must be trained in safe and responsible practices. Safety training must be completed before any student begins research involving biohazards, toxins, or other hazardous materials. Completion of safety training must be documented by the PI and recorded on the RCR form.
4. Waiver: RCR requirements may be waived for students who have successfully completed RCR training at C of I or another institution designed to satisfy NSF/NIH's training requirement or other comparable training; in these cases, the OAA specifies what constitutes appropriate documentation. In general, training completed more than 3 years prior will not be accepted. Successful completion must be documented by attaching to the RCR form a certificate generated by the online training program or by other documentation acceptable to the OAA.
5. Plans for inclusion of undergraduates whose research is funded by other sources: Currently, RCR training is mandated only for students working on NSF/NIH-funded research. On the longer term, however, the intent is eventually to extend RCR training to all undergraduate research, regardless of discipline or funding source.
6. Different types of grants: Students supported by funding that does not directly involve them in research will also receive RCR training as appropriate to their roles. In such cases, the PI will submit revised RCR protocols to the OAA and document their timely implementation. Appropriateness of the protocols and implementation will be judged by the OAA and the Vice President for Academic Affairs (VPAA). Most conference, travel, symposium and workshop grants are exempt from RCR training requirements.
7. Subawardees: When The College of Idaho is the subawardee, C of I policies for RCR apply unless explicitly mandated otherwise by the primary grant recipient. When The College of Idaho is the primary awardee, the requirements for RCR training will be passed to any subawardees, and the subawardees may follow their own compliant RCR plan or they may follow procedures adopted by The College of Idaho.

## **B) AMENDMENTS AND UPDATES**

1. The College of Idaho may amend this plan at any time after consultation with the Director of Foundations and Corporate Relations in the OAA, the Director of Student Research and Creative Activities (DSRCA), and the VPAA. Details of any amended plan will be sent to all faculty with NSF grants, the OAA, the DSRCA, the VPAA, The College of Idaho Controller's Office, and the VPFA, and posted on the OAA website.

2. When revisions occur, the revised plan will become effective on a specified date and the old plan will cease to apply on a specified date (not necessarily the same date for both). That way an RCR plan remains in place, even while revisions are in process.
3. At a minimum, the plan will be reviewed and updated annually, no later than July 1 of each year (beginning July 1, 2012).

### **C) NON-COMPLIANCE**

1. Issues of non-compliance that are identified through ongoing monitoring activities or other means will be forwarded in writing to the VPAA, who is responsible for imposing sanctions. The VPAA must document the individuals and procedures involved, the responsible PI, and the nature of the offense.
2. Failure to gain compliance within a specified time frame or repeated or egregious non-compliance may result in restriction of all access to project funds, including wages, associated with the non-compliant project(s) until compliance is established.

### **D) CONTACTS**

1. For questions regarding this policy, requests for forms, clarifications, exceptions or policy revisions, please contact [Grants@collegeofidaho.edu](mailto:Grants@collegeofidaho.edu).

### **E) RESOURCES** –suggested resources for RCR training

#### Possible topics for additional training

- Human subjects
- Animal welfare
- Intellectual property
- Ethical issues
- Environmental and societal impacts of research
- Scientists as responsible members of society

Case studies can provide valuable insight into regulatory procedures. Real scenarios are available at <http://www.nsf.gov/oig/closeouts.jsp>

ORI offers training modules <http://ori.dhhs.gov/education/products/> and an interactive, role-playing video <http://ori.hhs.gov/TheLab/>

Columbia University's RCR training modules are available at <http://ccnmtl.columbia.edu/projects/rcr/index.html>

NIH RCR requirements: <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html>  
<http://www.nigms.nih.gov/Training/responsibleconduct.htm>

NSF RCR guidelines: [www.nsf.gov/pubs/policydocs/rcr/faqs\\_mar10.pdf](http://www.nsf.gov/pubs/policydocs/rcr/faqs_mar10.pdf)  
<http://www.nsf.gov/bfa/dias/policy/rcr.jsp>

RCR educational objectives: <http://ori.dhhs.gov/rcr-objectives-delphi-study>