

National Science Foundation Responsible Conduct in Research Education Plan

Background

The America COMPETES Act, signed into law in 2007, mandates training in the Responsible Conduct of Research (RCR). As a result the National Science Foundation (NSF) began requiring institutions to certify they have an RCR plan outlining such training for individuals paid by NSF grants. This certification was effective with proposals submitted on or after January 4, 2010.

Wake Forest University will require RCR education for all undergraduate students, graduate students and postdoctoral researchers that are paid by NSF grants that are the result of a proposal submitted on or after January 4, 2010. The types of educational activities required depend on the status of the individual and are outlined below. Consistent with NSF policy, individuals paid by conference, symposium, workshop, or travel grants are exempt from the training requirement. It is the Principal Investigator's (PI) responsibility to ensure that all individuals in his/her research group participate in the appropriate programs as required.

It should be noted that the CITI RCR course is different from the CITI Human Subjects Research training course. Completing the CITI RCR course does not satisfy the requirements for individuals working on research involving human subjects. Likewise, completing the CITI Human Subjects Research training course does not satisfy the RCR education requirements.

Undergraduate Students

Applicability: All undergraduates paid on an hourly basis to assist faculty in their laboratories working on NSF-funded research projects, including those who are paid through a Research Experience for Undergraduates (REU) supplement during the summer must complete an RCR education program. The PI may also require that undergraduate research fellows, conducting research in his/her laboratory, complete the RCR program.

Undergraduates meeting the criteria above should complete the on-line CITI course in the Responsible Conduct of Research as soon as possible after they begin working on the grant. The modules required will be discipline specific and are: Biomedical Research, Social and Behavioral Research, Physical Sciences, and Arts and Humanities. Since the majority of the NSF grants at WFU are in the Biology, Chemistry and Physics Departments, most students will complete the Physical Sciences module.

In addition to the on-line course, students will be expected to attend a one-hour workshop offered during the spring or summer semester. Both the on-line training and the workshop should be completed within the first year the student begins working on the grant. Students are not permitted to charge their time completing the training to the NSF grant however Principal Investigators may use discretionary funds to pay for this time.

Graduate Students

Applicability: Graduate students who have an assistantship paid with NSF grant funds, graduate students paid on an hourly basis by a NSF grant, NSF Graduate Research Fellows, and graduate students who carry out a research project for credit in a laboratory that receives NSF funding must complete an RCR education program.

Graduate students meeting the criteria above are required to take GRAD707 offered each fall. Additionally, graduate students must also complete the on-line CITI course in the Responsible Conduct of Research as soon as possible after they begin working on the grant. The modules required will be discipline specific and are: Biomedical Research, Social and Behavioral Research, Physical Sciences, and Arts and Humanities. Since the

majority of the NSF grants at WFU are in the Biology, Chemistry and Physics Departments, most students will complete the Physical Sciences module.

Postdoctoral Researchers

Applicability: Postdoctoral researchers who are paid in full or in part by NSF grant funds.

Postdoctoral researchers should complete the on-line CITI RCR course. In addition, postdoctoral researchers can attend the *Introduction to the Responsible Conduct of Research* workshop offered at the Wake Forest University Baptist Medical Center. It is expected this training will be supplemented through interactions with the PI as required by the postdoctoral researcher's mentoring plan.

Responsibilities

Principal Investigator:

- Tell undergraduate students, graduate students and postdoctoral researchers being paid by an NSF grant about the RCR education requirements and ensure they complete them
- Lead by example, set standards in the laboratory

The Office of Research and Sponsored Programs:

- Certify to the existence of a RCR Education plan on NSF and NIH proposals
- Maintain the RCR Education plan and RCR webpage
- Keep a list of students, staff and/or faculty who complete the CITI RCR course
- On a regular basis, receive a list from Payroll of individuals paid by NSF grants subject to RCR education requirements; this list will be compared to the list of those who have completed the various programs
- Certify at proposal submission that subawardee institutions have appropriate RCR education plans
- Ensure that the RCR education requirement is included in all subawards, including international institutions, as appropriate
- Provide \$2,500 toward the cost of teaching GRAD707 annually

The Graduate School:

- Offer GRD707 courses annually
- Maintain the list of which students have complete the courses above; provide the list to ORSP

The Undergraduate Research and Creative Activities Center:

- Offer and pay for 2 one-hour sessions in the Responsible Conduct of Research each summer
- Disseminate RCR training requirements to faculty who have students applying for (receiving) undergraduate research fellowships
- Through the workshop facilitator, provide a list of attendees to ORSP

References

National Science Foundation's website: <http://www.nsf.gov/bfa/dias/policy/rcr.jsp>