



**NSF-Required Training and Oversight Plan  
Responsible and Ethical Conduct in Research  
August 2010**

**BACKGROUND: National Science Foundation (NSF) Announcement (20 August 2009  
Federal Register)**

"The responsible and ethical conduct of research (RCR) is critical for excellence, as well as public trust, in science and engineering. Consequently, education in RCR is considered essential in the preparation of future scientists and engineers. Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 U.S.C. 1862) requires that each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project. "<http://edocket.access.gpo.gov/2009/E9-19930.htm>.

**IMPLEMENTATION DATE:** January 4, 2010

**RESPONSIBILITIES OF TTU**

1. TTU will implement a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduate students, and postdoctoral researchers who conduct research with NSF support.
2. TTU will provide this training plan to NSF, upon request.
3. TTU will designate one or more persons to oversee compliance with the RCR training requirement.
4. TTU will adopt procedures to verify that all undergraduate students, graduate students, and postdoctoral researchers who participate in research supported by NSF have received training in the responsible and ethical conduct of research.

**IMPLEMENTATION PLAN**

Beginning on January 4, 2010, the authorized representatives for TTU will sign the certification page in proposals stating that the university has a plan to train undergraduate students, graduate students and postdoctoral researchers in RCR.

The TTU Office of Research Services (ORS) will maintain a database of all NSF proposals submitted on or after January 4, 2010, and of all resulting awards. ORS will share this database with the Office of the Vice President for Research (OVPR). OVPR will provide the principal investigators on the proposals (PIs) with a description of the NSF requirements and the TTU implementation plan.

The OVPR will ask all PIs to (1) identify all paid and unpaid students and postdoctoral researchers whose research is supported by these NSF awards and (2) submit their names and TTU identification numbers to OVPR as soon as they join a project or the award is funded, whichever occurs last.

The OVPR will ask that individual PIs send to the OVPR a memorandum containing a list of all students and postdoctoral researchers whose research is supported by the PI's NSF project. This memorandum should be sent to the Office of the Vice President for Research (103 Holden Hall Box-41035, ResearchIntegrity@ttu.edu). The memorandum should contain the following information: PI name, NSF award number, title, account number, student or postdoctoral researcher name, TTU R number, eRaider, and status (paid or unpaid). When the trainee has completed RCR training activities that provide certificates, the PI will forward a copy of the certification of completion to OVPR. When the trainee completes other training, the on-line site or course instructor will forward the certification of completion to OVPR.

The OVPR will ask that the PI direct all students and postdoctoral researchers to take the following types of training:

- ***Before beginning work on the project:*** Face-to-face TTU safety training **and** on-line or face-to-face specialized research training appropriate to their discipline, **AND**
- ***Within 30 days of beginning work on the project, or before the completion of the project, whichever occurs first:*** Discipline-specific CITI RCR Training available through on the TTU OVPR [[ResearchIntegrity@ttu.edu](mailto:ResearchIntegrity@ttu.edu)]. The PI will direct trainees to print a copy of CITI RCR Training certificate and send it to the PI as proof of training. The PI should forward a copy of the certification of completion to OVPR.

The OVPR will ask that the PI direct trainees who continue work on a project for more than one semester

- to complete an ***approved didactic course in RCR or research ethics*** (currently approved courses are ENGR 4392/5392: Engineering Ethics and Its Impact on Society, NRM 6002: Field Research Ethics or Wildlife Research Ethics, and PHIL 5125: Introduction to Research Ethics) **OR**
- to receive credit for participation for at least ***three (3) hours each long semester*** in workshops and/or seminars focused on responsible conduct of research. Such activities will be offered by the Ethics Center, the Graduate School, the Teaching Learning and Technology Center (TLTC), Environmental Health and Safety, and other units. Faculty can also arrange for students to receive credit for discussions and activities at conferences or group meetings. Activities that provide RCR credits will be posted at <http://www.depts.ttu.edu/vpr/> and on TechAnnounce, instructions for using conference and group meeting activities will be posted at <http://www.depts.ttu.edu/vpr/>.

### **Additional Information**

Office of the Vice President for Research ([ResearchIntegrity@ttu.edu](mailto:ResearchIntegrity@ttu.edu))  
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