NSF Plan: Responsible Conduct of Research (RCR) Education Program

I. Background

On August 20, 2009, NSF published a final version of Section 7009 of the COMPETES Act, which requires the implementation of Responsible Conduct of a Research Training Program. "Effective January 4, 2010, NSF will require that, at the time of proposal submission to NSF, a proposing institution's Authorized Organizational Representative certify 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 who will be supported by NSF to conduct research." Other key elements of the new requirement include:

- "While training plans are not required to be included in proposals submitted to NSF, institutions are advised that they are subject to review upon request."
- "...institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research have received RCR training."
- NSF will leave it up to the institutions to decide the content and delivery method of the training and how the training will be recorded and tracked.

II. Oversight of Training Compliance

Oversight of the Responsible Conduct of Research training is a responsibility shared by the Principal Investigator (PI) and the University, to be coordinated by the Research Compliance Office (RCO) in the Division of Research.

III. Content/Minimum Core Topics

While each discipline and type of research may emphasize different aspects of ethical training, there are core topics essential for all students and postdoctoral researchers including:

- Responsible Peer Review
- Responsible Authorship
- Data Acquisition and Management
- Conflict of Interest
- Mentoring
- Research Misconduct
- Collaborative Research

According to federal regulations, investigators conducting human subject research or animal research are already responsible for the training of all members of their research team.

Undergraduate students who are appointed to an NSF-funded project but do not contribute to the design, conduct, or reporting of that project need to be apprised of a responsible conduct of research overview prior to appointment.

Each student and postdoctoral researcher appointed as an hourly employee, graduate assistant, postdoctoral fellow, research associate, or visiting researcher who contributes to the design, conduct, or reporting of an NSF-funded project shall be trained in the responsible conduct of research.

IV. Delivery Methods and Offerings

Online training modules and interactive mentored discussion workshops will be available as effective delivery methods. Options available for meeting the RCR requirement include:

- One-day workshop offered each semester
- Modular workshops covering the core topics (2-3 modules offered each semester)
- Graduate course for credit
- Collaborative Institutional Training Initiative (CITI) online educational program

V. Tracking

The RCO will maintain a website to include the following:

- NSF RCR Requirements
- UM NSF RCR Plan
- Schedule of RCR Offerings
- Resource Information Guide
- Contact Information for Assistance

The RCO will contact all NSF PIs and department administrators quarterly to inform them of upcoming scheduled RCR training opportunities.

It is the responsibility of the PI/College/Department to:

- Notify students and postdoctoral researchers of the training requirement when they are appointed.
- Ensure that any NSF supported students and post doctoral researchers complete the training.
- Maintain verification of completion of the training.

VI. Consequences for Non-compliance

Consequences for non-compliance with the NSF RCR training requirement may include:

- Discontinuance from participation on the NSF-funded project.
- Transfer of salary and related expenditures from the NSF account to a departmental account.