**University of Missouri – Kansas City
Procedures for the Responsible Conduct of Research Training**

Effective Date: January 4, 2010

I. Introduction – Purpose and Scope

A. Effective January 4, 2010, the National Science Foundation (NSF) is requiring all funded students and post-doctoral scholars to undergo training in the responsible conduct of research (RCR). Any proposals submitted to NSF must certify that the University of Missouri System (UM) has a training plan in place for undergraduate, graduate, and post-doctorals who will be supported by NSF to conduct research. Training plans are not required to be included in the proposals submitted to NSF; however, these are subject to review by NSF upon request.

B. The University requires all NSF proposals to include the following standard language:

> *The University of Missouri System has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduates, graduates students, and postdoctoral researchers who will be supported by the National Science Foundation to conduct research.*

These requirements are included in the <u>NSF Proposal and Award Policies and Procedures Guide, Chapter II.C.1.e, Proposal Certifications</u>, effective January 4, 2010.

C. As a Research-Extensive Institutional system, UM has an obligation to take steps to ensure all appropriate individuals have a thorough working knowledge of matters related to the responsible conduct of research. At a minimum, these include: proper citation of other work, plagiarism, research misconduct, intellectual property and copyright, falsification and unwarranted editing of data, conflict of interest, authorship on manuscripts, and mentor-mentee relationships. Training on other ethical issues may also be appropriate such as human subject protocols, animal welfare, and proper handling of hazardous materials.

This procedure establishes the <u>minimum</u> RCR training requirements for post-doctoral, graduate, and undergraduate students whether or not they are directly supported by NSF funds or indirectly benefit from the use of materials purchased with these funds. For example, a student utilizing NSF funded equipment may be subject to the same requirements whether or not directly working on the NSF award.

II. Compliance Requirements

A. <u>Training options</u>. UMKC provides two options for RCR training:
  1. On-line training modules provided by CITI which meet the RCR requirements. The modules will take approximately 1-2 hours depending on the field of study and can be completed in stages.

These modules are available at:
https://www.citiprogram.org/default.asp?language=english .

2. UMKC graduate courses identified as meeting the RCR requirements. Please refer to the Graduate School's website:
http://web2.umkc.edu/catalog/School_of_Graduate_Studies_1.html
for information on the RCR compliant courses. There are four courses that must be taken to meet the NSF requirement (SGS5550A, SGS5550D, SGS5550E, SGS5550F). There is also a course dealing with human subjects research (SGS5550B) and one with research involving animals (SGS5550C). Note that these courses will take two semesters to complete, and will not meet the January 4, 2010 deadline unless already completed in 2009.

Substitutions for the above options will not be allowed under any circumstances. Individuals who transfer to UMKC or were employed by another institution will need to take UMKC's RCR training to meet the requirements.

NOTE: A recent clarification by NSF states that ONLY those students who will be supported by a grant submitted after 4 January 2010 OR a grant supplement obtained after that date must complete the RCR training.

B. <u>Post-doctoral students</u>. Each post-doctoral student supported by NSF must complete the minimum required RCR training within two calendar months following the effective date of employment with UMKC.

C. <u>Graduate students</u>. Each graduate student supported by NSF must complete the required RCR training prior to the end of the second semester of their enrollment or the Fall semester 2010, whichever is later. (Note: This RCR training is likely to apply to all graduate students, regardless of NSF funding, at some future time.)

D. <u>Students currently benefitting from NSF funding</u>. If any of the following apply, each student must complete the required RCR training within <u>two calendar months</u> following the date of the specific situatations:

i.   The effective date of the student who is currently supported by an NSF award.

ii.   The start date of any course in which the student is enrolled and for which research is an integral element of the course. For example, honors courses, masters thesis, or doctoral dissertations.

iii. For undergraduate students, if he/she will be involved in research, at the direction of his/her advisor.

E. <u>Discipline-specific RCR training</u>. Graduate and post-doctoral students may be required to complete additional, more discipline-specific, RCR training as part of their curriculum for graduation. The scope and extent of the additional training will be at the discretion of the advisor and department. This may include, but is not limited to, additional courses,

seminars, and/or on-line modules. Tracking and monitoring of these requirements are the responsibility of the advisor or the department.

F. <u>Subawards</u>. In all cases, subrecipients are subject to the same requirements as UMKC personnel. A clause will be included in the terms and conditions of any NSF-funded subaward of noting these requirements. Subrecipients will need to certify to UMKC that their institution has a plan in place and all required individuals have completed RCR training in accordance with the Subrecipient institution's procedures.

G. <u>Faculty</u>. While not required, all faculty are strongly encouraged to complete the online RCR module for their own benefit and to better advise students in dealing with issues on the responsible conduct of research.

III. UMKC Procedures

A. <u>RCR attribute in PeopleSoft</u>. When the PSRS for an NSF grant is created, the RCR attribute should be marked. Upon acceptance of the award, the PI/Dept. must ensure any postdoc, graduate, or undergraduate students supported by an NSF award have met the above requirements for RCR training. The PI's department will note this in PeopleSoft by checking the RCR attribute and listing people being paid on the grant.

If an individual has not completed the RCR training, the PI must contact the individual and ensure the training is completed before the award can be set up.

B. <u>Responsibility for Monitoring</u>. The Office of Research Support, Office of Compliance, will be responsible for certifying that any post-doctoral, graduate, or undergraduate students who are directly paid from a NSF award have taken the required RCR training.

PI's will be responsible for certifying that those indirectly benefitting from this funding have complied.

On a monthly basis, the Compliance Office will run a report to identify individuals as noted above who are paid from any NSF award which have not met the requirements. The PI on the award will be contacted to follow-up with the individual immediately. The individual will need to complete the RCR training within 30 days of the notification from the PI.

C. <u>Noncompliance Implications</u>. Any individuals who have not completed the RCR required training by the dates noted above shall have their employment terminated after one reminder. Reinstatement of employment will be conditional on satisfactory of the RCR training.

These requirements are considered part of UMKC's terms and conditions for acceptance of any NSF award. Noncompliance could result in unallowed costs for any individual who has not complied. In addition, fines and/or sanctions could be imposed if the University is deemed negligent in its oversight responsibility on the award. Any unallowed costs are the responsibility of the department.