Responsible Conduct of Research (RCR)
UMCES Training and Oversight Plan for Research Funded by National Science Foundation and National Institutes of Health

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:
- Content and delivery method of the training and how the training will be recorded and tracked is up to the institution.
- "…institutions are responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NSF to conduct research have received RCR training."
- Institutional RCR plans are subject to review by NSF upon request.

The National Institutes of Health (NIH) implemented a similar policy on November 24, 2009. The NIH policy applies to NIH training, career development, research education, and dissertation research grants.*

II. **Minimum Requirements**

While other aspects of ethical training can always be added, the following is a list of core topics essential for all students and postdoctoral researchers to be covered in the delivery of RCR training:
- Authorship, Publication and Peer Review
- Data Ownership and Intellectual Property
- Conflict of Interest
- Mentorship
- Scientific Misconduct

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 or an NIH-funded project subject to the RCR requirement, shall be trained in the responsible conduct of research. The first step of what should be an on-going training process is completion of the on-line training through the CITI Program**. This first step must be completed within 30 days of the hire date.

Undergraduate students who are appointed to an NSF-funded project or to an NIH-funded project subject to the RCR requirement 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. Weekly seminars provided to undergraduate students under NSF REU funding are to have these core topics included in those seminars.

III. Delivery Methods
- The core RCR training modules of the CITI Program must be completed within 30 days of the first day of employment on an NSF project or an NIH project subject to the RCR requirement.
- Case studies are available in the CITI program for PI's to use for continued RCR training in specific core areas
- Seminars covering the core (and others as needed) topics will be developed and offered at least once a year
- Graduate student seminar course on Research Ethics for credit is expected / will be developed (working with UMCP on this for the MEES program).

IV. Oversight of Training Compliance
Oversight of the Responsible Conduct of Research training is a responsibility shared by the Principal Investigator (PI) and the Office of Research Administration and Advancement (ORAA).

ORAA responsibilities:
- ORAA will maintain a website section and access to:
  - RCR Requirements
  - UMCES RCR Plan
  - Information and instructions for CITI on-line training Schedule of RCR Seminars
- ORAA will contact all NSF/NIH PIs and Lab Assistant Directors to inform them of upcoming scheduled RCR training opportunities when training needs to be completed
- ORAA will contribute to RCR seminars where appropriate
- Director of ORAA will be point of contact for questions on this plan

PI/Lab responsibilities:
- 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 and that any students and post-doctoral researchers being supported by NIH projects subject to the RCR requirement do likewise
- Maintain verification of completion of the training

V. Consequences for Noncompliance
Consequences for non-compliance with the RCR training requirement may include:
- Discontinuance from participation on the NSF- or NIH-funded project
- Transfer of salary and related expenditures from the NSF or NIH account to a Lab account

* RCR applies to the following NIH award types: D43, D71, F05, F30, F31, F32, F33, F34, F37, F38, K01, K02, K05, K07, K08, K12, K18, K22, K23, K24, K25, K26, K30, K99/R00, KL1, KL2, R36, T15, T32, T34, T35, T36, T37, T90/R90, TL1, TU2, and U2R.

**Collaborative Institutional Training Initiative (CITI) offered by the University of Miami at www.citiprogram.org.