

Responsible Professional Conduct of Research Training Requirement for Master's Students, Doctoral Students and Postdoctoral Fellows

The Office for Research Protections and Compliance (ORPC) at UMBC has stated that institutions receiving funding from the National Science Foundation (NSF) and National Institutes of Health (NIH) must have a set of established training requirements in Responsible Conduct of Research (RCR). For example, NSF expects UMBC to be able to verify that graduate and post-doctoral students receiving NSF funds, either in salary support or stipends to conduct research, receive RCR training. NIH requires the submission of an instructional plan addressing the responsible conduct of research for any NIH student training, career development award (individual or institutional), research education grant, and dissertation research grant. In either case, faculty mentors or advisers are encouraged to be familiar with the RCR training that their students and postdoctoral researchers have taken to enhance the discussion of RCR. In the interest of maintaining a documented code of ethics, professionalism, and research integrity, The Graduate School at UMBC and the Office of Postdoctoral Affairs will be extending the RCR training requirement according to one of the options below to all graduate students and postdoctoral fellows, in all disciplines.

For Post-Doctoral fellows, PhD students, and Master's Thesis students, documented training can take either of the following forms:

- Collaborative Institutional Training Initiative (CITI) web-based materials. RCR training can be completed using the CITI modules, which include comprehensive web-based course materials, a series of short content exams, and a completion certificate. Detailed instructions are available on the ORPC website: http://www.umbc.edu/research/ORPC/rcr_training.html. It is highly recommended that departments supplement these modules with in-person discussions that address the nuances within the disciplines.
- A training course that is related to responsible research. The course may be offered by the academic department, or other entity, so long as the training culminates with an acknowledgement of completion. The completion of training may result in either a designation on the transcript or by written acknowledgment of the training filed with the Graduate School. This alternative training must also be documented within the department and accessible for review by ORPC.

Each department can *recommend* or *require* that students take the training earlier, but the Graduate School will conduct a compliance check at the candidacy stage for doctoral students and prior to the thesis submission for Master's students. The Graduate School will add a new "RCR certification checkbox" to the "Application for Admission to Candidacy for the Degree of Doctor of Philosophy" form for doctoral students. For Master's students, compliance will be documented when the Master's thesis committee nomination form is completed and submitted to the Graduate School.

Optional training for Master's students who are not completing a thesis:

• Training that is related to responsible professional conduct and ethics. Master's students who are not completing a thesis may be required by their respective department/program to provide proof of training in the area of professional conduct, ethics, or related area depending of the student's course of study. In many cases, a course in Professional Ethics is an appropriate substitute for this requirement. For those master's students who do not have access to an actual course (which will be designated on the transcript), an acknowledgement of completion should be filed with the department/program. An electronic copy of the certification of completion is sufficient for tracking purposes.

Other Compliance Training

Other compliance training for research activities involving animals, human subjects, biohazardous materials use or situations involving conflicts of interest or export controlled items are required by regulations specific to the research activity. This training is separate from RCR training. Information on compliance training at UMBC can be found here: http://my.umbc.edu/groups/compliance/documents/163.