College of Human Medicine Responsible Conduct of Research
College-Wide Plan

12/23/09

Initial training must be completed in Year 1 of medical school. It will include 5 hours of training (NIH requires 8 hours) for Year 1 students: lectures/case studies/discussion, Institutional Review Board (IRB) training, and online modules from the Graduate School Research Integrity website (http://grad.msu.edu/researchintegrity/resources).

Training in Year 2 and Year 3 will be incorporated in required courses in addition to IRB refresher and online modules. Case studies will be incorporated.

Training in Year 4 will be for students performing research or who will take a research elective.

It will be the responsibility of the MSU/CHM PI or supervising faculty mentor to determine that the trainee has fulfilled project specific requirements.

Training will be documented using the non-credit information system (details to be sent from the Graduate School).

Topic areas and materials will be selected from the Graduate School Research Integrity Resources website (http://grad.msu.edu/researchintegrity/resources) as well as from the NIH Reports of Scientific Misconduct, the NIH Office of Research Integrity website (http://ori.dhhs.gov), online RCR modules, On Being a Scientist (3rd ed.), published online by the National Academy Press, and any additional sources the course instructor, workshop leader, or faculty mentor deems relevant.

Year 1 Responsible Conduct of Research
-CHM Orientation: Introduction to Responsible Conduct of Research including overview of major topics and Plagiarism
-IRB online training – 2 hours
-2 online modules from the Graduate Research Integrity Resources website that cover Authorship and Publication, Collaborative Research, Management of Research Data, Mentor/Trainee Relationships
-Additional training topics will be covered if required by a research project including NIH research. For example, any research involving use of animal subjects will necessitate completion of animal subject training through the Institutional Animal Care and Use Committee (www.iacuc.msu.edu). Likewise – lab research may require completion of training on handling of different biological and/or radioactive materials through the Office of Radiation, Chemical, and Biological Safety (www.orcbs.msu.edu) at MSU via both classroom and online mechanisms.

Year 2 Responsible Conduct of Research
-HM 546 (Social Context of Clinical Decisions) Objectives (one week):
  1. Describe the system of human subjects protections used in the U.S., and the history that led to its creation
  2. Describe the key ethical principles governing research on human subjects
  3. Explain the elements of informed consent for participation in research, and why these are more stringent than consent for therapeutic interventions
  4. Describe the circumstances requiring special protections for vulnerable subjects.

Case studies for small group discussion, a set of readings, and a required video (Deadly Deception, on the Tuskegee syphilis study)
-IRB refresher online
-2 online modules from the Graduate School: Conflict of Interest, the Continuum from Research Integrity to Research Misconduct

**Year 3 Responsible Conduct of Research**
-Critical Appraisal/Analytic Medicine (CAAM): topics to include data acquisition, management and protection; research misconduct, data ownership, authorship, and publication guidelines; human subjects protections.
-2 online modules from the Graduate School

**Year 4 – RCR Refresher for Students Performing Research or Who Sign Up for Research Elective**
-IRB Refresher
-2 online modules from the Graduate School

MKS