Responsible Conduct of Research – Chemistry Plan

Initial Training

1. **Introduction to RCR** – a discussion of research misconduct issues
   a. Graduate Students – orientation program – 1 hour
   b. Post-docs and mid-year graduate student admissions – GS presentation
   c. Undergrads – GS presentation

Currently, we run an introduction to RCR during our graduate student orientation week prior to the start of the fall semester. Because the students have not joined research groups, the presentation is general. It is based on a document that the CNS Dean's Office made available to departments several years ago. We have the students sign a form at the end of this session and that is kept in their academic file. For post-docs, out-of-cycle graduate admissions and undergraduates, the records for this initial training will be kept by the graduate school.

2. **Conflict of Interest training** – this will be accomplished via assigned readings on the GS web site followed by an annual discussion with the department chair at the start of the spring semester. At this point in time, the new students have joined research groups and will have some sense of the groups operation. The point is to make them aware of COI issues that might surface during their research and to let them know that they can talk confidentially to the department chair, or the associate chair for the graduate program, about concerns. Attendance will be taken and records kept by the Department’s graduate office. (1 hour)

3. **Initial Discussion with Research Advisors** – Graduate Students, Post-docs and Undergraduate researchers with have an initial meeting with their research advisors where specific issues of RCR that pertain to the group are discussed. These include expectations for record keeping and data management, ownership of data, authorship policies, honesty in recording/reporting experimental observations, and possible COI concerns. The student will be instructed to take the GS Research Misconduct training and the programs on responsible research with Human and Animal subjects if needed. The graduate office will issue forms to the research advisors to remind them of this requirement. The meeting will be documented through completion of a topic checklist on this form and its signing by both the student and research advisor. Completed forms will be maintained with the students/post-docs academic records. (1 hour)

4. **GS Program on Research Misconduct** – follow-up to the initial discussion with research advisors for graduate students, post-doctoral researchers and undergraduates. The responsible conduct of research
involving Human/Animal subjects will be inserted into this phase of training as needed. Documentation will be completed by the GS. (2 hours)

5. **Research Group Refresher** – One group meeting will be set aside each semester to discuss RCR issues pertinent to the group. Each research advisor will receive a reminder from the graduate office regarding their obligation to hold these meetings and they will be given a form to complete that provides a brief summary of the discussion and documents those in attendance. (1 meeting during fall, spring and summer semesters – 3 hours total)

During their first year in a research lab, all researchers will receive 8 hours of training. Five through a combination of departmental and Graduate School based programs, and three through regular research group meetings. After the first year, research group meetings devoted to RCR issues will deliver 3 hours of reinforcement. The annual COI meeting held by the Department Chair will be open to all graduate students, not just those who are new to our program.