RCR Requirements

NIH Guidance:

Format:

- Substantial face-to-face discussions among the participating trainees/fellows/scholars/participants
- A combination of didactic and small-group discussions (e.g. case studies)
- Participation of research training faculty members in instruction in responsible conduct of research are highly encouraged.
- **While on-line courses can be a valuable supplement to instruction in responsible conduct of research, online instruction is not considered adequate as the sole means of instruction**.

Subject Matter: While there are no specific curricular requirements for instruction in responsible conduct of research, the following topics have been incorporated into most acceptable plans for such instruction:

- Conflict of interest – personal, professional, and financial
- Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
- Mentor/mentee responsibilities and relationships
- Collaborative research including collaborations with industry
- Peer review
- Data acquisition and laboratory tools; management, sharing and ownership
- Research misconduct and policies for handling misconduct
- Responsible authorship and publication
- The scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research

Faculty Participation:

- Training faculty and sponsors/mentors are highly encouraged to contribute both to formal and informal instruction in responsible conduct of research. Informal instruction occurs in the course of laboratory interactions and in other informal situations throughout the year.
- Training faculty may contribute to formal instruction in responsible conduct of research as discussion leaders, speakers, lecturers, and/or course directors.

Duration of Instruction:

- Acceptable programs generally involve **at least eight contact hours**.
- A semester-long series of seminars/programs may be more effective than a single seminar or one-day workshop because it is expected that topics will then be considered in sufficient depth, learning will be better consolidated, and the subject matter will be synthesized within a broader conceptual framework.

Frequency of Instruction:

- Reflection on responsible conduct of research should recur throughout a scientist's career: at the undergraduate, post-baccalaureate, predoctoral, postdoctoral, and faculty levels.
- **Instruction must be undertaken at least once during each career stage, and at a frequency of no less than once every four years.**
- It is highly encouraged that initial instruction during predoctoral training occurs as early as possible in graduate school.
- Individuals at the early career investigator level (including mentored K awardees and K12 scholars) must receive instruction in responsible conduct of research at least once during this career stage.
- Senior fellows and career award recipients (including F33, K02, K05, and K24 awardees) may fulfill the requirement for instruction in RCR by participating as lecturers and discussion leaders.
- To meet the above requirements, instruction in RCR may take place, in appropriate circumstances, in a year when the trainee, fellow or career award recipient is not actually supported by an NIH grant.

Washington University RCR Options:

The Program for Ethical and Responsible Conduct in Science and Scholarship (PERCSS): *(Online: 8 learning modules. Workshops 3 hours; 2-3 times annually)* PERCSS offers face-to-face ethics workshops and web-based learning modules. Each workshop begins with two lectures that provide introduction to common ethical issues and Washington University policies and guidelines related to research. The second half of the workshop is devoted to small group discussion lead by WUSTL senior faculty. Groups discuss hot topics and case studies related to responsible conduct of research. https://research.wustl.edu/ComplianceAreas/rcr/RCR_Plan/Documents/BoilerPlate_RCR_Plan.pdf

Instruction in the Responsible Conduct of Research (ICTS): This course consists of a series of 1-hour face-to-face seminars on diverse topics pertaining to RCR held throughout the year. The RCR course requires participation in at least 8 hours of face-to-face sessions. Sessions include a mixture of lectures, panels, case discussions, and role plays. Participants must complete the PERCSS online Core curriculum prior to attending a face-to-face session. Open to anyone, but fills up quickly.
http://icts.wustl.edu/icts-researchers/center-for-clinical-research-ethics/ccre-education/rcr-course

DBBS: Ethics and Research Science: (*Spring Semester; 6 1 hour sessions*) All graduate students in the Division of Biology and Biomedical Sciences (DBBS) are required to complete this course in a satisfactory fashion by the end of their second year. While the course is reserved for DBBS students, course materials are available via their website and can be tailored for another program's RCR educational needs.
http://dbbs.wustl.edu/curstudents/CourseInformation/Pages/Ethics.aspx

Ethical and Legal Issues in Clinical Research (MSCI Program): (*Fall Semester; once a week for 2 hours; 30 hours total*) This course prepares clinical researchers to critically evaluate ethical and regulatory issues in clinical and biomedical research. The principal goal of this course is to prepare researchers to identify ethical issues in research and the situational factors that give rise to them, to identify ethics and compliance resources, and to foster ethical problem-solving skills. Open to anyone; no cost if not taking for credit.
http://crtc.wustl.edu/images/files/Syllabi/M17-510_Ethics_Syllabus.pdf

MPHS: Ethics in Population and Clinical Health Research: *(Spring Semester, 11 1 hour sessions)* This course will expose population and clinical health researchers to the various ethical issues and situations encountered in their profession. It will also familiarize them with available ethics and compliance resources. Case studies and scenario presentations will facilitate discussion on topics such as allegations of misconduct, data objectivity and presentation, publications, collaborators' rights and responsibilities, intellectual property, and student-mentor relationships.
http://www.mphs.wustl.edu/Courses/MPHS-Core#M19-505

Psychology: Seminar in Research Ethics *(Fall semester; 1 hour)* In-depth review and discussion of common ethical concerns encountered in research, including the use of human and animal participants, informed consent, the Belmont report, the role of the IRB, protection of special populations, deception in research, duty to refer, various forms of conflict of interest, issues of data ownership and sharing, bias and fraud in data collection, analysis, and reporting, conflicts surrounding authorship, concerns about duplicate or fragmented publication, understanding and preventing plagiarism, and the reporting of misconduct of others. **Open only to Psychology graduate students.**
https://psychweb.wustl.edu/courses/wucrsl/L33/5405/FL2015