

# ETHICAL SCIENTIFIC CONDUCT

## 16:115:556

**Course Directors:** Dr. Janet Alder  
[janet.alder@rutgers.edu](mailto:janet.alder@rutgers.edu)

**Participants:** This course is required for all Biomedical PhD students and Master of Science in Biomedical Sciences students. The course complies with NIH guidelines for RCR training. Students will receive 1 credit for successfully completing the course. Postdoctoral fellows as well as F33 and K award recipients are invited to participate in the course and will receive a certificate of completion after attendance at a minimum of eleven one-hour weekly meetings. Students in their 5th year graduate school must take a refresher training course (16:115:558).

### Course Objectives:

- To describe the relationship and responsibilities in the compact between mentor and mentee
- To identify cases of plagiarism and copyright infringement
- To explain proper methods for data acquisition and laboratory book maintenance
- To describe policies for handling research misconduct
- To explain how authorship should be decided and how publications should be prepared
- To describe situations of professional or financial conflict of interest and how to handle them
- To identify cases of inappropriate behavior between individuals and how to act as responsible member of society
- To explain the relationship between academia and industry
- To explain appropriate methods for peer review of manuscripts and grant proposals
- To describe policies for the use of animals in research
- To describe policies for including human subjects in studies
- To describe some of the environmental and societal impacts of scientific research
- To identify cases that involve intellectual property and technology transfer and the approach for dealing with these situations

**Course Format:** The course meets Mondays from 4:00-5:00pm. The format of the course will generally consist of lecture by a content expert from 4:00-4:25pm in the West Lecture Hall on Busch Campus followed by small group case discussions from 4:30-5:00pm held in Robert Wood Johnson Medical School. Students are expected to attend both the lecture and the small group discussion for each topic. There are a couple of weeks in which the lecture will take the whole time and there will be no small groups.

## LECTURE SCHEDULE

Mentor-Mentee Responsibilities and Relationships, History of Scientific Ethics	J. Alder & T. Shinbrot
Data Acquisition and Laboratory Tools: Management, Sharing and Ownership	Y. Zhang
Research Misconduct and Policies for Handling Misconduct	C. Gelinas
Plagiarism, Academic Rules, Copyright	Y. Zhang
Responsible Authorship and Publication	G. Aston-Jones
Peer Review	C. Lutz
Conflict of Interest – Personal, Professional, and Financial	J. Neubauer
Scientist as Responsible Member of Society	C. Dellatore
Collaborative Research in Academia and Industry	V. Smeraglia
Contemporary Ethical Issues in Biomedical Research	N. Connell
Environmental and Society Impacts of Scientific Research	J. McCormick-Ell
Policies for Animal Subjects in Research	D. Crockett
Policies for Human Subjects in Research	P. Bistak