GRAD 214: Ethics and the Responsible Conduct of Research
Spring 2019, First Year Students

Faculty Director: Liz Silva, PhD, Associate Dean, elizabeth.silva@ucsf.edu
Coordinator: Jhia Jackson, PhD(c), jhia.jackson@ucsf.edu

LOCATIONS: M, T, Th, F – Mission Bay, Mission Hall 1400
W – Mission Bay, Mission Hall 1401 & 1402

Time policy: 9:00 – 12:00 AM *Doors close at 9:10 AM. Late arrivals or early departures will NOT be given credit for the session and will need to make up the session the next time this course is offered.*

Laptop policy: This course uses lectures, case studies, and group discussions to teach students about some of the most important but difficult responsible practice topics facing professional researchers. Therefore, students are expected to be fully engaged in all class lectures and discussions, and the course organizers and directors ask you to refrain from using laptops, tablets, and handheld devices for personal or research-related work during class time.

Sign-in policy: You **MUST** scan your UCSF ID Card to receive credit for the session!

Attendance Policy:

In order to pass GRAD 214 you must participate in **all sessions**. However, individual programs have specific requirements for making up a missed session. **Please contact Jhia Jackson, jhia.jackson@ucsf.edu, as soon as possible if you will be missing a session and she will detail your options for making up the class.** Most programs only allow **one** absence so be sure to do your absolute best to attend the entire week.

Consolidated Session Themes:

- Scientific Misconduct and Ethics in Science
- Publications and Peer Review
- Conflicts of Interest: Science Outside of the Academy
- Scientific Record Keeping and Data Management
- The Art of Mentorship and Being Mentored
- Science in the Genomic Era: Biomedical Research and Human Subjects
- Animal Welfare in Research

Detailed Session Description:

Scientific Misconduct and Ethics in Science
Mark Ansel, PhD & Anthony DeFranco, PhD

Developing a well-reasoned response to an ethical problem in scientific research. The meaning of research misconduct and the regulations, policies, and guidelines that govern research misconduct in PHS-funded institutions. Includes topics such as fabrication, falsification, and plagiarism; error vs. intentional misconduct; institutional misconduct policies; identifying misconduct; procedures for reporting misconduct; protection of whistleblowers; and outcomes of investigations, including institutional and federal actions.

Publications and Peer Review
Kaveh Ashrafi, PhD and Elizabeth Silva, PhD

The purpose and importance of scientific publication, and the responsibilities of the authors. Includes topics such as collaborative work and assigning appropriate credit, acknowledgments, appropriate citations, repetitive publications, fragmentary publication, sufficient description of methods, corrections and retractions, conventions for deciding upon authors, author responsibilities, and the pressure to publish. Also, the purpose of peer review in determining merit for research funding and publications. Includes topics such as, the definition of peer review, impartiality, how peer review works, editorial boards and ad hoc reviewers, responsibilities of the reviewers, privileged information and confidentiality, institutional animal care and use committees, and treatment of animals.

Conflicts of Interest: Science Outside of the Academy
Gretchen Kiser, PhD & Aditi Bhargava, PhD & Shuvo Roy, PhD

The definition of conflicts of interest and how to handle conflicts of interest. Types of conflicts encountered by researchers and institutions. Includes topics such as conflicts associated with collaborators, publication, financial conflicts, obligations to other constituencies, and other types of conflicts.

Scientific Record Keeping and Data Management
Ariel Deardorff, MLIS

Accepted practices for acquiring and maintaining research data. Proper methods for record keeping and electronic data collection and storage in scientific research. Includes defining what constitutes data; keeping data notebooks or electronic files; data privacy and confidentiality; data selection, retention, sharing, ownership, and analysis; data as legal documents and intellectual property, including copyright laws.

The Art of Mentorship and Being Mentored
Keith Yamamoto, PhD

The responsibilities of mentors and trainees in predoctoral and postdoctoral research programs. Includes the role of a mentor, responsibilities of a mentor, conflicts between mentor and trainee, collaboration and competition, selection of a mentor, abuse of the mentor/trainee relationship, and policies for handling misconduct.

Science in the Genomic Era: Biomedical Research and Human Subjects
Elizabeth Silva, PhD & Jhia Jackson

Issues pertaining to biomedical research and human subjects' protections in the genomic era: privacy, confidentiality and protection of human tissue donors; management of genomic data; informed and open consent; and ethical issues in genomics research with vulnerable populations.

Animal Welfare in Research
Gina Alvino, PhD & Melissa Reeves, PhD

Issues important in the use of animals in conducting research. Includes topics such as definition of research involving animals, ethical principles for conducting research on animals, federal regulations governing animal research, institutional animal care and use committees, and treatment of animals.