

2017 UC San Francisco Responsible Conduct of Research program for Postdoctoral Scholars (RCR-PS) Syllabus

Dates: January 25 — March 2, 2017

Time: 12-1:30 p.m.

Please plan to arrive five minutes early to sign the attendance sheet, address any administrative concerns, and to silence and stow away electronic devices.

Locations: Wednesdays at Mission Bay, Thursdays at Parnassus

Participants can elect to attend a session on Wednesday or Thursday (not both)

Week I: 1/25: Mission Bay, HD-160

1/26: Parnassus, S214

Week II: 2/1: Mission Bay, HD-160

2/2: Parnassus, S214

Week III: 2/8: Mission Bay, HD-160

2/9: Parnassus, S214

Week IV: 2/15: Mission Bay, HD-160

2/16: Parnassus, S214

Week V: 2/22: Mission Bay, HD-160

2/23: Parnassus, S214

Week VI: 3/1 Mission Bay, HD-160

3/2: Parnassus, S214

Program Director

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The UCSF Responsible Conduct of Research Program for Postdoctoral Scholars (RCR-PS) is a thought-provoking, six-session course designed to satisfy NIH and NSF requirements for training in the responsible conduct of research.

Unique to the postdoctoral training experience, the RCR-PS program utilizes a combination of faculty presentations and in-person case study discussion during each 1.5-hour session to address contemporary debates at the interface between biomedical science and society. With attention to the tools and resources requisite of successful, ethical research careers, postdocs will meet with a community of UCSF faculty to discuss issues such as:

- Scientific entrepreneurship and the university-industry interface and conflicts of interest
- Responsible authorship, publication, and peer review
- Societal implications of scientific misconduct
- Animal welfare in research
- Collaborative science: data management, sharing, and ownership
- Science in the genomic era: biomedical research and human subjects

Program Requirements

I. Attendance

To complete the program, participants must attend all six sessions and write one ethics blog per week to post on the course website. In the unforeseeable event of a missed session, please email the program director to schedule the submission of a "think piece" pertaining to topic of the missed session (details below).

II. Ethics Forum

The ethics forum is an opportunity for you to apply the themes of each session to real life challenges, questions, concerns, and ruminations. For your contribution to the forum, please respond to the posted question(s) or questions posed during discussion; pose your own questions; and/or dialogue with fellow participants regarding the session topic. These need not be polished; however, they should reflect how *you* experience and make sense of the weekly topic. These will be due by Friday *after* each session to enable you to incorporate questions or comments related to discussion.

Think Piece (*Only as make-up for one missed session*)

1-2 pages; double spaced; one-inch margins per think piece

Due by March 9th, 2016 to the program director

In the event that you miss a session, you will have the opportunity to fulfill the course deliverables and advance your understanding of the material by producing a "think piece," thereby critically evaluating the topic as it relates to your own research experience. The think piece should include a discussion of readings, case studies, and/or reflection on the relevance of the weekly theme for your own research. You can also use the think piece to respond to course-mates' blogs.

Statement on Accommodation

Postdocs who require a physical, medical, or learning accommodation may contact Disability Management at <http://ucsfhr.ucsf.edu/index.php/dismgmt/>

In compliance with Education Code Section 92640(a), students may arrange to turn in course deliverables at a time that does not conflict with their religious observances.

Program Schedule

Session 1: Scientific Entrepreneurship and the University-Industry Interface

Wednesday, 1/25: Mission Bay HD160, 12-1:30 p.m.

Thursday, 1/26: Parnassus S214, 12-1:30 p.m.

Facilitators

Karin Immergluck, PhD; Christopher Ryan, PhD; and Neha Kaul, MA

This opening session addresses conflicts of interest (COI) at the university-industry interface. An interest may be defined as a commitment, goal, or value held by an individual or an institution. A conflict of interest exists when two or more contradictory interests relate to an activity by an individual or an institution. The conflict lies in the situation, not in any behavior or lack of behavior of the individual. A conflict of interest in research exists when "the individual has interests in the outcome of the research that may lead to a personal advantage and that might therefore, in actuality or appearance compromise the integrity of the research." NAS, Integrity in Scientific Research.

Biotechnology, whether in the context of new drugs derived from DNA and genetic technology, genetically modified food, or biologics making use of living cells, raises ethical concerns at a variety of different levels. At the research level, there is concern that the very nature of research is being subverted, rather than enhanced, by entrepreneurship. This area of ethical concern has intensified in the United States as a result of the conflicts of interests resulting from the growing alliance between University academia and private industry in the research enterprise. Source: Kuszler, Patricia C. 2006. "Biotechnology Entrepreneurship and Ethics: Principles, Paradigms, and Products." *Medicine and law* 25(3):491–502

Session 2: Responsible Authorship, Publishing, and Peer Review

Wednesday, 2/1: Mission Bay HD160, 12-1:30 p.m.

Thursday, 2/2: Parnassus S214, 12-1:30pm

Facilitators

Patricia O'Sullivan, EdD and Arianne Teherani, PhD

This topic examines the responsibilities of authors in scientific publication. It includes procedures for assigning credit and authorship, the responsibilities of each author, as well as accepted practices for detailing methods, analyses and results and including appropriate citations. It also can focus on some of the pitfalls such as the pressure to publish.

Session 3: Societal Implications of Scientific Misconduct

Wednesday, 2/8: Mission Bay HD160, 12-1:30 p.m.

Thursday, 2/9: Parnassus S214, 12-1:30pm

Facilitator

Mark Ansel, PhD and Anthony DeFranco, PhD

This session addresses the societal implications of scientific misconduct. Training in this topic also addresses ethical issues involved in the development and dissemination of scientific research findings and how to report occurrences of scientific misconduct.

11.9.16

Session 4: Animal Welfare in Research

Wednesday, 2/15: Mission Bay HD160, 12-1:30 p.m.

Thursday, 2/16: Parnassus S214, 12-1:30pm

Facilitators

Philip Sabes, PhD

This session addresses 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.

Session 5: Scientific Recordkeeping in the Digital Age

Wednesday, 2/22: Mission Bay HD160, 12-1:30 p.m.

Thursday, 2/23: Parnassus S214, 12-1:30pm

Facilitator(s)

Ariel Deardorff, MLIS and Jeffrey Loo, PhD (UC Berkeley)

The data acquisition, management, sharing and ownership topic covers accepted practices and procedures for acquiring, storing, documenting, analyzing, sharing and maintaining data. It includes definitions for what constitutes data, procedures for maintaining the confidentiality and integrity of data, and proper methods for keeping records and processing and analyzing data. It also examines guidelines for who 'owns' data as well as the legal ramifications for intellectual property, patent and copyright laws.

The key to successful research collaboration is frequent, responsible, and fair communication between parties involved. A researcher must consider many factors prior to developing research collaborations. The decision to participate in a collaborative research project is a major **responsibility**; therefore, researchers must fulfill duties in a scholarly and responsible way such as addressing issues immediately as they arise. The ethical issues that may arise through research collaboration continue long after the dissolution of the collaboration. Source: Yoland Smith and Kira Newman, 2012. Emory University "Ethical Issues Related to Research Collaborations"

Session 6: Science in the Genomic Era: Biomedical Research and Human Subjects

Wednesday, 3/1: Mission Bay HD160, 12-1:30 p.m.

Thursday, 3/2: Parnassus S214, 12-1:30pm

Facilitators

Barbara Koenig, PhD; Marsha Michie, PhD; Kevin Shannon, MD; and Zena Werb, PhD

This session addresses complex issues pertaining to biomedical research with human subjects 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.