# BMS 214: Ethics and the Responsible Conduct of Research Spring 2016

Faculty Director: Bruce Conklin, <u>BConklin@gladstone.ucsf.edu</u>
Coordinator: Ulluminair Salim, ulluminair.salim@ucsf.edu

**Locations**: Wednesdays – Parnassus, Nursing Building N517

Thursdays – Mission Bay, Genentech Hall N114

**Time Policy:** 10-11:30 a.m. *Doors close at 10:10 a.m. Late arrivals will NOT be given* 

credit for the session and will need to make up the session next year

**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

handhelds for personal or research-related work during class time.

**Sign-in Policy:** You MUST sign the attendance sheet to receive credit for the session!

Think Piece Policy: In the Event of ONE Pre-approved Absence...

In order to pass BMS 214 you must participate in all seven sessions. However, in the event that you miss one session and have contacted your graduate program administrator IN ADVANCE, you will have the opportunity to fulfill ONE such session 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.

The Think Piece make-up assignment applies only to graduate students who obtain permission in advance to make-up no more than ONE pre-approved missed session

Your pre-approved Think Piece should be 1-2 pages; double spaced; one-inch margins.

# Steps to Take

- 1. Obtain permission IN ADVANCE of missed session by sending a request to your program administrator and carbon copy course coordinator Ulluminair Salim.
- 2. Submit pre-approved Think Piece for ONE missed session to the Dropbox repository (details forthcoming) by 5pm on Thursday, May 26, 2016.

# Week 1 Please arrive ten minutes early and bring UCSF Identification Badge

Wednesday, April 6 (Parnassus N517) or Thursday, April 7 (Mission Bay, Genentech Hall N114) Animal Welfare in Research

Jessica Couch—Senior Scientist and Safety Assessment Therapeutic Area Lead for Biotherapeutic Neuroscience, Genentech

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.

# Week 2

Wednesday, April 13 (Parnassus N517) or Thursday, April 14 (Mission Bay, Genentech Hall N114) Scientific Misconduct and Ethics in Science

Bruce Conklin—Professor, Medical Genetics and Senior Investigator, Gladstone Institutes

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.

#### Week 3

Wednesday, April 20 (Parnassus N517) or Thursday, April 21 (Mission Bay, Genentech Hall N114) Scientific Record Keeping and Data Management

Parnassus Speaker—Anita Sil, Professor, Department. of Microbiology and Immunology Mission Bay Speaker—Michael McManus, Associate Professor, School of Medicine Diabetes Center

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.

# Week 4

Wednesday, April 27 (Parnassus N517) or Thursday, April 28 (Mission Bay, Genentech Hall N114) Science Outside of the Academy - Conflicts of Interest

Christopher Ryan—Director, Human Research Protection Program, UCSF Office of Ethics and Compliance

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.

## Week 5

Wednesday, May 4 (Parnassus N517) or Thursday, May 5 (Mission Bay, Genentech Hall N114) The Art of Mentorship and Being Mentored

Keith Yamamoto—Professor, Cellular and Molecular Pharm. and Vice Chancellor for Research; Executive Vice Dean, School of Medicine

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.

## Week 6

Wednesday, May 11 (Parnassus N517) or Thursday, May 12 (Mission Bay, Genentech Hall N114) Science in the Genomic Era: Biomedical Research and Human Subjects

Barbara Koenig—Professor, Social and Behavioral Sciences and Institute for Health and Aging Kevin Shannon – Auerback Distinguished Professor, Pediatric Molecular Oncology Zena Werb – Professor and Vice-Chair, Anatomy

with Ulluminair Salim -Doctoral Candidate in Sociology

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.

## Week 7

Wednesday, May 18 (Parnassus N517) or Thursday, May 19 (Mission Bay, Genentech Hall N114) Publications and Peer Review

Vivian Siegel – Director of Scientific Education and Public Communication, The Broad Institute of MIT and Harvard; Past Editor-in-Chief of Cell and of Executive Director of PLoS

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