Responsible Conduct in Research Refresher Course
Syllabus and Requirements, Fall Quarter 2023

This is a non-credit course covering topics of scientific integrity and ethics for senior graduate students and postdocs who have already taken a full RCR course earlier in their training. This course is required of biomedical research trainees to satisfy NIH requirements of training at minimum every four years. The course satisfies the requirements for training in Responsible Conduct of Research for predoctoral and postdoctoral trainees supported by federal training grants or individual fellowships. In lieu of course credit, participants will receive a certificate of completion. Participants should register for the class through this link: **Class Enrollment Form**.

Class Schedule: **Mondays and Tuesdays, 9-10:30am on Zoom, October 2-24**

Contact Information for the Instructor, Dr. Lynn Talton:

Email	**LTalton@mednet.ucla.edu**
Office Hours	**Before/After class** or **Email** and set up Zoom/call appt

Reading assignments and course materials will be shared via online Google Docs folder, including selections from:

- *On Being a Scientist: A Guide to Responsible Conduct in Research,* National Academy of the Sciences
- *Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty,* Burroughs Welcome Fund, Howard Hughes Medical Institute

Course Requirements to Receive Certifications of Completion:

1. Attend and participate in every online class discussion meeting
2. Participants may make-up an approved absence for a maximum of two sessions with a written assignment (see below)

If you must miss a session

Participation in all the course sessions is a requirement for passing the course. You can make-up up to **two** missed sessions with a written assignment.

Preparing the Make-up Assignment

An absence will require make-up written assignment for the missed session. Each written assignment will ask the student to review the session materials, add their own comments an additions to each section and complete any session activities. Make-up assignments should be emailed to GradPostdoc@mednet.ucla.edu with the subject line: “Make-Up Assignment” and are due **no later than one week** after the date of the missed class.

Outline of Discussion Topics for each of the Class Sessions

Session 1

Monday Session
October 2
9-10:30AM

Mentor/Mentee Relationships – Learning Objectives:

- What are the expectations for both the mentor and mentee in the training relationship?
- Trainees will develop strategies for approaching mentoring relationships, as both mentor and mentee, including Individual Development Plans, compacts and conversational tools.
- What are the three different types of potentially conflicting roles that mentors must take on?

Session 2

Tuesday Session
October 3
9-10:30AM

Intellectual Property and Technology Transfer – Learning Objectives:

- What are intellectual property policies at UCLA (and most institutions) that apply to trainees and how do they protect the interests of the researcher, university, and funding source?
- What should be considered about potential commercialization or collaboration with industry?

Conflicts of Interest and Commitment – Learning Objectives:

- What are several types of personal, professional and financial conflicts of interest that are common in research institutions and collaborations or relationships with industry or other outside funding sources?
- How are potential conflicts of interest reviewed and what types of mitigation plans may result?

Session 3

Monday Session
October 9
9-10:30AM

Dual Use Research of Concern (DURC) – Learning Objectives:

- What are the types of life sciences research that can be reasonably anticipated to provide knowledge, information, products, or technologies that could be directly misapplied to pose a significant threat to public health and safety?
- How can we promote important scientific progress while minimizing the risk of misuse?

Laboratory Safety – Learning Objectives:

- What are the policies promoting and protecting laboratory safety at UCLA?
- What is the role of the mentee and mentor in creating a culture of safety?

Research Collaborations – Learning Objectives:

- What factors should be discussed in a collaboration agreement and how should collaborators address changes in the agreement as research progresses?

Session 4

Tuesday Session
October 10
9-10:30AM

Data Management – Learning Objectives:

- Know how to appropriately record, label, store and keep data secure. How to use tools that redundantly back up data and facilitate sharing.
- Understand the chain of data ownership and the responsibility to make data usable by others.

Misconduct and Negligence – Learning Objectives:

- In what ways is it inappropriate to manipulate data and how do you avoid inadvertently mishandling your data?
- How do you respond if you see evidence of research misconduct or negligence?

Outline of Discussion Topics for each of the Class Sessions

Session 5

Tuesday Session
October 16
9-10:30AM

Responsible Publication and Presentation – Learning Objectives:

- Be able to recognize and advocate for ethical publication practices in one's projects, including using appropriate citation; avoiding plagiarism; and being clear with readers and reviewers regarding: originality, the strength of effects, lines of evidence that do not support hypotheses, appropriate use of statistical evaluation of data, methodology that promotes rigor, and how data will be shared.

Session 6

Tuesday Session
October 17
9-10:30AM

Peer Review – Learning Objectives:

- What are the strengths and weaknesses of the peer review process?
- What confidentiality is required of reviewers, and how does one appropriately assist in a review with a mentor?
- When should reviewers disclose conflicts of interest and who do you approach with peer review issues or concerns?

Authorship – Learning Objectives:

- How authorship is determined in your work groups and what are the scientific community standards for contributions that merit authorship?
- How do you discuss authorship with mentors and collaborators and support appropriate attribution of credit in your projects?

Session 7

Tuesday Session
October 23
9-10:30AM

Animal Welfare – Learning Objectives:

- How is animal research reviewed and considered?
- What are the ethical guiding principles for animal research?

Human Subjects in Biomedical Research – Learning Objectives:

- How is research with human subjects reviewed and considered?
- What are the ethical guiding principles for research with humans?

Session 8

Tuesday Session
October 24
9-10:30AM

Safe and Inclusive Research Environments – Learning Objectives:

- How do you promote a culture of inclusion and respect?
- Trainees and their colleagues or mentees may experience issues of discrimination, harassment, or violence during their training. How should you respond in these situations?
- Trainees and their colleagues or mentees may experience mental health and wellness challenges or you may fear that someone in your research community could be a danger to themselves or others. What is the best response?