



Responsible Conduct in Research (RCR) Training ~ Fall 2018 ~

Required for entering PhD students in Division of Biology and Medicine

Meeting Times: Tuesdays from 4-6 PM (Sept 18 – Oct 30, 2018)

Location: MACMILLAN HALL – ROOM 115

Course Leaders: Elizabeth O. Harrington, PhD
Associate Dean, Office of Graduate & Postdoctoral Studies

Melissa Walsh, PhD
Training Grant Manager, Office of Graduate & Postdoctoral Studies

Graduate Teaching Assistant: Chapman Beekman, PhD Candidate, MCB

Admin Contact: Tracey Cronin, Office of Graduate and Postdoctoral Studies, 863-3281

Brown University is committed to full inclusion of all students. Please inform Dean Harrington or Tracey Cronin if you have a disability or other condition that might require accommodations or modification of any of these course procedures. You may speak with Dean Harrington after class or send her an email before Sept 18). For more information contact Student and Employee Accessibility Services at 401-863-9588 or SEAS@brown.edu.

TEXT BOOK: **The ORI Introduction to the Responsible Conduct of Research** by Nicholas H. Steneck, updated Edition 2007 *web version or pdf @ <https://ori.hhs.gov/sites/default/files/rcrintro.pdf>*

- **Overall Goals:** The overall goal of this course is to review and discuss what research or scientific misconduct is and the impact unethical conduct can cause within and outside of the research community. Topics to be covered include:
 - ◇ Animal research ◇ Human subject research ◇ Proper representation of data ◇ Original presentation of data/ plagiarism ◇ Authorship ◇ Mentorship ◇ Conflict of interest ◇ Confidentiality ◇ 'Whistle-blowing' ◇ Copyright ◇ Intellectual Property ◇ Data Management and Sharing Plan ◇ Individual Development Plan ◇ Rigor & Reproducibility ◇ Collaborative Science btw Academia and Outside Researchers
- **Expectations:** Requirements to earn certificate of completion:
 - ◇ Attendance/participation in 7 sessions
 - ◇ Completion of assignments
 - ◇ Passing grade on final exam (≥75%) ◇

Speaker and Topic Schedule

9/18/18: *“Introduction and Overview of RCR Course”*

Presenter: Elizabeth O. Harrington, PhD, Assoc. Dean & Professor, Medicine
Overview of training, readings, IDP, google site

“Case Study Breakout Sessions”

Presenter: Chapman Beekman, PhD Candidate, MCB

✚ **Assignment Due 10/30/18:** Complete your online [Individual Development Plan \(IDP\)](#).

9/25/18:

“Human Subjects Research”

Presenter: TBD

- Safe and Ethical Research ▪ The checkered history ▪ Regulations ▪ The complex decisions
▪ IRB ▪ What, Where, and How

“Overview of Mentoring”

Presenter: Mark Johnson, PhD, Associate Professor of Biology, Department
Molecular Biology, Cell Biology, and Biochemistry

- Expectations and Responsibilities of Mentor and Mentee ▪ Conflict Resolution ▪
Professionalism

10/2/18:

“Research Involving Animals”

Presenter: Kareen Coulombe, PhD, Assistant Professor of Engineering and
Medical Science, School of Engineering

- Overview ▪ Past problems ▪ Regulations ▪ Activists ▪ How does this relate to your
research now OR later?

“Conflict of Interest”

Presenter: Jeff Morgan, PhD, Professor, MPPB

- What this means for you as a student and for your faculty mentor

10/9/18: *“Plagiarism and Publications”*

Presenter: John Sedivy, PhD, Professor of Medical Science, Molecular Biology, Cell Biology, and Biochemistry

- What is plagiarism? ▪ Authorship ▪ Publications ▪ Peer Review ▪ Author’s rights ▪ Copyright ▪ Intellectual Property

“Data Reproducibility/ Rigor”

Presenter: Karla Kaun, PhD, Assistant Professor, Neuroscience

- Overview ▪ Scientific integrity ▪ Accountability ▪ Social responsibility ▪ Transparency ▪ Biological variables ▪ Key scientific resources ▪ How does this relate to your research now OR later?

10/16/18: *“Data Management/ Big Data”*

Presenter: Neil Sarkar, PhD, Associate Professor of Medical Science

- How do you store and organize large data sets? ▪ Are these data sets useful for others beyond the people in your own lab?

“Data Sharing/ Data Management”

Presenter: Andrew T. Creamer, MAEd, MSLIS, Scientific Data Management, Brown University Library

- Elements of Data Management and Sharing Plans ▪ Use of disciplinary metadata standards ▪ Preserving and archiving data ▪ Appraisal and depositing data in repositories ▪ Conventions for citing data ▪ Length of time the data needs to be stored after the grant is over, PI leaves, paper published, etc.

10/23/18: *“Collaborative Science with academia and industry”*

Presenter: TBD

- Intellectual property ▪ technology transfer ▪ patents ▪ Bayh-Dole Act ▪ issues with publishing work ▪ materials transfer agreements (MTA)

“Case Studies/ Review”

Presenter: Chapman Beekman, TA

- Preparation for final exam.

10/30/18: **Final Exam**

Note – The contents of this syllabus are subject to change prior to the start of the course, a complete syllabus will be posted prior to Sept 18.

Note: The successful completion of “Responsible Conduct in Research Training” is a requirement for your PhD training, federal training grants and fellowship awards. A Certificate of Completion will be e-mailed by end of the semester to each student who attends all sessions of this class, completes assignments and passes the final exam (score of 75 or higher).

To contact Office for Graduate & Postdoctoral Training:

Phone: 863-3281; e-mail Tracey_Cronin@brown.edu

TA: Chapman Beekman; e-mail Chapman_Beekman@brown.edu