

Responsible Conduct of Research (RCR)

Brown Ethics and Responsible Conduct of Research Education (BEARCORE)

Spring 2023 Syllabus

Course Description

The Brown Ethics And Responsible Conduct Of Research (BEARCORE) program is administered by the Office of the Vice President for Research and is offered to students and trainees from a variety of academic fields, biomedical and non-biomedical. It is designed to acquaint researchers and trainees with ethical issues that emerge in all disciplines, and to equip participants with knowledge and resources to conduct research responsibly and with the highest degree of excellence and integrity.

Successful completion of the BEARCORE training fulfills the National Institutes of Health's (NIH) and the National Science Foundation's (NSF) RCR requirements.

BEARCORE can be taken as a <u>Full RCR course</u> or a <u>Refresher course</u>. If you have not completed an RCR course within the past four years, you must take the Full RCR course.

Course Contacts

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Course Dates

Core Sessions	Date	Time	Location
Core Session - Introduction	Monday, March 6		Campus Center, Petteruti Lounge
Core Session I Data Management and Integrity	Monday, March 13		Campus Center, Petteruti Lounge

Core Session II Collegial Relationships	Monday, March 20	•	South Street Landing, Multipurpose Room (Fourth Floor)
Core Session III Fostering Safe Research Environments	Monday, April 3	•	South Street Landing, Multipurpose Room (Fourth Floor)
Core Session IV Case Study Discussion	Monday, April 17	11 am -1 pm	Campus Center, Petteruti Lounge

Elective Sessions	Date	Time	Location
Elective Session I Ethical Considerations in Human Subjects Research	Tuesday, March 14	1 * *	Campus Center, Petteruti Lounge
Elective Session II International Collaboration and Research Security	Tuesday, March 21	1 * *	Campus Center, Room 225
Elective Session III Ethical Considerations in Animal Research	Tuesday, April 11	1 pm- 2 pm	Zoom
Elective Session IV Grants Management & Fiscal Responsibility	Friday, April 14	1 * *	Campus Center, Room 225

Course Requirements

Full BEARCORE Course:

In order to earn a Certificate of Completion, participants must

- Attend all FIVE Core sessions, and
- Attend at least two one-hour Elective sessions, and

Participants are also expected to engage in class discussions and complete any assigned coursework.

BEARCORE Refresher Course:

If you are enrolled in the BEARCORE refresher course, you must attend at least 8 hours of inperson teaching to receive the RCR Refresher certificate. However, you can choose what sessions to attend in order to fulfill the 8 hour training requirement. For example, you can attend two Core sessions (2 hours each) and four one-hour Elective sessions. Or you can attend three Core sessions and two Elective sessions. If enrolled in the Refresher Option, you do not need to attend the Final Group session in order to receive a certificate of completion.

Required Readings/Assignments: Relevant required readings or assignments will be given prior to each week's class.

BEARCORE Course Descriptions

CORE SESSIONS

<u>CORE Session: Introduction</u> Location: Campus Center, Petteruti Lounge Monday, March 6, 2023 (11 am – 12 pm)

Topic: Introduction to Responsible Conduct of Research Training

Graduate students learn about research norms and acceptable practices in their field by working closely with established researchers and academics, who provide training and mentoring in the responsible conduct of research. That is the theory. In practice, however, the level of training and mentoring that is provided varies from lab to lab; and it is not clear that the responsible conduct of research is taught with the same emphasis and rigor across disciplines. In this session, we will introduce the key concepts and discuss the overall course goals.

In this session, we will also hear from Brown's Research Integrity Officer, Jules Blyth, about research misconduct and other questionable research practices. Many real life cases of unethical conduct of research reveal a whole host of short- comings: from inadequate mentoring, insufficient oversight, and ad hoc or sloppy training, to pressure and intimidation, as well as deliberate teaching of questionable research practices. We will discuss case studies to illustrate how research misconduct can come about and how it may be prevented. We also discuss the avenues and mechanisms for asking questions and raising concerns, as well as look at applicable regulations, policies or guidelines you should be aware of.

Speaker(s)/Facilitators:

Torrey Truszkowski, BEARCORE Lead Instructor, Assistant Director, Research Security and Export Controls, Office of Research Integrity

Juliane Blyth, Senior Director, Office of Research Integrity, Research Integrity Officer

CORE Session I Monday, March 13, 2023

Location: Campus Center, Petteruti Lounge (11 am – 1 pm)

Topic: Data Management and Integrity

In this session, we will explore the concept of research data stewardship by discussing Brown and federal funding agency policies on retention, storage, ownership, security and sharing of research data. This session will also touch on tools and resources for curating data and associated recordkeeping practices, including recommended practices for documenting data and maintaining an electronic laboratory notebook (ELN).

Speakers/Facilitators:

Andrew Creamer, Open Science Librarian, University Library Arielle Nitenson, Assistant Director of Research Integrity, Office of Research Integrity

<u>CORE Session II</u> Monday, March 20, 2023 Location: South Street Landing, 350 Eddy St (11 am - 1 pm)

Multipurpose Room (497-499)

Topic: Collegial Relationships

Relationships form the basis of all scientific endeavors. In this session, we will discuss building relationships among colleagues and how good communication and transparency underpin strong relationships. This session will cover all aspects of collaborative research, including authorship and publication, mentor/mentee relationships, peer review, and collaboration with external colleagues and industry. The session will focus strongly on building the foundations of positive collegial relationships that ease collaboration by preventing and forming clear pathways to resolve potential conflicts.

Speakers/Facilitators:

Natasha Sokol, Assistant Professor of Psychiatry and Human Behavior

Torrey Truszkowski, Assistant Director, Research Security and Export Control, Brown University

CORE Session III

Monday, April 3, 2023

Location: South Street Landing, 350 Eddy St

(11 am - 1 pm)

Multipurpose Room (497-499)

Topic: Fostering safe research environments

This interactive workshop will take place over one, 2-hr session. This first part of the workshop is dedicated to raising awareness of harassment and bullying; the scope and breadth of these hostile behaviors; how academic practices and institutional structures allow for harassment, bullying and other hostile behaviors to persist; and discuss initiatives to address harassment as research misconduct. The second part will provide training and practice in personal intervention strategies to protect and support targets of harassment. As a result of this session, participants will be able to identify: (1) different ways in which sexual and other types of harassment and bullying can manifest in research environments; (2) strategies for bystander intervention, and (3) resources on promoting cultural change.

Speaker/Facilitator:

Professor Meredith Hastings, Department of Earth, Environmental, and Planetary Sciences (DEEPS), Deputy Director, Institute at Brown for Environment and Society (IBES)

CORE Session IV

Monday, April 17, 2023

Location: Campus Center, Petteruti Lounge

(11 am - 1 pm)

Topic: Case Study Discussion

In this session, we will discuss case studies that bring together all of the course content. Please email Torrey by April 10 if you have a case study you would like to discuss at this session.

Speaker/Facilitator:

Torrey Truszkowski, Assistant Director, Research Security and Export Control, Brown University

ELECTIVE SESSIONS

Elective Session I

Tuesday, March 14, 2023

Location: Campus Center, Room 225

(1 pm -2 pm)

Topic: Ethical Considerations in Human Subjects Research

This session will offer an overview of the responsible conduct of research as it pertains to human subjects, whether biomedical or social/behavioral/educational. The presenters will discuss the ethical principles that are the foundation of human subjects research that we follow today. Case studies will be presented to encourage discussion.

Speakers/Facilitators:

Ita Irizarry, MA, CIP, Associate Director, Human Research Protection Program (HRPP), Office of Research Integrity (ORI)

Michael Worden, Assistant Professor of Neuroscience

Elective Session II

Location: Campus Center, Room 225

Tuesday, March 21, 2023 (1 pm -2 pm)

Topic: International Collaboration and Research Security

To ensure the widest possible dissemination of research results, universities focus most of their efforts on conducting basic research that is intended to be shared and published openly in the scientific literature. There are, however, instances when information and technology generated in universities cannot be shared widely for a variety of reasons, including national and economic security. In these instances, universities and their researchers must strike a balance between scientific openness and controlling the release of information.

In this session, we will address several topics that academic researchers should have basic knowledge of: export controls and deemed exports; classified vs. fundamental research; data sharing and protection; and sharing of research materials. We will also discuss the increased scrutiny and legislative action from the U.S. government in response to a perceived increase of academic espionage and theft of intellectual property.

Speaker/Facilitator:

Torrey Truszkowski, Assistant Director, Export Control and Research Security, Brown University

Elective Session III
Location: Zoom

Tuesday, April 11, 2023 (1 pm -2 pm)

Topic: Ethical Considerations in Animal Research

The scientific community largely views research with animal subjects as a scientific necessity to find cures and treatments that will benefit society. However, the use of animals in research is fraught with emotion and considered unethical by some, and anti-research organizations are focused on ending this practice. This session will explore responsible conduct of research as it

applies to the use of animals in research. What is the regulatory framework that governs their use? What are a researcher's ethical obligations when working with animals? This session will discuss the historical and ethical framework that forms the basis of today's animal research regulations and use realistic scenarios to walk through ethical decision-making as it pertains to using animals in research.

Speaker/Facilitator:

Eugene Matullo, Associate Director Animal Research Compliance, Brown University

<u>Elective Session IV</u> Location: Campus Center, Room 225 Friday, April 14, 2023 (1 pm -2 pm)

Topic: Grants Management & Fiscal Responsibility

Most scientists will, in the course of their career, receive sponsored research support, whether it is through a federal grant, a work order, an industry contract or a gift. Unfortunately, most scientists never receive any training on how to manage a grant responsibly. What are the rights and responsibilities under certain funding mechanisms? What is the life cycle of a sponsored award and what is expected of the Principal Investigator (PI) at each stage of the award?

This session will explore the various sponsored research mechanisms and discuss funders' expectations and PI responsibilities.

Speakers/Facilitators:

Melissa Medeiros, Assistant Director, Pre-Award Services, Office of Sponsored Projects, Office of the Vice President of Research

Brandi Glover, Assistant Director, Post-Award Services, Office of Sponsored Projects, Office of the Vice President of Research