

Course Directors

Graeme Mason, Rajita Sinha

Location

MRRC Conference Room, N-135 TAC-MRRC

Textbook

None; Scientific, business and management articles and papers will be assigned. Within each module, relevant sections will address effective strategies in leading a research team, manage collaborations, and carry out team science.

Time

Wednesdays, Spring Semester, 9:00-10:30 am

Objectives

At the end of the course, attendees should understand

- 1) How to write and manage a Human Subjects research protocol with respect to Institutional Review Board (IRB) requirements.
- 2) How to write and manage an Animal research protocol with respect to Institutional Care and Use Committee (IACUC) requirements.
- 3) Effective strategies in leading a research team.
- 4) Funding strategies to sustain an academic research laboratory.
- 5) Financial management of an academic research laboratory.
- 6) Different types of NIH research grants and how to write them.
- 7) Optimal approaches to personnel recruitment, assessment, and supervision.
- 8) Principles of mentoring students and postdoctoral trainees.
- 9) Principles of time management.
- 10) Management of collaborations, with particular attention to interdisciplinary research and team science.
- 11) Rigor and Reproducibility in Experiment Design.
- 12) How to make effective poster presentations, 10-minute oral presentations, and 20-40 minute lectures.

Title	Lecturer
Introduction and Overview	Graeme Mason/Rajita Sinha
<i>Module 1. Resources</i>	
Supervision of Staff and Mentoring Students and Postdoctoral Trainees	Marina Picciotto
Mentoring a Diverse Laboratory	Darin Latimore
Enhancement of Diversity: why and how	Darin Latimore
Management of Resources: strategic deployment of money, materials, staff, and time, negotiating a startup package including benefits like maternity/paternity leave	Douglas Rothman
Managing Data Integrity for Rigor and Reproducibility	Daniel Coman
<i>Module 2. Grant Proposals</i>	
General Principles of Grant Writing	Graeme Mason
Writing the Science for a Grant Proposal, including Rigor and Reproducibility	Gerard Sanacora/Ralitz Gueorguieva
Reviewing Grant Proposals	Douglas Rothman

Title	Lecturer
Module 3. Administration	
Human Research Protocols.	Suchitra Krishnan-Sarin
Animal Research Protocols.	Elizabeth Eynon
Fiscal Management and Responsibilities	Douglas Rothman
Module 4. Dissemination	
What is the take home message of your findings? Writing brief summaries and abstracts; hands-on discussion with papers and talking to the media	Douglas Rothman/ Rajita Sinha
Research Papers	Fahmeed Hyder
Review Articles	Rajita Sinha
Poster Presentations	Henk de Feyter/ Zachary Corbin
Short Talks (10 minutes)	Robin de Graaf
Full-Length Research Presentations (30-40 minutes)	Robin de Graaf