

Establishing a Thriving Research Program Summer 2023

Course Directors

Graeme Mason, PhD, Professor of Radiology and Biomedical Imaging and of Psychiatry

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Course Objectives:

The goal of the course is to provide participants with the practical skills necessary to become successful Physician-Scientists and Scientists in academia. Additionally the course will be a great venue to network with other trainees who are in a similar career stage.

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.

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) The importance of diversity in a research team
- 13) Developing data management and sharing plans
- 14) Faculty Appointments
- 15) Opportunities outside of academia
- 16) How to make effective poster presentations, 10-minute oral presentations, and 20-40 minute lectures.

Date	Room	Time	Presenters	Topic
7/25/2023	SHM I-116	9:45-10:00	Graeme Mason and Rajita Sinha	Introduction
		10:00-11:00	Jonathan Grauer; Samuel Ball	Introduction to Faculty Appointments
		11:00-12:00	Graeme Mason	General Principles of Grant Writing

		12:00-1:00	Graeme Mason	Discussion
7/27/2023	TAC N203	10:00-11:00	Ralitza Gueorguieva	Rigor and Reproducibility
		11:00-12:00	Kaitlin Throgmorton	Writing a Data Management & Sharing Plan
		12:00-1:00	Ralitza Gueorguieva; Kaitlin Throgmorton	Discussion
8/1/2023	SHM I-116	10:00-11:00	Fahmeed Hyder	Research Papers
		11:00-12:00	Jen Edelman	Reviewing Grant Proposals
		12:00-1:00		Discussion
8/3/2023	TAC N203	10:00-12:00	Madelon Baranoski; Monika Lau; Gina Larsen; Linda Coleman	Human Research Protocols
		12:00- 1:00	Madelon Baranoski; Monika Lau; Gina Larsen; Linda Coleman	Discussion
8/8/2023	SHM I-116	10:00-11:00	Douglas Rothman	Management of Resources: strategic deployment of money, materials, staff, and time, negotiating a startup package including benefits like maternity/paternity leave
		11:00-12:00	Rajita Sinha	Review Articles What is the take home message of your findings? Writing brief summaries and abstracts; hands-on discussion with papers and talking to the media
		12:00-1:00	Rajita Sinha	Discussion
8/10/2023	TAC N203	10:00-11:00	Margaret Cartiera	Industry Environment, expectations, recruitment, interviewing, negotiation
		11:00-12:00	Darin Latimore	Enhancement of Diversity: why and how
		12:00-1:00		Discussion
8/15/2023	SHM I-116	10:00-11:00	Tracy Kloczynski; Troy Hallman	Animal Research Protocols
		11:00-12:00		
		12:00-1:00	Tracy Kloczynski; Troy Hallman	Discussion
8/17/2023	TAC N203	10:00-11:00	Marina Picciotto	Supervision of Staff and Mentoring Students and Postdoctoral Trainees
		11:00-12:00	Robin de Graaf	Short (10 minutes) and Full Length (30-40 min) Research Presentations
		12:00- 1:00	Robin de Graaf	Discussion