

SoCRATES: Short Course on Clinical Research and Translational Experience in Science

Course Co-Leaders: Beau B. Bruce and Andi L. Shane

Course Description

This course will provide medical students entering the Discovery Phase with an overview and introduction to clinical and translational research in academic and non-academic settings. Didactic sessions, panel discussions, and a society-based journal club will provide forums for students to gain an appreciation of the fundamentals of clinical and translational research, biostatistics, epidemiology, the research enterprise, and practical and applied aspects of conducting research.

Objectives

At the completion of the course, the student will be able to:

- Describe the opportunities for clinical and translational research in the academic setting.
- Describe the components and complete “cycle of research”.
- Comprehend key biostatistics and epidemiology principles and apply them to their proposed Discovery Phase project.
- Describe the variety of traditional academic and non-traditional research opportunities.
- Describe the research resources at Emory and be able to incorporate their offerings into their Discovery Phase project.
- Critically read and assess a published journal article.

Course Requirements

- Course preparation, attendance, and participation 25%
- Journal Club preparation and participation 25%
- Written knowledge assessment 50%

Day 1 (May 24) - "Introduction"

- 08:00-08:50 Block 1 – Introduction – The Research Experience (Andi Shane)
- 09:00-09:50 Block 2 – Basic study design and epidemiology (Beau Bruce)
- 10:00-10:50 Block 3 – Bringing in a biostatistician (Azhar Nizam)
- 11:00-11:50 Block 4 – Careers in academic medicine (Kate Heilpern)

Day 2 (May 25) - "The Cycle of Research"

- 08:00-08:50 Block 1 – How to be mentored & how to manage your mentor – (Valerie Biousse)
- 09:00-09:50 Block 2 – Finding grant funding (Janet Gross)
- 10:00-10:15 Block 3A – History of ethics in clinical research (Laura Mazer)
- 10:15-10:50 Block 3B – The Institutional Review Board (Sarah Putney and Clifford Gunthel)
- 11:00-11:50 Block 4 – Publishing and presenting (Nathan Flacker)

AFTERNOON: Society Leaders ONLY– instruction for journal club exercise (Igho Ofotokun)

Day 3 (May 26) - "The Research Community"

- 08:00-08:25 Block 1A – Implementation research (Hank Blumberg)
- 08:30-08:55 Block 1B – Team science and multidisciplinary research (David Guidot and Tom Ziegler)
- 09:00-09:50 Block 2 – Resources at Emory (ACTSI, CTSA) – (Jeff Sands)
- 10:00-11:50 Blocks 3 and 4 – The World of Research
 - 10:00-10:50 Global health research (Jim Hughes & Carlos del Rio)
 - 11:00-11:50 Community research (Dan Blumenthal)

Day 4 (May 27) - "Toolbox"

- 08:00-08:50 Block 1 – Bioinformatics – (Marc Overcash)
- 09:00-09:50 Block 2 – Data management – (Andrew Post)
- 10:00-10:50 Block 3 – Reading and critiquing the literature – (Igho Ofotokun & Seema Kini)
- 11:00-11:50 Block 4 – Biostatistical applications – (Beau Bruce)

Day 5 (May 28) - "Journal Club / Wrap-up"

- 08:00-08:50 Block 1–Translational research–(Dennis Choi, Hank Radziewicz, and Susan Johnson)
- 09:00-09:50 Block 2 – Time management/work-life balance – (Susan Johnson)
- 10:00-11:25 Block 3 – Journal Club – (Society leaders)
- 11:30-12:00 Block 4 – Evaluation/Wrap-up/Assessment – (Cam Escoffery)