Certificate Program in Translational Research
Georgia Clinical & Translational Science Alliance, Emory Laney Graduate School

ABOUT THE PROGRAM
The NIH-funded Certificate Program in Translational Research (CPTR) is a multidisciplinary, innovative program which provides trainees with didactic and practical training in clinical and translational research (CTR) in order to transform biomedical scientific discoveries to benefit human health. The program covers a range of topics across the spectrum of CTR and is ideal for investigators seeking to gain skills in translating their findings from laboratory to bedside to community. The CPTR is designed to provide a better understanding of clinical research, CTR infrastructure and how it can be accessed, and to provide experience in interacting with other types of investigators, study subjects, and clinical patients.

CURRICULUM (16 CREDITS TOTAL)
• Introduction to Clinical/Translational Research* (2)
• Fundamentals of Epidemiology (2)
• Biostatistics for Translational Research (2)
• Clinical/Translational Research Ethics* (1)
• Scientific and Grant Writing* (2)
• Research Colloquium* (1)
• Community Engagement and Health Disparities* (1)
• Health Services Research* (1)
• Big Data 2 Knowledge* (BD2K, 1)
• Elective related to translational research (1)
• Translation to Clinical Medicine (2)

*Master of Science in Clinical Research course

Translation to Clinical Medicine: This course provides non-clinicians with a new set of experiences relevant to both their understanding of disease and their research interest(s). Trainees are linked with a funded physician-scientist working in their discipline or area of interest who helps them navigate through the clinical enterprise.

ELIGIBILITY
• The CPTR is available to:
  - PhD graduate students
  - Postdoctoral MD or PhD-equivalent fellows
  - Faculty

• Eligible schools:
  - Emory
  - Georgia Tech
  - Morehouse School of Medicine
  - University of Georgia

• There are no citizenship requirements.
• Emory postdoctoral fellows and faculty employed one year are usually eligible for the Emory Courtesy Scholarship which will cover tuition costs (5 credit hours/semester).

REQUIREMENTS
• The CPTR requires 16 credits of didactic training in the Laney Graduate School of Emory University.
• Additional requirements are:
  - Clinical rotation (20 hrs)
  - Monthly Journal Club
  - IRB Observation
  - Team Science workshops

The CPTR can be personalized to meet a trainee's specific needs and interests.

• The program can be completed in a single year or over two years for a limited impact on laboratory or clinical duties.

CPTR COMPETENCIES

Spectrum of Translational Research
a) Understand the process of translating biomedical discoveries to practice;
b) Describe the spectrum of current cutting-edge translational research (T1-T4);
c) Describe the role of biostatistics and bioinformatics in biomedical and public health research;
d) Collaborate with bioinformatics specialists in the design, development, and implementation of research projects;
e) Critique clinical and translational research;
f) Describe quality improvement research; and

g) Describe the impact of the culture of medicine on translational research.

Designing clinical and translational research studies
a) Conduct a comprehensive and systematic search of the literature using informatics techniques;
b) Develop and rigorously test an experimental hypothesis;
c) Propose a study protocol for addressing a clinical or translational research question;
d) Summarize the principles and practices of the spectrum of community-engaged research;
e) Extract desired information from the medical record.

Research ethics
a) Use high legal and ethical standards in the conduct of research; and
b) Describe the relevance of cultural/population diversity in clinical research design.

Implementing team science and translational research studies
a) Build an interdisciplinary team that matches the objectives of the research problem;
b) Manage a team of interdisciplinary translational scientists;
c) Conduct a clinical or translational research project;
d) Integrate elements of translational research into given study designs that could provide the bases for future research;
e) Generate simple descriptive and inferential statistics that fit the study design chosen and answer research question.

Communication in clinical and translational science
a) Prepare competitive grant proposals;
b) Effectively communicate detailed scientific information in manuscript form; and

c) Communicate information to a research subject in a clinical/translational research trial.

APPLICATION
Applications are reviewed by a committee and acceptances will be based on candidates' interest and potential for a translational research career.

Items needed:
1. Cover sheet – Request form by e-mail
2. NIH-style Biosketch from applicant
3. NIH-style Biosketch from mentor/supervisor
4. Personal statement (maximum one page)
5. Letter of support from supervisor
6. Sealed official transcripts from all colleges and universities previously attended^*  
6. Application fee of $75^*

*Not needed if current PhD student at Emory

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CTSA Clinical & Translational Science Awards

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