Research Education, Training, and Career Development Program

Master of Science in Clinical Research
KL2 – Mentored Clinical and Translational Research Scholars
TL1 – Medical Scientist Training
**Master of Science in Clinical Research**

In order to achieve excellence in the 21st century, investigators undertaking clinical and translational research must couple their knowledge of medicine and biology with analytic sciences including statistical reasoning, decision analysis, probability theory, analytical epidemiology, and informatics. They must also have an understanding of the principles of evidence-based medicine, implementation science, bioethics, clinical trial design, regulations involving human subjects and animals, scientific and grant writing, and responsible conduct of research.

The Master of Science in Clinical Research (MSCR) degree program from the Emory University Laney Graduate School provides didactic and mentored clinical and translational research training. The degree is designed for participants who hold a doctorate or equivalent degree (such as physicians and PhD-level scientists) and have demonstrated a commitment to a career in clinical investigation. Pre-doctoral (medical or PhD graduate) students may apply to the MSCR program through the TL1-Medical Scientist Training Program (dual degree program).

The MSCR requires a minimum of 28 academic credit hours, which include classes, a research thesis, and a written grant proposal. Full time students complete two semesters of class work in the first year. The summer and second year consist of completing required rotations (IRB and Clinical Interaction Network), research project, thesis, and grant. Mentoring is by an established and successful federally-funded clinical investigator.

Admission is rolling and applications are accepted until the class is full. For selected qualified applicants, tuition scholarships are available from the Atlanta Clinical and Translational Science Institute (ACTSI), funded by a NIH Clinical and Translational Science Award (CTSA). Further information is available online: [acts.i.org/retcd](http://acts.i.org/retcd)
MSCR Curriculum

**CORE COURSES**

Introduction to Clinical and Translational Research
Analytic Methods for Clinical and Translational Research I and II
Biostatistics
Data Management
Community Engagement/Health Disparities in Clinical Research
Clinical Trial Design and Analysis
Scientific and Grant Writing for Clinical and Translational Research
Fundamentals of Bioinformatics
Clinical Research Colloquium
Analysis of Clinical Research Data
Ethical, Legal, and Social Issues of Responsible Clinical Research
Rotation in the Clinical Interaction Network (CIN)
Rotation on the Institutional Review Board (IRB)

**ELECTIVE COURSES**

Electives offered include Behavioral Science and Health Education, Bioinformatics, Biostatistics, Epidemiology, Health Policy and Management, and Biology and Biological Sciences
**RETCD Executive Committee**

**Henry M. Blumberg, MD, Program Director**
Professor of Medicine, Division of Infectious Diseases
Emory University School of Medicine
Professor of Epidemiology
Emory University Rollins School of Public Health
Hospital Epidemiologist, Grady Memorial Hospital

**Thomas R. Ziegler, MD, Program Co-Director**
Director, TL1 and Associate Director, Emory CIN
Director, Center for Clinical and Molecular Nutrition
Professor of Medicine, Division of Endocrinology, Metabolism, and Lipids
Emory University School of Medicine

**Michael Benatar**, MBChB, MSc, DPhil
Associate Professor of Neurology and Epidemiology
Director, Electromyography Laboratory
Director, Muscular Dystrophy Association Clinic Neurology
Emory University School of Medicine

**John R. Boring, III, PhD, MSCR Co-Director**
Professor of Epidemiology
Emory University Rollins School of Public Health

**Barbara D. Boyan, PhD**
Professor
Associate Dean for Research, College of Engineering
Price Gilbert Jr. Chair, Tissue Engineering
Wallace H. Coulter Department of Biomedical Engineering
Georgia Institute of Technology
Georgia Research Alliance Eminent Scholar

**Cam Escoffery**, PhD, MPH, CHES
Clinical Assistant Professor of Behavioral Science and Health Education
Emory University Rollins School of Public Health

**Mitchel Klein, PhD**
Research Assistant Professor of Environmental and Occupational Health Epidemiology
Emory University Rollins School of Public Health

**Amita Manatunga, PhD**
Professor of Biostatistics and Bioinformatics
Emory University Rollins School of Public Health

**Patricia Marsteller, PhD**
Director, Emory College Center for Science Education
Hughes Science Initiative and SURE
Emory University

**Greg S. Martin, MD, MSc**
Associate Professor of Medicine, Division of Pulmonary, Allergy, and Critical Care Medicine
Emory University School of Medicine
CIN Site Director, Emory University Hospital Midtown

**John E. McGowan, MD, MSCR Co-Director**
Professor of Epidemiology
Emory University Rollins School of Public Health
Professor of Medicine (Infectious Diseases)
Emory University School of Medicine

**Dominique L. Musselman, MD, MSc**
Associate Professor of Psychology and Behavioral Sciences
Emory University School of Medicine

**Douglas F. Paulsen, PhD**
Associate Dean for Graduate Studies
Director, MS and PhD Programs in Biomedical Sciences
Professor of Pathology and Anatomy
Morehouse School of Medicine

**Alexander Quarshie**, MD, MSc
Associate Director, Morehouse School of Medicine MSCR
Director, Biostatistical and Data Management Center
Research Assistant Professor of Community Health and Preventive Medicine
Morehouse School of Medicine

**William M. Shafer, PhD, Co-Director, ACTSI TL1**
Professor of Microbiology and Immunology
Graduate Division of Biological and Biomedical Sciences
Emory University
Senior Research Career Scientist
VA Medical Center (Atlanta)

**Viola Vaccarino**, MD, PhD
Professor of Medicine, Division of Cardiology
Emory University School of Medicine
Professor of Epidemiology
Emory University Rollins School of Public Health
Director, Emory Program in Cardiovascular Outcomes Research and Epidemiology (EPICORE)

**RETCD Advisory Committee**

**David S. Stephens, MD, Chair PI, ACTSI**
Vice President for Research
Woodruff Health Sciences Center
Stephen W. Schwarzman Distinguished Professor of Medicine
Division of Infectious Diseases
Emory University School of Medicine

**Don P. Giddens, PhD, Co-Chair**
Dean of College of Engineering
Georgia Institute of Technology
Professor of Biomedical Engineering
Emory University and Georgia Institute of Technology

**David Satcher, MD, PhD, Co-Chair**
Director, Center of Excellence on Health Disparity
Poussaint-Satcher-Cosby Chair in Mental Health
Morehouse School of Medicine
Gang Bao, PhD
Robert A. Milton Chair in Biomedical Engineering
College of Engineering Distinguished Professor
Emory University and Georgia Institute of Technology

Arlene B. Chapman, MD
Director, Emory CIN
Professor of Medicine, Renal Division
Emory University School of Medicine

Carlos del Rio, MD
Hubert Professor and Chair, Department of Global Health
Emory University Rollins School of Public Health
Professor of Medicine (Infectious Diseases)
Emory University School of Medicine
Co-Director, Emory Center for AIDS Research (CFAR)

Gary H. Gibbons, MD
Director, MSM Cardiovascular Research Institute
Professor of Medicine
Morehouse School of Medicine

Kenneth W. Hepburn, PhD
Associate Dean for Research
Emory University Nell Hodgson Woodruff School of Nursing

Nadine Kaslow, PhD
Professor of Psychiatry and Behavioral Sciences
Emory University School of Medicine
Chief Psychologist, Grady Memorial Hospital

Jeffrey P. Koplan, MD, MPH
Vice President for Global Health
Director, Global Health Institute
Emory University

David H. Ledbetter, PhD
Director of Division of Medical Genetics
Robert W. Woodruff Professor of Human Genetics
Emory University School of Medicine

Kathleen R. Miner, PhD
Associate Dean for Applied Health
Professor of Behavioral Sciences and Health Education
Emory University Rollins School of Public Health

Elizabeth Ofili, MD, MPH
Director, Morehouse School of Medicine MSCR Program
Professor of Medicine and Chief, Cardiology
Director, MSM Clinical Research Center
Morehouse School of Medicine

Charles Parkos, MD, PhD
Professor of Pathology
Director, MD/PhD Program
Emory University School of Medicine

Tristram G. Parslow, MD, PhD
Professor and Chair of Pathology and Laboratory Medicine
Emory University School of Medicine

Joel H. Saltz, MD, PhD
Director, Center for Comprehensive Informatics
Woodruff Health Sciences Center
Chief Medical Information Officer
Emory Healthcare and Emory University

Jeff M. Sands, MD, Co-PI, ACTSI
Associate Dean, Clinical and Translational Research
Director, Renal Division
Juha P. Kokko Professor of Medicine
Emory University School of Medicine

Barbara J. Stoll, MD
Professor and G. W. Brumley Jr. Chair of Pediatrics
Emory University School of Medicine
Medical Director
Children's Healthcare of Atlanta at Egleston

Keith D. Wilkinson, PhD
Professor of Biochemistry
Director, Graduate Division of Biological and Biomedical Sciences
Emory University

Stuart M. Zola, PhD
Director, Yerkes National Primate Research Center
Professor of Psychiatry and Behavioral Sciences
Emory University School of Medicine
Senior Research Career Scientist
VA Medical Center (Atlanta)

RETCD Other Faculty
Claudia Adkison, JD, PhD
John Banja, PhD
Beau B. Bruce, MD
Angela Caliendo, MD, PhD
Dennis Choi, MD, PhD
Steven Culler, PhD
Carlton Dampier, MD
Robert Davis, MD, MPH
David M. Guidot, MD, MPH
Clifford J. Gunthel, MD
Robert Nerem, PhD
Azhar Nizam, MS
Igho Ofotokun, MD, MSc
Patricia L. Olinger, RBP
Saad B. Omer, PhD, MPH, MBBS
Marc Overcash
Kerry Peluso
Sarah B. Putney, JD/CIP
Henry Radziewicz, MD, MSc
Kimberly Rask, MD, PhD
Brenda Seiton, JD
Scott W. Thomaston, MS/MPH
Winifred Wilkins Thompson, PhD, MSW
Shanita D. Williams, PhD, MPH, APRN
Stanley Wilson, MMSc/CHP
Kristin West, JD
MSCR Application Process

MSCR applications are reviewed by the Research Education, Training, and Career Development (RETCD) Executive Committee. Candidates are selected on the basis of academic qualifications, departmental recommendations, diversity, and multidisciplinary background. Information on the programs, applications, and instructions are available online: actsi.org/retcd

KL2 – MENTORED CLINICAL AND TRANSLATIONAL RESEARCH SCHOLARS
The KL2 - Mentored Clinical and Translational Research Scholars program is supported by a NIH Clinical and Translational Science Award (CTSA) and provides didactic and mentored clinical and translational research training. The program is open to Emory University, Georgia Institute of Technology, and Morehouse School of Medicine junior faculty with a doctorate (MD or PhD), at the level of instructor or assistant professor, who are committed to a career in clinical and/or translational research. The MSCR is the didactic portion of the research training. Those funded receive 75% salary support, research costs, and tuition for the MSCR. Candidates are selected through a competitive process. Applications are due March 1.

TL1 – MEDICAL SCIENTIST TRAINING
The MD/MSCR and PhD/MSCR dual degree programs support pre-doctoral clinical and translational research training for medical students and other health professionals pursuing doctorate degrees in public health, biomedical sciences, and nursing. Stipends and tuition support are available under the Medical Scientist Training Program to candidates not supported by a NIH or other federal grant. Applications are due March 1. Further information is available online: actsi.org/retcd
**MSCR APPLICATION**

For application to the Master of Science in Clinical Research (MSCR) degree program, apply to the Graduate School at Emory University. The application is online: [www.gs.emory.edu/apply](http://www.gs.emory.edu/apply)

**ADDITIONAL MATERIALS**

MSCR applicants must submit the following additional materials by e-mail to: csroka@emory.edu

1. Curriculum Vitae
2. Research project thesis proposal
3. Commitment letter from Department Chair to provide:
   - Applicant salary/stipend during study
   - Protected time (40+ hr/wk) to complete requirements
   - Thesis research mentor
4. Mentor NIH Biosketch, other support, and commitment letter
5. Request for tuition scholarship if applicable

Dr. Jeannie Visootsak, KL2 scholar and MSCR graduate, with study participant
Further information about the ACTSI Research Education, Training, and Career Development Program (MSCR, KL2, and TL1) is available online: actsi.org/retcd

Contact: Cheryl Sroka
1599 Building, 1599 Clifton Road NE, Room 1.416
Atlanta, GA 30322
404-727-5096
404-727-5021 (fax)
csroka@emory.edu