

MEDICAL SCIENTIST TRAINING PROGRAM (MD/PHD)

<http://mdphd.med.miami.edu/>

Overview

The Miller School of Medicine Medical Science Training Program (MD-PhD Program) provides a unique training environment for exceptionally qualified individuals who want to pursue careers combining medicine and research. The curriculum comprises the school's outstanding preclinical and clinical training, rigorous PhD graduate training and several elements, including professional development workshops, clinical case reviews, MSTP symposium and other activities, specifically designed to provide an integrated research/clinical training experience for MD/PhD students. There has been a long tradition of research excellence and physician scientist training at the Miller School of Medicine. With the opportunities for basic, translational and clinical research here, Miami's diverse population and access to Latin America and the Caribbean, the backdrop of a vibrant city, make the Miller School a unique place for physician scientist training.

PhD Programs

The following doctoral programs, described elsewhere in this bulletin, participate in the MSTP. The MSTP office can provide you with further information about these programs and the research interests of their faculty.

- Biochemistry & Molecular Biology (<http://biomed.med.miami.edu/graduate-programs/biochemistry-and-molecular-biology/>)
- Biomedical Engineering (<http://bulletin.miami.edu/graduate-academic-programs/engineering/biomedical-engineering/biomedical-engineering-phd/>)
- Biostatistics (<http://www.biostat.med.miami.edu/academics/phd-in-biostatistics/>)
- Cancer Biology (<http://biomed.med.miami.edu/graduate-programs/cancer-biology/>)
- Cellular Physiology and Molecular Biophysics (<http://biomed.med.miami.edu/graduate-programs/physiology-and-biophysics/>)
- Epidemiology (<http://publichealth.med.miami.edu/graduate/academic-programs/phd-in-epidemiology/>)
- Human Genetics & Genomics (<http://biomed.med.miami.edu/graduate-programs/human-genetics-and-genomics/>)
- Microbiology and Immunology (<http://biomed.med.miami.edu/graduate-programs/microbiology-and-immunology/>)
- Molecular Cell & Developmental Biology (<http://biomed.med.miami.edu/graduate-programs/molecular-cell-and-developmental-biology/>)
- Molecular and Cellular Pharmacology (<http://biomed.med.miami.edu/graduate-programs/molecular-and-cellular-pharmacology/>)
- Neuroscience (<http://biomed.med.miami.edu/graduate-programs/neuroscience/>)
- Prevention Science & Community Health (<http://publichealth.med.miami.edu/graduate/academic-programs/phd-in-prevention-science/>)

Contact Information

Sandra Lemmon, PhD, Program Director
Alessia Fornoni, MD, PhD, Associate Program Director

Daniel Liebl, PhD, Associate Program Director
Santos I. Cayetano, Assistant Director

University of Miami, Miller School of Medicine
MD/PhD Program Office
1600 NW 10th Avenue, Room 1129
PO Box 016189
Miami, Florida 33101-6189
305 243 2478
MSTP@miami.edu

Admission Requirements

Admission to the MSTP is highly competitive, and interested applicants are advised to apply early in the fall. AMCAS applications must be received by the Medical Admissions Office no later than December 15. Applicants must complete the minimum course requirements (<http://admissions.med.miami.edu/md-programs/general-md/prerequisites/>) of the MD Program to be considered for the MSTP. The Graduate Record Examination (GRE) is not required for matriculation into the MSTP.

Competitive applicants will have the following:

- Completed AMCAS & Secondary Application for MSTP
- Excellent academic record
- Strong MCAT scores
- Significant research experience

- Co-authorship on abstracts and / or peer-reviewed papers is desirable
- Strong letters of recommendation from research mentors and other scientists who can specifically address the applicant's potential as a physician scientist
- Motivation to pursue a career as a physician scientist

Applications from under-represented groups, including minorities, individuals with disabilities and women, are encouraged.

All MSTP applicants are reviewed by both the MD Program Admissions Committee and the MSTP Program Admissions Committee. These evaluations proceed independently, and a student will still be considered for the MD program even after an unfavorable review by the MSTP. A successful applicant is granted admission to both the MD Program and the MSTP.

Full application instructions can be found here (<http://mdphd.med.miami.edu/Admissions/>).

Curriculum Requirements - Medicine

Code	Title	Credit Hours
MD Degree Requirements (136 credits)		
Phase 1: Pre-Clerkship		
MDR 550	Introduction to the Medical Profession	3
MDR 526	Biomedical Principles of Health I	5
MDR 527	Biomedical Principles of Health II	5
MDR 531	Medicine as a Profession 1	4
MDR 532	Medicine as a Profession 2	4
MDR 533	Medicine as a Profession 3	1
MDR 520	Symptoms, Signs, and Disease 1	3
MDR 521	Symptoms, Signs, and Disease 2	4
MDR 522	Symptoms, Signs, and Disease 3	6
MDR 523	Symptoms, Signs, and Disease 4	3
MDR 524	Symptoms, Signs, and Disease 5	6
MDR 525	Symptoms, Signs, and Disease 6	5
Phase 2: Integrated Clerkships		
MDR ###	Transition to Clerkships	1
MDR 715	Integrated Pediatrics and Obstetrics and Gynecology	12
MDR 716	Integrated Surgery, Emergency Medicine, and Anesthesiology	12
MDR 717	Integrated Medicine	12
MDR 718	Integrated Psychiatry, Neurology, and Family Medicine	12
MDR ###	Medicine as a Profession Clerkships 1	1
MDR ###	Medicine as a Profession Clerkships 2	3
MDR ###	Medicine as a Profession Clerkships 3	2
Phase 3: Advanced		
MDR ###	Sub-Internship	4
MDR ###	Clinical Selective	4
MDR ###	Integrated Science Selective	4
MDR ###	Critical Care Selective	2
MDR ###	Transition to Residency	2
MDR ###	Specialty Boot Camp	2
	Electives	14
PhD Requirements		
60		
See individual programs for full curriculum.		
	PhD in Biochemistry and Molecular Biology	
	PhD in Biomedical Engineering	
	PhD in Biostatistics	
	PhD in Cancer Biology	
	PhD in Epidemiology	
	PhD in Human Genetics and Genomics	

PhD in Microbiology and Immunology	
PhD in Molecular and Cellular Pharmacology	
PhD in Molecular Cell and Developmental Biology	
PhD in Neuroscience	
PhD in Physiology and Biophysics	
PhD in Prevention Science and Community Health	
Total Credit Hours	196

The following doctoral programs, described elsewhere in this bulletin, participate in the MSTP. Follow the link for each program's curriculum requirements:

- Biochemistry & Molecular Biology (<http://bulletin.miami.edu/graduate-academic-programs/medicine/biochemistry-molecular-biology/biochemistry-and-molecular-biology-phd/#curriculumtext>)
- Biomedical Engineering (<http://bulletin.miami.edu/graduate-academic-programs/engineering/biomedical-engineering/biomedical-engineering-phd/>)
- Biostatistics (<http://bulletin.miami.edu/graduate-academic-programs/medicine/biostatistics/biostatistics-phd/#curriculumtext>)
- Cancer Biology (<http://bulletin.miami.edu/graduate-academic-programs/medicine/cancer-biology/cancer-biology-phd/>)
- Cellular Physiology and Molecular Biophysics (<http://bulletin.miami.edu/graduate-academic-programs/medicine/physiology-biophysics/#curriculumtext>)
- Epidemiology (<http://bulletin.miami.edu/graduate-academic-programs/medicine/public-health/epidemiology-phd/#curriculumtext>)
- Human Genetics & Genomics (<http://bulletin.miami.edu/graduate-academic-programs/medicine/human-genetics-genomics/human-genetics-and-genomics-phd/>)
- Microbiology and Immunology (<http://bulletin.miami.edu/graduate-academic-programs/medicine/microbiology-immunology/microbiology-and-immunology-phd/>)
- Molecular Cell & Developmental Biology (<http://bulletin.miami.edu/graduate-academic-programs/medicine/molecular-cell-developmental-biology/#curriculumtext>)
- Molecular and Cellular Pharmacology (<http://bulletin.miami.edu/graduate-academic-programs/medicine/molecular-cellular-pharmacology/#curriculumtext>)
- Neuroscience (<http://bulletin.miami.edu/graduate-academic-programs/medicine/neuroscience/#programplantext>)
- Prevention Science & Community Health (<http://bulletin.miami.edu/graduate-academic-programs/medicine/public-health/prevention-science-community-health-phd/#curriculumtext>)