

BIOMEDICAL SCIENCES

INTEGRATED PROGRAM IN THE BIOMEDICAL SCIENCES

- BIOCHEMISTRY AND MOLECULAR BIOLOGY (PhD, MS)
- CELL AND MOLECULAR PHYSIOLOGY (PhD, MS)
- INTEGRATIVE CELL BIOLOGY (PhD, MS)
- MICROBIOLOGY AND IMMUNOLOGY (PhD, MS)
- MOLECULAR PHARMACOLOGY AND THERAPEUTICS (PhD, MS, MS/MBA)
- NEUROSCIENCE (PhD, MS)

MEDICINE AND HEALTH-RELATED CREDENTIALS

- MEDICAL PHYSIOLOGY (MS)
- CELLULAR AND MOLECULAR ONCOLOGY (MS)
- CLINICAL & APPLIED PROTEOMICS
- INFECTIOUS DISEASE AND IMMUNOLOGY (MS)
- PHARMACOLOGY/BUSINESS (MS/MBA)
- PHARMACOVIGILANCE (CERTIFICATE)

BIOETHICS AND HEALTH CARE MISSION LEADERSHIP

- BIOETHICS AND HEALTH POLICY (DBE, ONLINE MA, ONLINE CERTIFICATE)
- HEALTH CARE MISSION LEADERSHIP (PhD, MA)
- HEALTH CARE MISSION LEADERSHIP (CERTIFICATE)

Located at the Loyola University Health Sciences Campus in suburban Maywood, Illinois, these graduate programs provide solid training for research scientists in conjunction with the resources of one of the highest rated medical centers in the Midwest and the Stritch School of Medicine. Researchers and clinicians collaborate in the Center for Translational Research and Education (CTRE), a state-of-the-art research facility at the heart of the campus.

INTEGRATED PROGRAM IN THE BIOMEDICAL SCIENCES

At the Health Sciences Campus, we offer laboratory research degrees under the umbrella of the Integrated Program in the Biomedical Sciences (IPBS). The IPBS encompasses all of our Biomedical Sciences disciplines, providing students with flexible options. All of these tracks also offer a 2-year, thesis-based Master of Science (MS) degree.

BIOCHEMISTRY AND MOLECULAR BIOLOGY (PhD, MS)

The Biochemistry and Molecular Biology program is an interdisciplinary program offering students the opportunity to pursue research and training in human cancer and experimental therapeutics, molecular virology, bacteria/host symbiosis, molecular immunology, molecular cardiology, eukaryotic and prokaryotic gene transcription, epigenetics, genetics, and signal transduction.

CELL AND MOLECULAR PHYSIOLOGY (PhD, MS)

The Cell and Molecular Physiology track trains students to integrate the acquisition and analyses of foundational research data in the context of dynamic physiology, with the goal of understanding the molecular basis of cell function and dysfunction within the organism. With cardiovascular science, neuroscience and metabolism as the main research themes in this track, students receive innovative training in biochemistry, biophysics, cell biology, molecular biology, systems physiology and pathophysiology.

INTEGRATIVE CELL BIOLOGY (PhD, MS)

This track prepares students to pursue career in academic research, teaching, or the pharmaceutical industry. Our faculty's strength is in eukaryotic cells at the cellular and molecular levels, encompassing various disciplines from cellular structures, normal hematopoiesis through inflammation, amyloid proteins in neurodegenerative disease, trauma and tissue injury, gut microbiota, tumor immunology, and cancer.

MICROBIOLOGY AND IMMUNOLOGY (PhD, MS)

This track prepares students for careers in microbiology, virology, immunology, and molecular biology. Major areas of research are molecular and cellular immunology, bacterial and viral pathogenesis, bacterial symbiosis, bacterial genetics, molecular virology, neuroimmunology, cancer immunology, mucosal immunology, and molecular biology.

MOLECULAR PHARMACOLOGY (PhD, MS)

This track trains students for research and teaching in medical schools, research centers, and the pharmaceutical industry. Students gain a deeper understanding of the mechanisms of drug action, drug-receptor interactions, and cellular signal transduction.

NEUROSCIENCE (PhD, MS)

Loyola's interdisciplinary Neuroscience track provides a rich, stimulating, and supportive research atmosphere that enables students to appreciate the whole spectrum of neuroscience research, from the molecular to the behavioral.

MEDICINE AND HEALTH-RELATED CREDENTIALS

The following programs are designed to prepare you for a career in medicine or health-related laboratory research in academia or industry.

MEDICAL PHYSIOLOGY (MS)	This degree program offers a solid foundation in biochemistry, biophysics, cell biology, molecular biology, physiology and pathophysiology, with cardiovascular research as the major focus. This is a 1-year, non-thesis program designed for college graduates interested in strengthening their understanding of medical physiology. Graduates are equipped to succeed—98% of our alumni are accepted into medical school.
CELLULAR AND MOLECULAR ONCOLOGY (MS)	The MS in Cellular and Molecular Oncology is a 2-year program. The training is focused on designing, conducting, and interpreting cancer research projects. Graduates will be well-prepared to pursue additional education (e.g. PhD, MD, JD) or directly enter careers as cancer-focus researchers in industry, academia, or as clinical coordinators.
CLINICAL AND APPLIED MASS SPECTROMETRY (MS)	The Master of Science in Clinical and Applied Mass Spectrometry (MS CAMS) is a program designed for science graduates and those already working in the field of scientific research who wish to pursue or advance their career through specialized study in the exciting field of Mass Spectrometry.
INFECTIOUS DISEASE AND IMMUNOLOGY (MS)	Infectious diseases are among the most profound health challenges facing humanity today. With the increasing need for researchers with cross-disciplinary training in both basic and clinical research, the MS in Infectious Disease and Immunology offers a strong foundation of skills for those looking forward to careers in translational research, medicine, and teaching.
PHARMACOLOGY/BUSINESS (MS/MBA)	The combined MS/MBA is a joint program with the School of Business. The ability of our graduates to understand both the science and business aspects of developing and marketing a new product or therapy gives them a competitive advantage in obtaining a position in industry and advancing their careers.
PHARMACOVIGILANCE (CERTIFICATE)	The Certificate in Pharmacovigilance gives students an opportunity to expand their knowledge of the modern tools that collect, detect, assess, monitor, and prevent adverse effects of approved therapeutics. This program is especially suited to medical, biotech, life science, and pharmaceutical professionals.

BIOETHICS AND HEALTH CARE MISSION LEADERSHIP

If you want to take the next step in your career, these credentials could set you apart from your peers.

BIOETHICS AND HEALTH POLICY (DBE, ONLINE MA, ONLINE CERTIFICATE)	The Bioethics programs are ideal for physicians, nurses, social workers, chaplains, and other health care professionals interested in developing their bioethics knowledge and skills. The master's degree and certificate program can be taken entirely online; the doctoral program has concentrations that require on-campus attendance in our blended courses.
HEALTH CARE MISSION LEADERSHIP (DOCTORATE, MA)	The MA in Health Care Mission Leadership offers professional preparation for those in senior leadership positions in a health care environment who are charged with developing, enhancing, cultivating, and protecting the identity and mission of their organizations. The Doctorate significantly builds upon the MA and is the only program of its kind in the U.S.
HEALTH CARE MISSION LEADERSHIP (CERTIFICATE)	The Certificate in Health Care Mission Leadership is for associates across Catholic health care who wish to deepen their understanding of the theological, ethical, and practical elements of the mission and ministry of Catholic health care.

STUDENT PLACEMENT Information on student placement can be found on program websites, accessible via LUC.edu/biomed.

LEARN MORE

APPLICATION REQUIREMENTS AND DEADLINES

LUC.edu/biomed

CONTACT INFORMATION

For further information about academic programs, or to arrange a visit, please contact:

Biomedical Sciences
Graduate School Administration
Loyola University Chicago
Health Sciences Campus

PHONE: 708.216.3531

EMAIL: loyolabiomed@LUC.edu

ONLINE: LUC.edu/biomed

Send all supporting documents to:

Graduate and Professional
Enrollment Management
Loyola University Chicago
820 N. Michigan Avenue
Lewis Towers 1200
Chicago, IL 60611

PHONE: 312.915.7900

EMAIL: GradApp@LUC.edu

ONLINE: gpem.LUC.edu/apply

To directly inquire about a specific academic program, contact the appropriate Graduate Program Director.

BIOCHEMISTRY AND MOLECULAR BIOLOGY	708.327.3358
BIOETHICS AND HEALTH POLICY	708.327.9200
CELL AND MOLECULAR PHYSIOLOGY	708.216.9508
CELLULAR AND MOLECULAR ONCOLOGY	708.327.3112
CLINICAL AND APPLIED MASS SPECTROMETRY	708.216.1017
INFECTIOUS DISEASE AND IMMUNOLOGY	708.327.3205
INTEGRATED PROGRAM IN THE BIOMEDICAL SCIENCES	708.327.2817
INTEGRATIVE CELL BIOLOGY	708.216.3603
MEDICAL LABORATORY SCIENCES	708.216.6915
MEDICAL PHYSIOLOGY	708.216.9508
MICROBIOLOGY AND IMMUNOLOGY	708.216.3706
MOLECULAR PHARMACOLOGY AND THERAPEUTICS	708.216.3362
NEUROSCIENCE	708.216.5652

