MASTER OF SCIENCE IN BIOTECHNOLOGY

Biotechnology is a far-reaching discipline in which biological organisms or products are exploited to develop new technologies for human benefit. The novel tools and products developed by biotechnologists are used in research, agriculture, industry and the clinic.

The Master of Science in Biotechnology at Drexel University College of Medicine is an innovative, non-thesis graduate degree program that emphasizes hands-on training in state-of-the-art laboratory techniques that are used across the biotechnology and biomedical industries. This program provides students with the necessary technical and professional skills to successfully secure gainful employment in both biotechnology/pharmaceutical firms and academic laboratories.

PROGRAM OF STUDY

The Master of Science in Biotechnology program consists of two complementary aspects:

CLASSROOM-BASED

A set of required and elective courses designed to provide students with the theoretical underpinnings of modern biochemistry and molecular biology, as well as the tools for professional success in the workplace.

LABORATORY-BASED

Practica in academic and pharmaceutical settings that immerse the student in the applications of state-of-the-art technologies used in biomedical research.

PRACTICA THEMES:

- Laboratory foundations
- Protein expression and purification
- Crystallography (sample preparation and crystallization)
- Gene expression and manipulation
- Protein-Protein and Protein-ligand interaction using surface plasmon resonance (SPR)
- Imaging and microscopy
- RNA purification and analysis

Practica are performed in laboratories conducting cutting-edge research in inhibitor design, structural biology, molecular machines, and cell biology.

ADMISSION REQUIREMENTS

- Completed online application and supplemental materials by deadline
- Deadlines:
  - Domestic – July 1st
  - International – May 15th
- Bachelor’s degree from an accredited college or university
- GRE scores obtained within the last five years. TOEFL or IELTS also required for international applicants
- Official transcripts from all post-secondary institutions attended
- Essay or personal statement
- Resume
- Three letters of recommendation
- Application fee

CONTACT US

BIOTECHNOLOGY
Graduate School of Biomedical Sciences and Professional Studies

Simon Cocklin, PhD
Program Director
215.762.7234 | sc349@drexel.edu

Amanda Mangano
Academic Administrator
215.762.8217 | amm523@drexel.edu

drexel.edu/medicine/academics/graduate-school/biotechnology/