

M.S. in Biotechnology



Bayer School of Natural
and Environmental Sciences



Make your mark as a leader in biotechnology.

Set yourself apart in the medical, health and scientific industries with an M.S. in Biotechnology from Duquesne's Bayer School of Natural and Environmental Sciences.

In this graduate-level program, you'll learn not just science, but also the essentials of regulatory affairs, ethics, business, law and product development. You'll build a firm foundation in the biotechnology field, conducting cutting-edge research and expanding your skills in leadership, communication and project management.

Our unique, comprehensive biotechnology curriculum goes further – providing advanced scientific training coupled with instruction in the management skills that employers seek. Courses are shaped by an advisory board of CEOs, chief medical officers and other executives from the biotechnology and health industries, incorporating real-world experience to prepare for your success at work after graduation.

Choose from two program tracks:

- **Biotechnology commercial track**, which emphasizes the skills needed to solve commercial and medical needs
- **Biotechnology pre-medical and academic track**, which gives you the opportunity to take a greater number of traditional courses in biology and biochemistry in preparation for further academic training

Start your M.S. in Biotechnology as an undergraduate and earn both your B.S. and your M.S. in just five years. Or, complete our 30-credit graduate degree in two years or less if you already have an undergrad degree in the natural sciences.

You can customize electives as part of your M.S. in Biotechnology studies. Visit duq.edu/biotech/curriculum for course sequences and elective options.





Minghua Li
M.S. Biotechnology '17

"The best attribute of the Bayer School is the faculty. Thanks to the instructors' broad backgrounds, I learned not only biotechnology, but also other related fields, such as disease diagnosis, pharmaceuticals and medical devices."



Duquesne's **Center for Biotechnology** is an interdisciplinary organization of faculty members, postdoctoral fellows and students from our nine schools and our biomedical engineering program.

Partner with accomplished scientists on cutting-edge research.

At Duquesne, you'll work on groundbreaking projects alongside nationally recognized instructors who are experts in their fields.

Duquesne professors are always eager to mentor, and are excited to share their knowledge and experience with you. Here are just a few examples of our biotechnology faculty's **research** and **areas of expertise**:

- Bioinformatics
- Cancer drug development and discovery
- Clinical diagnostics and devices
- Drug screening and formulation
- Genetic engineering
- Microbiology and vaccines
- Regulatory affairs and quality

Learn more about our biotechnology instructors: duq.edu/biotech/faculty

You'll take classes in business, law, leadership, biomedical engineering and other disciplines taught by faculty from other Duquesne schools and programs. It's a great opportunity to gain perspective while learning alongside professors and students with diverse academic backgrounds.

Explore biotechnology in our top-notch labs.

Conduct impressive research with Duquesne's state-of-the-art instrumentation and resources.

You'll perform experiments in our 15,000 square feet of combined lab space at Duquesne and learn product development at the Citizen Science Lab, located just blocks away from our campus. Discover biotechnology research in our modern cell and tissue culture facilities using DNA analysis, fluorescent microscopy and analytical instrumentation.

Recent Duquesne biotechnology research projects have been funded by federal agencies and prestigious foundations such as the **U.S. Economic Development Administration, Buhl Foundation** and **Gable Foundation**.

Take your education to the doctoral level. Duquesne biotechnology graduates have been accepted into top universities including **University of Maryland, Duke University, Columbia University, University of Arizona Medical School** and **LECOM**.

Connect to a bright career.

You'll be well-prepared for your future in science—and wherever else life takes you.

Biotechnology is one of the world's fastest growing sectors, offering you excellent opportunities for a rewarding science career. With your M.S. in Biotechnology from Duquesne, you'll be ready to make important contributions in expanding industries such as **medical devices and diagnostics, drug discovery, biomanufacturing products, bio-agriculture, renewable energy** and **environmental remediation**.

Plus, you'll have the research experience and knowledge to join top companies at the forefront of innovation. Duquesne biotechnology graduates have landed great jobs at top employers including **Mylan, Merck, Medimmune, Helomics, Jackson Labs, VWR International, ThermoFisher** and **Smith & Nephew**.



Alumni Connections

As a student, you're able to connect with our network of alumni. They're professionals working in many sectors, and they're ready to help you meet other scientists and seek out career opportunities:

duq.edu/alumni

As a Duquesne biotechnology student, partner with others interested in STEM fields through the **Citizens Science Lab**. Duquesne and the nonprofit Urban Innovation21 have come together to combine hands-on learning in Pittsburgh's first community life sciences lab, open to middle and high school students, college students and small businesses. Check out thecitizensciencelab.org for details.

Study and work in a science hub.

Duquesne's hometown of Pittsburgh is an emerging hub for biotechnology, medical, and research and development industries.

With an abundance of leading science-based companies located throughout the city, Pittsburgh is the perfect place to pursue a biotechnology degree—and after graduation, your career. You'll have access to a wide range of potential employers, from Fortune 500 corporations to medical device companies to numerous thriving start-ups.

Beyond studies and work, Pittsburgh is a great place to be a grad student, thanks to many recreational opportunities and plenty of arts, cultural and sporting events. Check out more at duq.edu/graduate-pittsburgh

10 BEST

WalletHub ranks Pittsburgh among its 10 best U.S. markets for STEM professionals, based on job growth and salary expectations.



"MOST AFFORDABLE"

Pittsburgh is rated as one of the most affordable U.S. cities by *Forbes*



Cara Mellits
B.S. Biological Sciences '12,
M.S. Biotechnology '13
Smith & Nephew

"Duquesne's Bayer School offers such a wide range of classes, allowing you to explore topics that interest you most, and to find the area of study where you want to develop your interests."

A great education at a great value.

An M.S. in Biotechnology from Duquesne is an investment in your future, and it's more affordable than you might think.

You'll make great discoveries as a scientist with a graduate degree from Duquesne, regularly ranked as a top-tier university and research institution by notable sources such as *U.S. News*, *Forbes Magazine* and Princeton Review.

And with financial aid options such as fellowships, assistantships, scholarships and a 25% tuition award on our M.S. in Biotechnology program, our high-quality education is in reach. Learn more at duq.edu/graduate-financing



Graduate Student Certificate of University Teaching

This noncredit program helps graduate student teaching assistants grow as teacher-scholars and document their college teaching in preparation for faculty careers.

Learn more here:

duq.edu/teaching-certificate

Join other student scientists in groups on campus such as the [Duquesne Society for Biotech](#), [Biotech Club](#) and [Women in Science at Duquesne](#).



About Duquesne

A nationally ranked Catholic university, Duquesne is recognized for its outstanding academic and research programs. The University has earned accolades from *U.S. News & World Report*, *Princeton Review*, *Bloomberg Businessweek* and *Washington Monthly Magazine*. Situated in the heart of downtown Pittsburgh, Duquesne is home to nearly 10,000 students in 80 undergraduate and 85 graduate programs across nine schools of study.



duq.edu/biotech

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