

FAQ

Master of Science in Pharmacology — Frequently Asked Questions (FAQ)

What is the MS in Pharmacology at Boston University?

Boston University's MS in Pharmacology is a research-driven graduate program housed in the Chobanian & Avedisian School of Medicine. It trains students in the skills needed for drug discovery, translational research, and regulatory science through rigorous coursework, hands-on lab experience, and professional development.

What program formats are offered?

- Capstone track: Full-time, 1 year (12 months), 32 units with a summer capstone research project.
- Thesis track: Full-time, 2 years, 36 units with an extended thesis research experience.

Part-time options are available—contact the program for details.

Where are classes held?

All classes and core research activities take place at Boston University's Medical Campus (at or in the vicinity of 72 East Concord St. Boston, MA 02118). In person attendance is expected.

Who should apply?

Ideal candidates have a bachelor's degree in a life science or related field, a strong academic record (overall and science GPA of 3.0 or higher), and an interest in drug discovery, translational research, or regulatory science.

What do I need to apply?

Submit an online application at <https://grad.bu.edu/apply> with:

1. Bachelor's degree in a life science or related discipline.
 - Passing grades in General Biology, General and Organic Chemistry, General Physics, Statistics, Calculus, and Biochemistry and/or Molecular Biology (required background for the core curriculum)
 - A minimum overall and science GPA of a 3.0

2. Undergraduate transcripts
3. Personal statement
4. CV or resume
5. Two letters of recommendation (at least one from a professional or academic reference)
6. Where applicable, proof of English proficiency (TOEFL, etc.) for international students

See the BU Graduate Medical Sciences admissions page for [Important Information on How to Apply](#).

When should I apply?

Right now! We are currently accepting applications for Fall 2027. Classes begin September 2nd, 2027. Applications are reviewed on a rolling basis, and early acceptances may be offered as soon as October 2026.

Visit the GMS admissions website for [Current Deadlines and Important Dates](#).

What does the curriculum include?

The curriculum blends core courses, electives, seminars, and a capstone or thesis. Core topics include pharmacokinetics/pharmacodynamics, drug metabolism, molecular and systems pharmacology, biostatistics, and modern research methods. Students also engage in professional development, seminars, and research mentoring. See the full curriculum [here](#).

Where can I see the full curriculum?

Full course listings and descriptions are available on the [Curriculum Page](#) and as a [PDF](#) here.

What are the typical courses and credit/unit breakdown?

Fall and Spring each include 13–15 units of coursework (core + electives). Example core courses include:

- Professionalism and Skills for Success (2 units)
- Foundations in Life Sciences (3 units)
- Introduction to Drug Discovery (3 units)
- Modern Research Methods (3 units)
- Human Systems Physiology & Pharmacology (4 units)

Summer (Capstone track): Research in Pharmacology (4 units)

What electives are available?

Students choose at least 5 units of elective courses across Fall and Spring from approved offerings such as:

- Advanced Research Methods (GMS PM 660)
- Current Topics in Pharmacological Sciences (GMS PM 810)
- Drug Discovery and Development (GMS PM 881)
- Deconstructing Systemic Bias (GMS GE 706)

Additional Graduate Medical Sciences electives may be approved based on availability.

What research and lab experiences are included?

Students gain hands-on training, both in the classroom and the laboratory, in biomolecular assays, structural analysis, cell/tissue culture, high-throughput screening, and advanced bioanalytical methods. Each student is required to complete a mentored research project. Students may choose a laboratory or literature-based topic. The streamlined 12-month Capstone track requires four units of independent mentored research, and the extended 2-year Thesis track requires eight units, plus the opportunity for additional summer research. Available research facilities include core labs for cryo-electron microscopy, genomics, proteomics, imaging, and bioanalysis. .

What professional development and career support is offered?

The program includes career counseling, grant-writing workshops, scientific communication training, networking events, and connections to Boston's biotech and pharmaceutical community. Faculty and staff provide individualized advising and one-on-one mentoring.

What careers can graduates pursue?

Graduates are prepared for roles such as research scientist, clinical research associate, regulatory affairs specialist, drug safety analyst, or for continued study (PhD, MD, professional degrees). Alumni benefit from internships, mentorship, and industry partnerships.

What are the program learning outcomes?

Graduates will be able to:

1. Apply core pharmacology and physiology principles to evaluate drug actions.
2. Design and perform pharmacological experiments using modern techniques.
3. Analyze experimental and clinical data with statistical and computational tools, including machine learning.
4. Critically assess scientific literature and emerging therapies.
5. Communicate scientific findings effectively in written and oral formats.

How much does the program cost?

Tuition and fees change annually. For the most up-to-date information, see the GMS tuition and student financial services page. <https://www.bumc.bu.edu/gms/admissions/student-financial-services/tuition/>

Financial aid, graduate assistantships, fellowships, and student loans may be available—contact the Financial Aid office for current opportunities and application procedures.

How do I arrange a visit or request more information?

Request more information or plan a campus visit via the [GMS request-information](#) page. For direct inquiries, contact the Program Director at PharmMS@bu.edu or 617.358.2075.

Where can I find faculty, research areas, and FAQs?

Visit [BU Profiles](#) the program's [Faculty Directory](#) and [Research Areas](#) pages for detailed faculty profiles and ongoing projects. This FAQ page and the program curriculum page list additional resources and links.

Who should I contact with questions about admission or curriculum?

General program inquiries: Program Director – Kate Carnevale, PhD | PharmMS@bu.edu | 617.358.2075

Admissions and application procedures: Chair of Admissions – C. James McKnight, PhD | cjmck@bu.edu | 617.358.9553

Additional information can be found at the following links: [GMS Admissions website and contact pages](#).

Financial aid: [BU GMS Student Financial Services and Office of Student Financial Services contact pages](#).

How do I plan a visit?

Contact MS Pharmacology Program Director: Kate Carnevale via email [PharmMS@bu.edu](#), phone 617.358.2075 or by filling out a [Request Information](#) form.

Location – Chobanian & Avedisian School of Medicine, 72 E. Concord St. Boston, MA 02118