

BIOMEDICAL SCIENCES - PHARMACOLOGY - M.S.

College of Sciences and Humanities
School of Biomedical Sciences
www.kent.edu/biomedical

About This Program

You will explore how drugs interact with the body as you build advanced expertise in pharmacology and toxicology through hands-on research and laboratory training. With access to cutting-edge facilities and collaborations with leading research partners, you'll develop the skills to drive innovation in drug discovery, healthcare or biomedical research. Read more...

Contact Information

- **John Johnson** | BMS@kent.edu | 330-672-3849
- Connect with an Admissions Counselor

Program Delivery

- **Delivery:**
 - In person
- **Location:**
 - Kent Campus

Examples of Possible Careers and Salaries*

Medical scientists, except epidemiologists

- 6.1% faster than the average
- 138,300 number of jobs
- \$91,510 potential earnings

Biological science teachers, postsecondary

- 9.3% much faster than the average
- 64,700 number of jobs
- \$85,600 potential earnings

Biological scientists, all other

- 2.2% slower than the average
- 44,700 number of jobs
- \$85,290 potential earnings

Natural sciences managers

- 4.8% about as fast as the average
- 71,400 number of jobs
- \$137,940 potential earnings

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at

which half of the workers in the occupation earned more than that amount and half earned less.

For more information about graduate admissions, visit the graduate admission website. For more information on international admissions, visit the international admission website.

Admission Requirements

- Bachelor's degree from an accredited college or university
- Minimum 2.750 undergraduate GPA on a 4.000-point scale
- Academic preparation adequate to complete graduate coursework (recommended courses in general chemistry, biochemistry and physiology)
- Official transcript(s)
- Résumé or curriculum vitae
- Goal statement indicating the applicant's interests in pharmacology, their research experience, career aspirations and fit with the program
- Three letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions to waive) by earning one of the following:¹
 - Minimum 94 TOEFL iBT score
 - Minimum 7.0 IELTS score
 - Minimum 65 PTE score
 - Minimum 120 DET score

¹ International applicants who do not meet the above test scores will not be considered for admission.

Application Deadlines

- **Fall Semester**
 - Application deadline: November 15

All application materials (including applicable fee, transcripts, recommendation letters, etc.) submitted after this deadline will be considered on a space-available basis.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
ANTH 68637 or BSCI 60104	BIOANTHROPOLOGICAL DATA ANALYSIS I BIOLOGICAL STATISTICS	4-5
BMS 60110	CAREER AND PROFESSIONAL SKILLS FOR LIFE SCIENTISTS	2
BMS 60120	LABORATORY TECHNIQUES IN BIOMEDICAL SCIENCES	2
BMS 60440	CELLULAR AND MOLECULAR SIGNALING	3
BMS 60502	MOLECULAR PHARMACOLOGY	4
BMS 61000	RESPONSIBLE CONDUCT OF RESEARCH	1
BMS 61001	INTRODUCTION TO BIOMEDICAL SCIENCES	1

Graduate Electives, choose from the following: 8-9

Any Biological Sciences (BSCI) Graduate Courses (50000 level or higher)

Any Biomedical Sciences (BMS) Graduate Courses (50000 level or higher)

Other graduate courses as approved by thesis committee

Culminating Requirement

BMS 60199	THESIS I ¹	6
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Minimum Total Credit Hours: 32

¹ Students selecting the thesis must continually register for BMS 60199 for maximum 6 credit hours toward the degree. Students may need to register for BMS 60299 to complete the thesis requirement; however, those credit hours do not, whatsoever, count toward the degree.

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
-	3.000

- Minimum 15 credit hours of overall hours must be letter graded (required and elective courses).
- No more than one-half of a graduate student's coursework may be taken in 50000-level courses.
- Grades below C are not counted toward completion of requirements for the degree.

Program Learning Outcomes

Graduates of this program will be able to:

1. Publish their research in peer-reviewed journals.
2. Demonstrate the ability to teach undergraduate students.
3. Seek employment in fields that reflect their area of training.

Full Description

The Master of Science degree in Biomedical Sciences–Pharmacology provides substantial opportunity to conduct research in molecular targeting, drug design and drug delivery in developing new approaches to treat disease. The multidisciplinary program enrolls a select group of graduate students interested in research-based careers in pharmacology, and provides a balance of classroom and laboratory work involving faculty at Kent State University and Northeast Ohio Medical University (NEOMED). Strong research foci exist in the areas of cardiovascular and metabolic diseases, neurodegenerative and blood brain barrier pharmacology. Interdisciplinary approaches to research and theoretical problems are strongly emphasized.

The M.S. degree in Biomedical Sciences–Pharmacology is offered in consortium with Cleveland Clinic and Northeast Ohio Medical University.