BIOMEDICAL SCIENCES

Overview

The Biomedical Sciences Program (BSP) is the premier umbrella admissions program for the AMC campus. Because the program is interdisciplinary, BSP students have the flexibility to choose one of 11 courses of study. We have over 200 training faculty representing all the basic and clinical departments on campus.

Admissions Requirements

To apply for admission applicants must submit the following:

- **Transcripts** | Transcripts from every institution you (the applicant) attended are required with your application. This includes transcripts from institutions regardless if a degree was earned (i.e. community colleges, transfers, etc.). For admissions review, a photocopy of an official transcript with the seal from the institution is sufficient. However, for enrollment, the graduate school requires an official copy sent from the institution directly. You can upload your unofficial photocopy to the application and you can have an official copy sent according to the following instructions:

  Electronic Transcripts should be sent to graduate.school@ucdenver.edu

  OR

  Mail a physical copy to:

  University of Colorado Denver
  Graduate School
  Mail Stop C296
  Fitzsimons Building, W5107
  13001 E. 17th Place
  Aurora, CO 80045

- **Letters of Recommendation** | Three (3) letters of recommendation are required as part of the application. By indicating your three (3) references on your application, they will be notified via email* to submit their letter of recommendation for you online. The Admission Committee assigns considerable weight to these letters in assessing a student's qualifications and probable success as a scientist. It is advantageous to have letters submitted by faculty who are well acquainted with the applicant's academic performance, research experience, and achievement potential.

BSP accepts a limited number of students each year and there are very few fellowships available for international students. We advise international students to consider applying through individual programs on our campus. Since tuition and fees are paid for and a stipend is received for all students, a financial affidavit showing adequate funds to live and study in the United States is not required during the application process.

Students whose native language is not English or who have completed their studies at an institution where English was not the language of instruction, must demonstrate English language proficiency by submitting scores of the Test Of English as a Foreign Language (TOEFL) or its equivalent (IELTS).

Degree Requirements

Year 1

Fall		**Hours**
BMSC 7806	Core I: Foundations in Biomedical Sciences	6
BMSC 7810	Core Topics in Biomedical Science	2
BMSC 7810	Core Topics in Biomedical Science	2
BMSC 7650	Research in Biomedical Sciences Section 001	1-3
BMSC 7650	Research in Biomedical Sciences Section 002	1-3
	Hours	**12-16**

Spring

Complete 2 Elective Courses (selected by student)

BMSC 7650	Research in Biomedical Sciences Section 0V3	1-3
	Hours	**1-3**
	Total Hours	**13-19**

Learning Objectives

The BSP trains graduate students to become proficient and successful investigators who are able to:

- Demonstrate a basic knowledge of central concepts in the biomedical sciences.
- Understand the basic principles underlying numerous different disciplines within the biomedical sciences
- Read and critically evaluate the scientific literature.
- Formulate hypotheses based on current concepts in the field and design, conduct, and interpret their own research projects.
- Develop ancillary skills, where necessary, to obtain positions outside of scientific research.

Courses

BMSC 7650 - Research in Biomedical Sciences (1-3 Credits)
Research rotation for students in the biomedical sciences in PhD program. Prereq: Consent of Instructor. Previously offered as IDPT 7650
Grading Basis: Letter Grade with IP
Repeatable. Max Credits: 20.
A-GRAD Restricted to graduate students only.
Typically Offered: Fall, Spring, Summer.

BMSC 7806 - Core I: Foundations in Biomedical Sciences (6 Credits)
Course will focus on the fundamental principles of biomedical sciences. Lectures and recitations/discussions will primarily address the basics of molecular biology, biochemistry, genetics, cell biology and energetic principles. Course is typically limited to biomedical science PhD and BSBT MS students. Previously offered as IDPT 7806
Grading Basis: Letter Grade
Repeatable. Max Credits: 6.
Typically Offered: Fall.

BMSC 7810 - Core Topics in Biomedical Science (2 Credits)
Sections focus on different core topics in biomedical science, and will address subject areas such as protein structure and function, neurobiology, embryology, stem cell research, and cancer biology. Students can enroll in multiple Core Topic Courses topics in one semester. Previously offered as IDPT 7810.
Grading Basis: Letter Grade
Repeatable. Max Credits: 20.
AMC-PHD PhD Students only
Typically Offered: Fall.

BMSC 7811 - Responsible Conduct of Research (1 Credit)
This course provides training in the responsible conduct of biomedical research. It is geared towards early PhD graduate students and meets NIH guidelines. Ethical issues associated with specific topics commonly encountered by graduate students are presented and discussed.
Grading Basis: Letter Grade
Typically Offered: Fall.

BMSC 7812 - Rigor and Responsibility in Biomedical Research (1 Credit)
Course will integrate the concepts of rigor, repeatability and reproducibility by combining both wet and dry lab components focused on teaching these concepts and laboratory skills. We will seek to make these concepts routine considerations during the design and execution of any type of experiment. Instructor consent required.
Grading Basis: Satisfactory/Unsatisfactory
Typically Offered: Spring.

Policies

Please refer to the Graduate School Policies page (http://catalog.ucdenver.edu/cu-anschutz/schools-colleges-programs/graduate-school/#policiestext).

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