

# BIOCHEMISTRY, BIOPHYSICS AND CHEMICAL BIOLOGY, PHD

The Graduate Group in Biochemistry, Biophysics, and Chemical Biology (BBCB) is devoted to the education and training of doctoral students in quantitative, mechanistic and molecular frontiers of biochemistry and biophysics, broadly conceived. The goal is to produce the next generation of scientists, scholars, educators and leaders in biomedical sciences.

To achieve this goal, BBCB starts with a strong relationship with the Department of Biochemistry, Biophysics, and Chemical Biology, combined with a world class, diverse faculty of over 90 members from four institutions, the University of Pennsylvania, the Wistar Institute, and the Children's Hospital of Philadelphia. Within the University of Pennsylvania, BBCB draws on faculty from the schools of Medicine, Arts and Sciences, Engineering, Dental Medicine, and Veterinary Medicine.

BBCB offers interdisciplinary training based on a rigorous core curriculum, combined with laboratory rotations, independent studies, and candidacy exam preparation that provides immersive training in laboratory and research skills to equip the students for their independent dissertation research.

For more information: <https://www.med.upenn.edu/bbcgrad/>

## Curriculum

Code	Title	Course Units
<b>Coursework</b>		
BIOM 6000	Cell Biology	
BBCB 5080	Macromolecular Biophysics: Principles and Methods	1
BBCB 5090	Structural and Mechanistic Biochemistry	1
BBCB 5100	Data Analysis and Scientific Inference	1
BBCB 7050	Candidacy Exam Preparation Course	0.5
Select four electives		
<b>Research</b>		
BBCB 6990	Laboratory Rotation	0-3
BBCB 8990	Pre-Dissertation Research	0-4
BBCB 9950	Dissertation Research	0

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2024 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.