

# BIOMEDICAL SCIENCES

The interdisciplinary doctoral programs in the biomedical sciences are organized within GW's Integrated Biomedical Sciences program (<https://ibs.smhs.gwu.edu/>). The first full year of study toward the PhD programs in cancer biology, genomics and bioinformatics, microbiology and immunology, neuroscience, and pharmacology and physiology is offered through the Institute. All programs are taken on an on-campus, full-time basis. Faculty are drawn from the School of Medicine and Health Sciences, including scientists from the Children's Research Institute of Children's National Health System.

Students are admitted directly into the biomedical sciences PhD through the Columbian College of Arts and Sciences. At the end of the first year of study, students select one of the five PhD fields—cancer biology, genomics and bioinformatics, microbiology and immunology, neuroscience, and pharmacology and physiology—and complete remaining degree requirements in the selected program.

Visit the Integrated Biomedical Sciences program website (<https://ibs.smhs.gwu.edu/>) for additional information.

## GRADUATE

### Master's program

- Master of Science in the field of bioinformatics and molecular biochemistry (<https://bulletin.gwu.edu/arts-sciences/biochemistry-molecular-medicine/ms-bioinformatics-molecular-biochemistry/>)

## DOCTORAL

### Doctoral programs

- Doctor of Philosophy in the field of cancer biology (<https://bulletin.gwu.edu/arts-sciences/biomedical-sciences/phd-cancer-biology/>)
- Doctor of Philosophy in the field of genomics and bioinformatics (<https://bulletin.gwu.edu/arts-sciences/biomedical-sciences/phd-genomics-bioinformatics/>)
- Doctor of Philosophy in the field of microbiology and immunology (<https://bulletin.gwu.edu/arts-sciences/biomedical-sciences/phd-microbiology-immunology/>)
- Doctor of Philosophy in the field of neuroscience (<https://bulletin.gwu.edu/arts-sciences/biomedical-sciences/phd-neuroscience/>)
- Doctor of Philosophy in the field of pharmacology and physiology (<https://bulletin.gwu.edu/arts-sciences/biomedical-sciences/phd-pharmacology-physiology/>)

## FACULTY

Faculty Leadership— Integrated Biomedical Sciences

Professors: A. Hall (*Director*), M. Colonnese, Y. Hu, N. Lee, R. Mazumder

Associate Professors: A. Bosque-Pardos, L. Caldovic, D. Leitenberg, N. Posnack, J. Triplett, C. Young

IBS PhD Faculty Trainers

A list of IBS PhD faculty trainers can be found on the Integrated Biomedical Sciences (<https://ibs.smhs.gwu.edu/phd-training-faculty/phd-faculty-trainer-list/>) website. This list is subject to change.

## COURSES

### Explanation of Course Numbers

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-level undergraduate courses that also may be taken for graduate credit with permission and additional work assigned
- Those in the 6000s and 8000s are for master's, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office
- Biomedical Sciences (BMSC) (<https://bulletin.gwu.edu/courses/bmsc/>)
- Cancer Biology (CANC) (<https://bulletin.gwu.edu/courses/canc/>)
- Genomics and Bioinformatics (GENO) (<https://bulletin.gwu.edu/courses/geno/>)
- Microbiology (MICR) (<https://bulletin.gwu.edu/courses/micr/>)
- Neuroscience (NRSC) (<https://bulletin.gwu.edu/courses/nrsc/>)
- Pharmacology (PHAR) (<https://bulletin.gwu.edu/courses/phar/>)