

# BIOLOGICAL AND BIOMEDICAL SCIENCES PROGRAM (GRAD)

## Contact Information

**Biological and Biomedical Sciences Program**  
Visit Program Website (<http://bbbsp.unc.edu>)

**Jean Cook, Director**

The Biological and Biomedical Sciences Program (BBSP) of the University of North Carolina at Chapel Hill is an umbrella admissions and first-year program for 14 Ph.D. programs in the School of Medicine, Eshelman School of Pharmacy, Gillings School of Global Public Health, and the College of Arts and Sciences. The following programs are affiliated with the BBSP: Biochemistry and Biophysics, Bioinformatics and Computational Biology, Biology (MCDB Division), Cell Biology and Physiology, Chemistry (Biological Chemistry Division), Genetics and Molecular Biology, Microbiology and Immunology, Neuroscience, Nutrition (Biochemistry Division), Oral Biology, Pathobiology and Translational Science, Pharmaceutical Sciences (Medicinal Chemistry and Molecular Pharmaceutics tracks), Pharmacology, and Toxicology. Students interested in pursuing a Ph.D. in any of these programs apply to the BBSP. For a complete list of faculty in the BBSP see the faculty page (<http://bbbsp.unc.edu/research/faculty-database>) of the program's Web site. See individual program listings for more information about individual Ph.D. programs. These also can be accessed from the BBSP Web site.

## Admission Requirements

A bachelor's degree (B.S. or B.A.) is required for admission into the BBSP. Successful applicants have a strong background in the biological sciences, chemistry, physics, or mathematics. Only applicants with both strong academic records and prior research experience are favorably considered. An interview, usually on campus, is required prior to admission.

## Financial Assistance

All BBSP students receive an annual stipend (\$32,000 in 2019–2020). Tuition, health insurance, and fees are covered by the program.

During their first year, BBSP students are part of small, interest-based groups led by several faculty members. These groups meet weekly and provide a research community for students until they join a degree-granting program. In these groups, students develop professional skills, including scientific writing, original research presentations, responsible conduct of research, and quantitative reasoning. The faculty members in these groups advise students in selecting laboratory rotations and courses that meet their individual interests.

BBSP students choose from more than 400 faculty members as they pursue three required research rotations in the fall and spring semesters of their first year. At the completion of the third rotation, each student selects an academic advisor who will provide guidance for his or her dissertation research training. The student also joins a Ph.D. program that the advisor is affiliated with and completes that program's requirements.

The BBSP does not have a core curriculum or require students to take a particular set of courses beyond BBSP 901 and BBSP 902. Students may take courses offered by any of the participating Ph.D. programs (see

individual program listings for available courses). After joining a specific Ph.D. program students must fulfill the specific coursework and other requirements of that program.

## BBSP

### Graduate-level Courses

**BBSP 705. Best Practices for Rigor and Reproducibility in Research. 1 Credit.**

A workshop to introduce best practices for increasing rigor and reproducibility in research. Permission of course directors required.

**Grading status:** Letter grade

**Same as:** BIOL 705.

**BBSP 710. Biostatistics for Laboratory Scientists. 2 Credits.**

This course introduces the basic concepts and methods of statistics with emphasis on applications in the experimental biological sciences. Students should have a basic understanding of algebra and arithmetic. No previous background in probability, statistics, or statistical computing is required. Students are required to have GraphPad Prism installed on their laptops and activated before the course begins. You can download GraphPad Prism from UNC software acquisition ([software.unc.edu](http://software.unc.edu); license required).

**Grading status:** Letter grade.

**BBSP 890. Special Topics in the Biological and Biomedical Sciences Program. 1-3 Credits.**

Permission of the instructor. Seminar/Discussion course dealing with advanced topics in the biological and biomedical sciences.

**Repeat rules:** May be repeated for credit; may be repeated in the same term for different topics; 9 total credits. 3 total completions.

**Grading status:** Letter grade.

**BBSP 901. Research in Biological and Biomedical Sciences. 0.5-6 Credits.**

Enrollment in BBSP program required. Lab rotations with BBSP faculty.

**Repeat rules:** May be repeated for credit; may be repeated in the same term for different topics.

**Grading status:** Letter grade.

**BBSP 902. Seminar in Biological and Biomedical Sciences. 0.5-4 Credits.**

Enrollment in BBSP program required. First Year Group course of small interest-based groups led by faculty advisors. Includes professional skills development in a research community.

**Repeat rules:** May be repeated for credit.

**Grading status:** Letter grade.

**BBSP 903B. Research in Biological and Biomedical Sciences - Part II. 1.5 Credit.**

Enrollment in BBSP program required. Lab rotations with BBSP faculty. This lab rotation is Part II of a two part lab rotation which spans fall and spring semesters.

**Grading status:** Letter grade.

**BBSP 903A. Research in Biological and Biomedical Sciences - Part I. 1.5 Credit.**

Enrollment in BBSP program required. Lab rotations with BBSP faculty. This lab rotation is Part I of a two part lab rotation which spans fall and spring semesters.

**Grading status:** Letter grade.