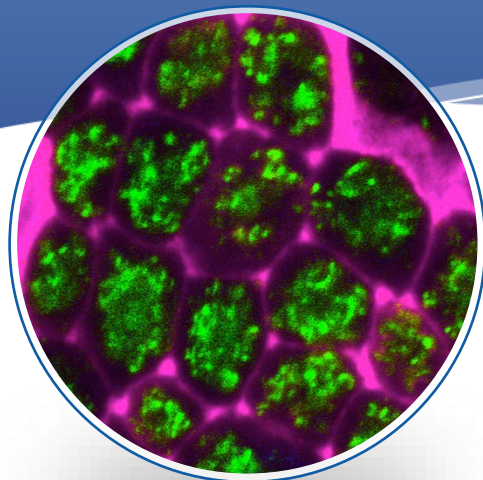


Research

The undergraduate independent research experience can be one of the most exciting and rewarding experiences of a student's education. Students are encouraged to pursue faculty-sponsored independent research beginning in their sophomore or junior year, and can receive academic credit for doing research. Although independent research does not require prior experience, good organizational skills and dedication are essential for success!

BS with Honors

Students wishing to graduate with honors in biochemistry must maintain a cumulative GPA of at least 3.5 in all courses required for the biochemistry major and prepare an acceptable thesis based on a minimum of two semesters of independent research.



Accelerated combined BS, MS or BS, MBA

Biochemistry majors are eligible to apply for an accelerated Bachelor of Science (BS) with either a Master of Science (MS) in chemistry or a master's in business administration (MBA).

The combined degree programs allow students to use graduate courses taken as an undergraduate toward both the undergraduate and graduate degrees, reducing the normal time required to complete both degrees.

Department of Biochemistry and Cell Biology

Dr. Bernadette Holdener, Professor
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Stony Brook University



Biochemistry Major

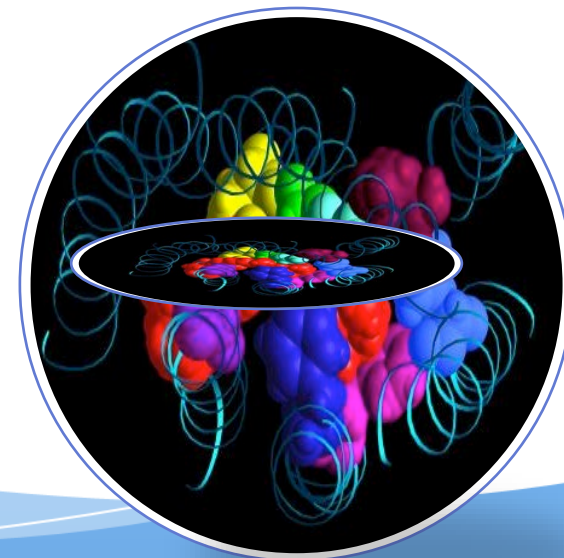
Challenge Your Mind

www.stonybrook.edu/biochem/



Biochemistry Major

The undergraduate biochemistry major at Stony Brook provides students with a challenging and exciting introduction to the chemical basis of biological phenomena. The major is appropriate for students who want to know how living systems operate and how they are regulated. The major is designed to prepare students who intend to pursue graduate study, attend health-related professional schools, pursue secondary school teaching careers, or fill entry-level positions in private, state, and federal laboratories or in pharmaceutical and biotechnical industries.



Biochemistry Major Requirements

The undergraduate curriculum is comprised of fundamental courses in biology, chemistry, physics, and mathematics which provide a foundation for upper-level courses. Students also complete advanced courses in genetics, cell biology, biochemistry and biochemistry laboratory and choose at least two elective courses from an approved list of about 20 electives that provide advanced understanding of this broad field. *Upper division electives cover topics including bioinformatics, cancer biology, chemistry, developmental biology, evolution, microbiology, neurobiology, physiology, and many others. Students who perform research in faculty laboratories will receive upper division credit. Upper division credit is also given for being a teaching assistant in our courses or for readings courses taken with a faculty member.

Career opportunities: research, medicine, dentistry, veterinary medicine, education, industry, forensic science, science policy and communication, patent law, etc.

In addition to the University general education, upper-division, and total credits requirements Biochemistry majors complete the following coursework for their Bachelor of Science (BS) degree:

Courses in related fields:

Calculus (1 yr)
General Chemistry with lab (1 yr)
Organic Chemistry (1 yr) with lab (1 sem)
Physics with lab (1 yr)
Physical Chemistry (1 sem)

Core courses in Biology

Introductory Biology (3 semesters)
Introductory Biology lab (1 yr)

Advanced Courses in Biology:

General Genetics (1 semester)
Cell Biology (1 semester)
Biochemistry I and II (1 yr)
Advanced Biochemistry Lab (1 sem)
Two *Upper division electives (2 sem)
Senior Writing Requirement (1 sem)

