BIOCHEMISTRY & MOLECULAR BIOLOGY

Bachelor of Arts

CLARK UNIVERSITY

Introduction to the Major

The biochemistry and molecular biology (BCMB) major prepares students for careers in a dynamic scientific field.

One of the most exciting and influential areas of science today, biochemistry and molecular biology (BCMB) exists at the intersection of biology and chemistry, focused on the cellular and molecular building blocks of living organisms. As a BCMB major, you will have opportunities to explore diverse topics in the classroom, in the lab, and in the field, and to develop the skills needed for successful careers in health sciences, biotechnology, education, or basic and applied research.

Highlights

BCMB students conduct research in Clark's LEED Gold-certified Lasry Center for Bioscience, a 50,000 square-foot, state-of-the-art facility, and use specialized biology and chemistry research equipment normally found only in much larger departments.

"Nestled within a liberal-arts education, BCMB at Clark provides students with the knowledge and skills to be successful problem solvers and compassionate leaders"

- Deborah Robertson, BCMB Faculty Member

What can I do with my major?

JOBS & EMPLOYERS

With a biochemistry and molecular biology major, you can train as a health professional. The major also provides an excellent foundation for those wanting to pursue a career in forensic science, intellectual property law, or K-12 teaching.

BCMB graduates work in medicine, pharmaceutical research and development, environmental regulation, veterinary practice, education, agricultural research, and more.

GRADUATE PROGRAMS

Alumni have pursued advanced study at Tufts University, Massachusetts College of Pharmacy and Health Sciences, Harvard University School of Dental Medicine, and others.

Foundational Courses

The BCMB major is an in-depth study of overlapping fields, and requires background in both chemistry and biology with core courses in:

- Biology
- Chemistry
- Math
- Physics
- Biochemistry

We strongly urge you to take at least eight semester courses in chemistry, biology, calculus or physics during your first two years.

Find out more at clarku.edu/programs/major/biochemistry-and-molecular-biology-bs

YOUR CLARK EXPERIENCE

Discover and Demonstrate your Purpose | Cultivate Your Communities | Engage Locally & Globally | Develop your Professional Identity

Year 1

Let's get started

Build your foundation by taking introductory biology and chemistry courses and either physics or calculus. Talk to your adviser about Accelerated Introduction to Chemistry and select an FYI within STEM or an area you want to explore.

Geting from here to there

Use the BCMB degree planner to map out your major coursework. Explore courses that fulfill the Clark Core requirements such as Medical Ethics or Sociology of Medicine.

Get connected

Check out biology and chemistry department events where scientists share their research. Join a student organization like Clark Emergency Rapid Response, Women in STEM, or the Prehealth Society.

Year 2

Stay the course

Take three courses in the BCMB major each semester. Develop your expertise and explore your interests in BCMB. Build research skills by taking Analytical Chemistry, Recombinant DNA, or Bioinformatics.

Start networking

Meet with each of your STEM professors early in the semester. Talk with your teaching assistants. What are their research interests? How did they get started in STEM?

Check out the Alumni Job Shadow Program to connect with alumni and learn about what they do.

Look ahead

Visit the Career Lab in ASEC to get your resume ready, attend a career fair to learn about potential paths, and explore research opportunities that fit your interests.

Year 3

Build your skills

Develop skills and knowledge in Biochemistry I & II and either cell biology or microbiology. Expand your horizons by selecting BCMB electives that pique your interests. Complete your core requirements.

Plan for senior year and beyond

Review the degree planner and chart your remaining courses. Explore the 4+1 Accelerated Master's Degree and keep track of deadlines.

Test-fly your career

Explore on- and off-campus research experiences and internships. Talk with BCMB faculty about funding opportunities for summer research.

Enroll in short chemistry courses that explore careers and develop professional skills.

Refine and update your resume.

Year 4

Finish strong

Enroll in Biophysical Chemistry and complete your BCMB electives. Continue building your techniques skill set with short courses in chemistry.

Bring it all together

Your capstone draws on your expertise and experiences at Clark. You may find yourself engaged in research or in a course that challenges you and your peers to practice problem-solving and effective communication.

Prepare for life after Clark

Work with your career adviser to update your resume, LinkedIn profile, and Handshake account. Share your career goals and aspirations with faculty and mentors. Schedule a mock interview to practice and prepare.