Biochemistry/molecular biology (B/MB) involves the study of life processes at the molecular level. At University of Wisconsin–Eau Claire, B/MB students study how molecules control heredity, development, aging and mental activity, as well as how abnormalities in these molecules can lead to diseases such as cancer. The B/MB major is an interdisciplinary major that offers a balanced curriculum integrating modern molecular biology and biochemistry. This comprehensive major is a laboratory-intensive bachelor of science program that provides students with a solid foundation in both chemistry and the biological sciences.

**Typical interests and values of biochemistry/molecular biology majors:**
- Sense of scientific inquiry
- Enthusiasm for hands-on laboratory experience
- Imagination to pose challenging questions
- Desire to learn about how things work

**Knowledge and skills gained from studying biochemistry/molecular biology:**

**Knowledge:**
By studying biochemistry/molecular biology, students will strengthen their abilities in problem solving, data analysis, and communication while gaining a greater understanding of statistics and computing. Students studying biochemistry/molecular biology also have many opportunities to enhance laboratory skills.

**Skills:**
- Data collection/interpretation
- Experimenting with ideas
- Organizing/classifying
- Inspecting/examining
- Diagnosing
- Testing hypotheses
- Thinking critically
- Summarizing data
- Problem Solving
- Research & Investigation skills
- Accurately identifying critical issues
- Using a variety of sources to assess information
- Identify problems and needs
- Identify resources
- Synthesize facts, concepts and principles

**Related student and professional organizations:**

**Student:**
- Tri Beta (Biology Club)
- Molecular Movement
- American Chemical Society (ACS)
- Pre-Physician Assistant Club
- Pre-Med Club

**Professional:**
- American Chemical Society
- American Society of Biochemistry and Molecular Biology
- American Society for Microbiology

**Career fields related to biochemistry/molecular biology:**

**Potential Employers:**
Biochemistry/molecular biology majors work in many fields depending on their interests, skills, and education. Some employers include: pharmaceutical companies, research institutes, chemical manufacturers, hospitals, and colleges and universities.

**Potential Job Titles:**
- Biochemist
- Staff Chemist
- Assistant Researcher
- Patent Attorney
- Forensic Scientist
- Medical Officer
- Scientific Editor
- Researcher
- Chemical Lab Technician
- Analytical Chemist
- Research Biochemist
- Research Assistant Professor
- Lab Coordinator
- Teacher
- Clinical Trials Researcher
Jobs you might also consider...
Environmental Engineer    Technical Writer
Food Science Technician Industrial Hygienist
Agricultural Technician Conservation Scientist
Water/Wastewater Management

Sample entry level jobs held by UW-Eau Claire biochemistry/molecular biology graduates:
- Clinical DNA Testing Technician, Prevention Genetics, Marshfield, WI
- Research Scientist, PPD, Inc., Middleton, WI
- Clinical Lab Scientist, Fairview University Medical Center, Minneapolis, MN
- Molecular Geneticist, Mayo Clinic, Rochester, MN
- Medical Student, UW-Madison Medical School, Madison, WI

Learn more about biochemistry/molecular biology:

Departments
- Contact UW–Eau Claire’s Department of Biology or Department of Chemistry: Biology - Phillips 330, 836-4166; Chemistry - Phillips 430, 836-3417

Getting Started at Career Services:
- Meet with a career counselor
- Take interest inventory and self-assessment tests
- Utilize Blugold Career Success Network, a database of UW–Eau Claire Alumni & Friends available for informational interviewing
- Utilize Blugold CareerLink, an online job search database specifically for UWEC students and alum

Resources At Career Services:

Yellow Section-
- Sigi 3 handouts:
  - Biochemistry/Molecular Biology
  - Biochemist
  - Chemist
  - Science Laboratory Technician
  - Forensic Scientist
- Book sections:
  - Science
  - Physicians

Orange Section-
- Internship information pertaining to biochemistry/molecular biology

Blue Section-
- Multiple resources to help you build a resume and cover letter for a career in biochemistry/molecular biology.

Opportunities to enhance skills in biochemistry/molecular biology:

Internship
Internships are a way to gain hands-on experience in a position that you may be considering as a potential career. To find an internship in biochemistry/molecular biology, visit Career Services (Schofield 230) and speak with a career associate. Contact your adviser or the Biology or Chemistry Department chairs about enrolling in BIOL 498 to obtain academic credit for your internship.

Research
There are many opportunities for students to participate in Research Experience for Undergraduates (REUs) to enhance the breadth of knowledge learned in the classroom. For additional information about REU’s for undergraduates, visit the website at www.nsf.gov/crssprgm/reu/. For additional information about research at UW-Eau Claire, contact the departments of biology or chemistry.

Directed Studies or Independent Study Class
By participating in a directed studies or independent study class, students will be able to research an area that they find particularly interesting. Speak with your adviser about enrolling in CHEM 399, 495, 497, or 499 or BIOL 395, 399, or 499.

What you can do now:
- Become a teacher assistant for a professor in the biochemistry/molecular biology program.
- Volunteer at a local hospital.
- Job shadow a professional in your field of interest or conduct informational interviews.
- Get a part-time job as a lab assistant or office worker at a local laboratory.