

Biochemistry & Molecular Biology

Highlights

Biochemistry Club

Undergraduate research

State-of-the-art facilities

What career will you have?

Agriculture

Allied health

Biomedical research

Biotechnology

Chemical industry

Clinical industry

Dentistry

Environmental research

Food industry

Forensics

Medicine

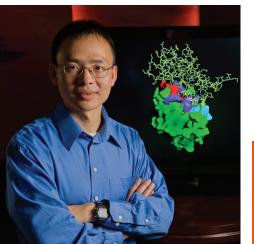
Nutrition

Pharmaceutical industry

Research institutes

Science education

Veterinary medicine





Biochemistry and molecular biology is the central scientific discipline linking the chemical, physical and biological sciences. By applying concepts and methods of chemistry and physics to the fundamental problems of biology, biochemists have made great progress in their effort to understand the biochemical mechanisms of living organisms. This knowledge can be used to improve the quality of life and health care for the world by producing better drugs, increasing agricultural yield and providing a cleaner environment.

Major discoveries concerning the biochemistry of genetic material provide the tools of molecular biology that are essential to contemporary life sciences research. Since a biochemist's tools are the physical sciences, he or she must receive sound education in mathematics, physics and chemistry.

Within biochemistry and molecular biology, you have the option to select a predefined emphasis area or work with your faculty adviser to customize your plan of study. These options include:

Biochemistry & Molecular Biology

Provides a broad background in chemistry and biological sciences and permits flexibility in meeting your particular interests.

Pre-Medical or Pre-Veterinary Science Option

Science heavy curriculum helps you meet requirements for post-graduate attendance of veterinary or medical school, while also preparing you for careers involving biochemistry.



Scholarship Dollars

The Biochemistry and Molecular Biology Department awarded **\$3,000** in scholarships to students in the department last year. CASNR awarded an additional **\$460,000** to students within the college.







Why Study Biochemistry & Molecular Biology?

As a biochemistry and molecular biology major, you will build a strong foundation in physical and biological science, as we tailor your education to meet your career goals. You will learn to use recombinant DNA technology, biotechnology, and protein and genetic engineering. We can prepare you for an excellent career in science or in any of the professional health care fields, including medicine and veterinary science.

In an effort to provide students with additional career and academic advice, our faculty mentoring program provides students with quality time with one of our outstanding faculty members. Meetings with faculty members give new students the opportunity to find out how they completed their education and what motivated them to be the professional they are today. Faculty advisers in the department will also help you apply for summer internships nationwide and draw from their own experiences to provide you with both research training and personal mentoring.

We encourages participation in undergraduate research, even as a freshman. Our goal is to help students begin to learn how to think like a scientist. Students can become involved with a research laboratory as early as they wish.

Fast Fact: The Department of Biochemistry and Molecular Biology is housed on three floors in the Noble Research Center.

Alumni Spotlight

Dr. Kevin Ahern

Master of Science in Biochemistry & Molecular Biology, 1980 Professor of Biochemistry, Oregon State University

Dr. Ahern graduated with a Master of Science in Biochemistry from Oklahoma State University in 1980. He attended Oregon State University in 1981 where he received his Ph.D. in 1986. Dr. Ahren began teaching in 1995 and advising in 1999 at Oregon State University.

Dr. Ahern has received numerous awards for teaching and advising, and is best known for his Metabolic Melodies YouTube lectures and iTunes U courses. His YouTube lectures alone have had more than 1.5 million views. Ahrens has also written books on biochemistry, such as "Biochemistry Free and Easy." Dr. Ahren and his wife, Indira, also co-authored "Kevin and Indira's Guide to Getting into Medical School."

The Department of Biochemistry and Molecular Biology at OSU is honored to call Dr. Ahern an alumnus of the program.



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