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.

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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 encourage participation in undergraduate research, even as a freshman. Our goal is to help you begin to learn how to think like a scientist. You can become involved with a research laboratory as early as you 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. Ahern began teaching in 1995 and advising in 1999 at Oregon State University.

Dr. Ahern has received numerous awards for teaching and advising, and he 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. Ahern 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.

CASNR Fast Facts

>>> Faculty Advising <<<

40+ Student Organizations
$1.4 Million in Scholarships each year

13:1 Student to Faculty Ratio

45 States Represented

4 out of 15 OSU Outstanding Seniors

Expanding Minds, Inspiring Purpose