

ILLINOIS WESLEYAN UNIVERSITY

BIOCHEMISTRY

Biochemistry is the study of the physical and chemical mechanisms underlying biological systems.

Why biochemistry at Illinois Wesleyan?

- Together with your faculty advisor, our pre-health/biology career advisor will assist you in preparing for your future endeavors, whether you pursue research or a graduate/professional program.
- Biochemistry majors at Illinois Wesleyan have the opportunity to participate in hands-on research. In fact, 80% of our biochemistry majors participate in lab research before graduation.
- Students who study science at liberal arts institutions have the benefit of not only learning the hard science but also being able to write and speak clearly about their subject matter. This combination of abilities has allowed IWU students to gain acceptance into prestigious graduate programs and obtain jobs at top companies.
- Each class and lab is taught by a faculty member. The small student to faculty ratio at Illinois Wesleyan allows for individual attention and the opportunity for students to play a significant role in the research of faculty.
- Past biochemistry majors have researched sickle cell anemia, worked on the translation of the living kidney donor list, presented their research at conferences and won awards. Their work has transcended the classroom and made a difference in their lives and the lives of others.

Learning from a Quality Faculty

- **Dr. Melinda Baur**, *Assistant Professor of Chemistry*
Ph.D. – University of North Carolina
Research interests: Cellular communication systems
- **Dr. David Bollivar**, *Miner Linnaeus Sherff Endowed Professor of Botany*
Ph.D.—Indiana University
Research interests: Phage biology and evolution, characterization of chlorophyll and bacteriochlorophyll biosynthesis enzymes
- **Dr. Brian Brennan**, *Associate Professor of Chemistry*
Ph.D. – University of Michigan
Research interests: Peptide synthesis, protein-protein interactions, and the development of therapeutics
- **Dr. Lorilyn Cozy**, *Assistant Professor of Biology*
Ph.D.- Indiana University
Research interests: Regulation of gene expression, protein interaction, and antibiotic production in bacteria



A sampling of courses offered by Biochemistry:

General Biology
Genetics
General Chemistry
Organic Chemistry
Physical Chemistry:
Thermodynamics
Biochemistry
Calculus



“**Illinois Wesleyan biochemistry majors benefit from small** classes and labs taught by faculty members. At a university of this size, students

have opportunities to participate in significant research, increasing their skills and experiences and setting them up for success as they pursue graduate studies, professional schools or employment after graduation.”

- **Dr. Ram Mohan**, *Wendell and Loretta Hess Professor of Chemistry*
Ph.D. – University of Maryland
Research interests: Environmentally friendly organic synthesis (green chemistry); isolation of natural products
- **Dr. Manori Perera**, *Associate Professor of Chemistry*
Ph.D. – University of Massachusetts Amherst
Research interests: Chemistry of the interstellar medium and antioxidant properties of natural products
- **Dr. Tim Rettich**, *Professor of Chemistry*
Ph.D. – Case Western Reserve University
Research interests: Thermodynamics and photochemistry of gas/liquid mixtures relevant to the environment
- **Dr. Rebecca Roesner**, *Professor of Chemistry, Department Chair*
Ph.D. – University of Kansas
Research interests: polyoxometalates, macrocyclic chemistry, and the characterization of astrochemically relevant mineral dusts
- **Dr. Tyler Schwend**, *Assistant Professor of Biology*
Ph.D. – Northwestern University
Research interests: Molecular and cellular basis of corneal nerve development and regeneration

Putting Learning into Practice

- Graduates of the biochemistry major will have the necessary background to pursue graduate studies in biochemistry, enter a wide variety of professional programs including medicine, dentistry, physical therapy, optometry, forensic science, and law, or enter governmental or industrial laboratories as biochemists.

Dr. Brian Brennan

Associate Professor of
Chemistry

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