Department of Molecular and Structural Biochemistry

Biochemistry is the science which is concerned with the discovery and understanding of the chemical principles of life. It is a wide-ranging field from the composition, biosynthesis, structure and function of biomolecules to the control and regulation of biochemical processes within organelles, cells, organs and organisms. Biochemical principles form the basis of most laboratory procedures within the life cycle.

Awards

The H. Robert Horton Award is given to the outstanding student in Biochemistry based on scholarly and research achievements.

Honors

The honors program in Biochemistry is jointly administered within the College of Agriculture and Life Sciences and the College of Sciences. It is designed for students who wish to explore advanced courses and/or research and be rewarded for outstanding academic achievement.

Curricula

The curriculum emphasizes the fundamentals of biological, chemical, and physical sciences, offering students both breadth of knowledge and depth of understanding. It is designed to provide students with broad experience in biological and chemical sciences and to encourage the development of experimental skills. Because of the breadth of the course requirements, many students can can add a second major in a variety of science disciplines such as Biological Sciences, Microbiology, Genetics, or Chemistry. Minors can also be added from various disciplines.

- Note: Only entering freshmen studying Biochemistry, Nutrition Sciences, or Plant Biology participate in the Life Sciences First Year Program (https://catalog.ncsu.edu/undergraduate/agriculture-life-sciences/life-sciences-first-year/).

For more information about this department, including contact information, visit the department (http://biochem.ncsu.edu) website.

Faculty

Department Head

Melanie Simpson

Director of Graduate Programs

Joseph J. Barycki

Undergraduate Coordinator

Trino Ascencio-Ibanez

William Neal Reynolds Professors

Dennis T. Brown

Professors

Joseph Barycki

Dennis Brown

Colleen Doherty

Thomas Makris

Flora Meilleur

Melanie A. Simpson

Adjunct Professor

M. Luther

Professors Emeriti

Charles Hardin

Cynthia Hemenway

H.R. Horton

James Knopp

E. Stuart Maxwell

William Miller

Elizabeth Theil

Paul Wollenzien

Associate Professors

Michael Goshe

Arion Kennedy

Xiaojing Liu

Ruben Rellen-Alvarez

Robert Rose

Guozhou Xu

Assistant Professors

Nathan Ennist

Ryan Sartor

Ning Sui

Teaching Professor

Trino Ascencio-Ibanez

Teaching Assistant Professors

Hung-Chieh (Kenny) Kuo

David Presutti

Research Associate Professors

Raquel Hernandez

Research Assistant Professor

Paul Swartz

Peter Thompson

Plans

- Biochemistry (BS) (https://catalog.ncsu.edu/undergraduate/agriculture-life-sciences/molecular-structural-biochemistry/biochemistry-bs/)