

# Department of Molecular and Structural Biochemistry

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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 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 (<http://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

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### Director of Graduate Programs

Joseph J. Barycki

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### Undergraduate Coordinators

Trino Ascencio-Ibanez

Charles Hardin

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## William Neal Reynolds Professors

Dennis T. Brown

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## Professors

Joseph Barycki

Dennis Brown

John Mackenzie Jr.

E. Stuart Maxwell

Melanie A. Simpson

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## Adjunct Professors

K.S. Korach

M. Luther

D.F. Ferreira

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## Professors Emeriti

H.R. Horton

James Knopp

William Miller

Elizabeth Theil

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## Associate Professors

Michael Goshe

Charles Hardin

Flora Meilleur

Robert Rose

Gouzhou Xu

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## Assistant Professor

Colleen Doherty

Kerim Eroglu

Arion Kennedy

Xiaojing Liu

Ruben Rellen-Alvarez

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## Teaching Associate Professor

Trino Ascencio-Ibanez

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## Teaching Assistant Professors

Hung-Chieh (Kenny) Kuo

David Presutti

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## Research Associate Professors

Rachel Hernandez

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## Research Assistant Professor

Paul Swartz

Peter Thompson

## Plans

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