



Michael J. Wolfgang, Ph.D.

Titles & Department

Professor, Biological Chemistry Director, Center for Metabolism and Obesity Research

Specialization Areas

Understanding molecular mechanisms to sense and respond to nutritional/metabolic cues and exploring novel neuron-specific enzyme function in metabolic processes

Summary of Research & Work

Dr. Wolfgang's laboratory studies the role and regulation of cellular and organismal metabolism. The research in the Wolfgang laboratory utilizes biochemistry and molecular genetics to understand the molecular mechanisms used to sense and respond to nutritional/metabolic cues. They are particularly interested in deciphering the roles of unexplored metabolic enzymes/pathways and determining novel roles of cannonical metabolic pathways in under-explored cells and tissues.

Publications

- Requirement of hepatic pyruvate carboxylase during fasting, high fat, and ketogenic diet
- mTORC1 activation is not sufficient to suppress hepatic PPARα signaling or ketogenesis
- <u>The role of ethanolamine phosphate phospholyase in regulation of astrocyte lipid</u> <u>homeostasis</u>
- Remodeling glycerophospholipids affects obesity-related insulin signaling in skeletal muscle