

Department Seminar Series

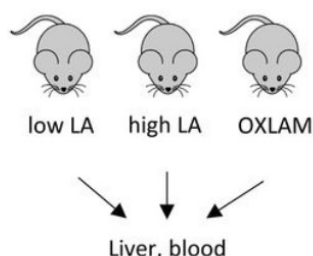
UCDAVIS
**FOOD SCIENCE AND
TECHNOLOGY**

4:10 PM, Wednesday Sept 29, 2021

FST290 students meet in person in Room 1207 RMI-South

Others may attend remotely by Zoom:

<https://ucdavis.zoom.us/j/92208083430>



Overview of research in
the Taha lab - Effects of lipids
and lipid-like compounds on
brain function

Ameer Taha, Ph.D.

Associate Professor
Food Science and Technology, UC Davis

Dr. Taha, an associate professor in the Department of Food Science and Technology, specializes in food chemistry and biochemistry. Taha completed his Ph.D. in pharmacology and toxicology at the University of Toronto, Canada. He joined the UC Davis faculty in 2014 after completing a postdoctoral fellowship at

National Institutes of Health. His research focuses on understanding the role of dietary lipids and lipid-like compounds on brain function.

SUMMARY: My lab focuses on characterizing exposures to bioactive lipids and lipid-like compounds (e.g. pesticides), and understanding their role on brain function. We focus on neurodevelopment and aging, two periods of increased vulnerability to environmental exposures. This presentation will provide an overview of the analytical methods used to measure these compounds in foods, and discuss how exposure may regulate early brain development or modify susceptibility to neurodegenerative disorders such as Alzheimer's disease.

Complementary approaches to
understand food breakdown
during digestion: Case study in
carbohydrate-based foods
Gail Bornhorst, Ph.D.

Associate Professor and Engineer
Food Science and Technology
Biological and Agricultural Engineering
UC Davis

Dr. Bornhorst received her M.S. and Ph.D. from University of California Davis in biological systems engineering. Her research involves developing a quantitative understanding of food structural breakdown during digestion and the impact on nutrient release and food functional properties. Her lab also works on development of dynamic in vitro model systems for studying digestion, and modeling of digestion processes.

SUMMARY: During the process of carbohydrate digestion, both physical and chemical breakdown contribute to the gastric emptying and glycemic response of a meal. This seminar will examine complementary in vitro (static and dynamic) and in vivo approaches to increase our understanding of the carbohydrate digestion process. This information is critical to tailor food product composition, structure, particle size, and processing for specific digestive outcomes.