Research Overview

The Department of Food Science is committed to impacting the world food system and quality of life by educating and training students for careers in industry, government, and academia. Our mission is to engage in discovery-driven activities leading to innovative learning and outreach that: enhances health, safety, quality, and sustainability of foods; prepares the next generation of leaders in food science; and addresses stakeholder needs.

The Department of Food Science has developed four key areas of expertise, each with several major thrusts.

Research Areas

Food Chemistry, Structure, and Function
Applies chemistry, biochemistry, sensory science, and molecular and polymer sciences to the investigation of food composition, food structures, and the quality and functional properties of whole foods, food constituents, and food ingredients.

Foods for Health
Applies food science principles to the study of the food matrix as a critical delivery vehicle of consumer health benefits.

Food Processing & Technology Development
Integrates engineering, chemistry, and microbiology through food and beverage processing unit operations to produce safe, high quality and value-added products.

Food Safety and Microbiology
Studies the reaction and inactivation of microorganisms in food and their environment. Develops novel detection methods for food and environmental pathogens.

Dr. Lisa Mauer’s research is aimed at improving the delivery of thiamin in food products. Their goals are to identify all factors that impact the stability of thiamin in food products (including those containing whole and refined wheat, rice, and corn) from production to storage, and to determine if new, more stable, salt forms of thiamin can be produced.
Faculty by Research Area

Food Chemistry, Structure, and Function
Bruce R. Hamaker   hamkerb@purdue.edu
Owen Jones   joneso@purdue.edu
Andrea Liceaga   aliceaga@purdue.edu
Lisa J. Mauer   mauerl@purdue.edu
S. Suzanne Nielsen   nielsens@purdue.edu
Brad Reuhs   breuhs@purdue.edu
Cordelia Running   crunning@purdue.edu
Yuan Yao   yao1@purdue.edu

Foods for Health
Bruce R. Hamaker   hamakerb@purdue.edu
Kee-Hong Kim     kim618@purdue.edu
Andrea Liceaga   aliceaga@purdue.edu
Stephen Lindemann   lindemann@purdue.edu
Lisa J. Mauer   mauerl@purdue.edu
Fernanda San Martin   fsanmartin@purdue.edu

Food Processing and Technology Development
Christian E. Butzke   cbutzke@purdue.edu
Carlos M. Corvalan   corvalac@purdue.edu
Brian Farkas   bfarkas@purdue.edu
Jen-Yi Huang   huang874@purdue.edu
Jozef Kokini   jkokini@purdue.edu
Lisa J. Mauer   mauerl@purdue.edu
Dharmendra Mishra   mishradh@purdue.edu
Fernanda San Martin   fsanmartin@purdue.edu
Qin Xu   xuq@purdue.edu
Yuan Yao   yao1@purdue.edu

Food Safety and Microbiology
Bruce M. Applegate   applegab@purdue.edu
Arun K. Bhunia   bhunia@purdue.edu
Amanda Deering   adeering@purdue.edu
Yaohua “Betty” Feng   yfengchi@purdue.edu
Haley F. Oliver   hfoliver@purdue.edu
Yuan Yao   yao1@purdue.edu

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