

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY
THE UNIVERSITY OF GEORGIA
Faculty Research Interests

Athens, GA 30602 (Phone: 706-542-2286; FAX: 706-542-1050)
<https://foodscience.caes.uga.edu/>

Koushik Adhikari

Associate Professor*
Ph.D. University Missouri – Columbia
koushik7@uga.edu; 770-412-4736

Sensory analysis of commodity and consumer food products; determining emotional response of consumers; determining the relevance of sensory analysis and consumer behavior in food choice.

Casimir C. Akoh

Research Professor
Ph.D. Washington State University
cakoh@uga.edu; 706-542-1067

Chemical and enzymatic synthesis of fat substitutes and structured lipids. Food emulsifiers; enzymatic modification of lipids and phospholipids; synthesis of flavor and fragrance compounds.

Kaitlyn Casulli

Assistant Professor
Ph.D. Michigan State University
kaitlyn.casulli@uga.edu; 706-542-7501

Mathematical modeling related to process validation and risk assessment. Modeling heating and cooling of foods during processing. Validating processes for low-moisture foods and novel processes.

Jinru Chen

Professor*
Ph.D. University of Guelph
jchen@uga.edu; 770-412-4738

Molecular detection and characterization of foodborne bacterial pathogens; epidemiological typing, bacterial stress response, microbial physiology and pathogenicity and control of pathogens in food.

Faith Critzer

Associate Professor
Ph. D. University of Tennessee
fcritzer@uga.edu 706-542-1088

Identifying food safety risks tied to the production and packing of fresh fruits and vegetables, as well as identification of and education on risk mitigation strategies.

Laurel Dunn

Assistant Professor
Ph. D. University of Tennessee
laurel.dunn@uga.edu 706-542-2574

Food microbiology and produce food safety. Microbial risks associated with soil amendments and agricultural water.

Yen-Con Hung

Professor*
Ph.D. University of Minnesota
yhung@uga.edu; 770-412-4739

Physical properties of foods; food quality enhancement; inactivation of pathogens on foods

William L. Kerr

Professor and FPRDL Coordinator
Ph.D. University of California
wlkerr@uga.edu; 706-542-1085

Physical properties of foods; food processing. Rheological and textural properties of foods. NMR, ultrasound, and calorimetric techniques as process sensors. Computational modeling of food components.

Fanbin Kong

Professor
Ph.D. Washington State University
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Food engineering; in vitro simulation of digestive systems microencapsulation of bioactive components; function of digestive enzymes and inhibition.

Kevin E. Mis Solval

Assistant Professor*
Ph. D. Louisiana State University
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Designing food ingredients from food industry by-products; developing computer simulation models for optimizing food processing conditions and studying nutrient retention and bioavailability of bioactives.

Abhinav Mishra

Assistant Professor
Ph.D. University of Maryland
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Food microbiology, modeling microbial responses in food, quantitative microbial risk assessment (QMRA) and food safety.

Anand Mohan

Associate Professor and
Extension Coordinator
Ph.D. Kansas State University
anandm@uga.edu; 706-542-6673

Muscle biochemistry, value enhancement, enzyme catalyzed functions associated with postmortem changes in skeletal muscles, lipid oxidation, protein oxidation and safety of meat and meat products.

Chad Paton

Associate Professor
Ph. D. University of Maryland - College Park
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Nutritional factors that regulate metabolic activity. Diet-induced obesity, nutrient mediated control of fatty acid oxidation and metabolism.

Ronald B. Pegg

Josiah Meigs Distinguished Teaching Professor
Ph.D. Memorial University of Newfoundland
rpegg@uga.edu; 706-542-1099

Functional foods and health aspects of food products.

José I. Reyes De Corcuera

Associate Professor and
Undergraduate Coordinator
Ph.D. Washington State University
jireyes@uga.edu 706-542-5136

Food processing with emphasis on fruits and vegetables.

Manpreet Singh

Professor and Department Head
Ph.D. Iowa State University
manpreet@uga.edu; 706-542-1092

Persistence, prevalence, and transmission of foodborne pathogens in food processing environments and processed foods.

Rakesh K. Singh

Professor
Ph.D. University of Wisconsin
rsingh@uga.edu; 706-542-1084

Value-added processing using emerging technologies; developing processing protocols using high pressure, HTST, radio frequency and cold plasma technologies applied to fruit juices, dairy protein and food powders.

Joonhyuk Suh

Assistant Professor
Ph. D. Chung-And University, Korea
j.suh@uga.edu 706-542-7909

Application of analytical chemistry in food science using 'omics' technologies (metabolomics and flavoromics).

**Faculty located at:
Dept. of Food Science and Technology
Griffin, Georgia 30223-1797*

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Center for Food Safety
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Hendrik Den Bakker

Assistant Professor
Ph.D. Leiden University
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Genomics of bacterial foodborne pathogens. Genomic applications in animal and public health settings.

Xiang-yu Deng

Associate Professor
Ph.D. Illinois Institute of Technology
xdeng@uga.edu; 770-233-5495

Genomics and molecular biology of foodborne pathogens; pathogen subtyping and genomic epidemiology; bioinformatics; microbial phylogenetics and evolution; food microbiology.

Govindaraj Dev Kumar

Assistant Professor
Ph.D. Virginia Polytechnic Institute
gd03883@uga.edu; 706-467-6094

Bacterial adaptations to stressors (environment, plant, sanitizers, packaging) through cellular responses (biofilms, fila-

ments, slow growing states), produce safety, sanitizer development, imaging and vehicles of foodborne pathogen cross contamination such as soil, compost, manures, water, dust, aerosols, particulates and food contact surfaces.

Francisco Diez-Gonzalez

Professor and Director
Ph.D. Cornell University
fdiez@uga.edu; 770-228-7284

The study and control of foodborne pathogens including Shiga-toxin producing *Escherichia coli*, *Salmonella*, *Listeria monocytogenes* and spore-forming bacteria. Particular interests include the safety of organic foods, pathogens associated with fresh vegetables, low water activity foods, and Hispanic foods.

Malek Esseili

Assistant Professor
Ph.D. University of Toledo
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Ecology of human noroviruses; microbial pollution of surface waters.

Issmat I. Kassem

Assistant Professor
Ph.D. University of Toledo
iik33253@uga.edu; 770-228-7284

Survival and transmission of foodborne pathogens; antimicrobial resistant pathogens in food production; evaluation of antibiotic alternatives to control foodborne pathogens and enhance production.

Ynes R. Ortega

Associate Professor
Ph.D. University of Arizona
ortega@uga.edu; 770-233-5587

Parasitology; detection of human and animal pathogenic parasites in food, biological and environmental samples; pathogenesis of coccidian parasites with emphasis on *Cryptosporidium parvum* and *Cyclospora cayatanensis*; methods for parasites inactivation in food products.

Adjunct Faculty

Mark Berrang

Adjunct Assistant Professor
Ph.D. University of Georgia
Microbiologist, USDA-ARS-PPMQ
Russell Research Center
mark.berrang@ars.usda.gov

Contamination of poultry carcass with *Campylobacter* and *Listeria* during processing and further processing.

Sudhagar Mani

Adjunct Associate Professor
Ph.D. University of British Columbia
Associate Professor, College of Engineering, UGA
smani@uga.edu

Hybrid process modeling and simulation methods applied to biomass supply chain management & risk assessment, novel preprocessing and pretreatment technologies for biomass.

Bosoon Park

Adjunct Assistant Professor
Research Scientist, USDA-ARS
Russell Research Center
Bosoon.park@ars.usda.gov

Optical detection of food safety and food defense hazards.

Harshavardhan Thippareddi

Adjunct Professor
Ph.D. Kansas State University
Professor, Department of Poultry Science, UGA
harsha.thippareddi@uga.edu

Poultry processing, unit operations, poultry quality, microbiological safety, antimicrobial interventions, predictive microbiology, novel food processing technologies to improve quality and mi-

crobiological safety of fresh and processed poultry.

Hong Zhuang

Adjunct Associate Professor
Ph. D. University of Kentucky
Research Food Technologist
USDA-ARS
Russell Research Center
hong.zhuang@ars.usda.gov

Developing rapid and non-destructive spectral methods to predict poultry meat quality; Developing packaging technology for poultry meat shelf life extension; Evaluating and improving poultry meat quality and poultry processing using sensory analysis and instrumental methods; Developing quality assessment methods for poultry meat products.

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Center for Food Safety

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Food Product Innovation and Commercialization Center (FoodPIC)

<https://foodpic.uga.edu/>

Food Science Extension Outreach

<https://extension.uga.edu/programs-services/food-science.html>

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