

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

Athens, GA 30602, 706-542-1069  
<https://foodscience.caes.uga.edu/>

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**Koushik Adhikari**

Professor\*  
Ph.D. University Missouri – Columbia  
[koushik7@uga.edu](mailto: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**

Distinguished Research Professor  
Ph.D. Washington State University  
[cakoh@uga.edu](mailto: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.

**VM Balasubramaniam**

Koehler-Ayres Professor\*  
Ph.D. The Ohio State University  
[ymbala@uga.edu](mailto:ymbala@uga.edu); 770-228-7273

Advanced thermal and nonthermal food processing technologies for pathogen control and quality preservation; high-pressure processing, ultrashear technology, and food process modeling.

**Jinru Chen**

Professor\*  
Ph.D. University of Guelph  
[jchen@uga.edu](mailto: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**

Department Head and Professor  
Ph.D. University of Tennessee  
[fcritzer@uga.edu](mailto: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 and Extension Coordinator  
Ph.D. University of Tennessee  
[laurel.dunn@uga.edu](mailto:laurel.dunn@uga.edu) 706-542-2574

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

**James Gratzek**

Director, FoodPIC\*  
Ph.D. University of Georgia  
[james.gratzek@uga.edu](mailto:james.gratzek@uga.edu); 770-229-3385

Food product innovation and commercialization.

**William L. Kerr**

Professor and Director of FPRDL  
Ph.D. University of California  
[wlkerr@uga.edu](mailto: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  
[fkong@uga.edu](mailto:fkong@uga.edu); 706-542-7773

Food engineering; in vitro simulation of digestive systems microencapsulation of bioactive components; function of digestive enzymes and inhibition.

**Christopher Kucha**

Assistant Professor\*  
Ph.D. McGill University  
[christopher.kucha@uga.edu](mailto:christopher.kucha@uga.edu); 706-542-8190

Precision food process engineering; applications of sensing technologies, machine vision, data analytics, and artificial intelligence to improve food quality, safety, and processing efficiency.

**Kevin E. Mis Solval**

Associate Professor\*  
Ph.D. Louisiana State University  
[kem54736@uga.edu](mailto:kem54736@uga.edu); 770-412-4741

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**

Director of Graduate Studies and Associate Professor  
Ph.D. University of Maryland  
[amishra@uga.edu](mailto:amishra@uga.edu); 706-542-0994

Food microbiology, modeling microbial responses in food, quantitative microbial risk assessment (QMRA) and food safety.

**Anand Mohan**

Associate Professor  
Ph.D. Kansas State University  
[anandm@uga.edu](mailto:anandm@uga.edu); 706-542-6118

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  
[cpaton@uga.edu](mailto:cpaton@uga.edu) 706-542-3750

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](mailto:rpegg@uga.edu); 706-542-1099

Functional foods and health aspects of food products.

**Thais Ramos**

Public Service Assistant\*\*  
Ph.D. Federal University of Lavras, Brazil  
[td45709@uga.edu](mailto:td45709@uga.edu); 530-379-5181

Produce contamination and practical mitigation strategies for conventional and organic systems.

**Manpreet Singh**

Professor and Associate Dean  
Ph.D. Iowa State University  
[manpreet@uga.edu](mailto:manpreet@uga.edu); 706-542-9971

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](mailto: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-Ang University, Korea  
[j.suh@uga.edu](mailto:j.suh@uga.edu) 706-542-7909

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

**Joseph Usack**  
Assistant Professor  
Ph. D. Cornell University  
[ju71764@uga.edu](mailto:ju71764@uga.edu); 706-542-5136

Sustainable food systems engineering; microbial bioprocesses for resource recovery, bioenergy and biochemical production, and circular bioeconomy applications.

**Hualu Zhou**  
Assistant Professor\*  
Ph. D. University of Massachusetts Amherst  
[hualuzhou@uga.edu](mailto:hualuzhou@uga.edu); 770-412-4766

Future foods; bioactive encapsulation and delivery; food

nanotechnology, emulsion technologies, and molecular modeling for sustainable foods and biomaterials.

*\*Faculty located at:  
Dept. of Food Science and Technology  
Griffin, Georgia*

*\*\*Faculty located at:  
CAES Tifton Campus,  
Tifton, Georgia*

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**Center for Food Safety**  
**Griffin, Georgia 30223-1797**  
**(Phone: 770-228-7284) (FAX: 770-229-3216)**  
<https://cfs.caes.uga.edu/>

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**Hendrik Den Bakker**  
Associate Professor  
Ph.D. Leiden University  
[hcd82599@uga.edu](mailto:hcd82599@uga.edu) 770-467-6066

Genomics of bacterial foodborne pathogens. Genomic applications in animal and public health settings.

**Xiang-yu Deng**  
Professor  
Ph.D. Illinois Institute of Technology  
[xdeng@uga.edu](mailto: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**  
Associate Professor  
Ph.D. Virginia Polytechnic Institute  
[gd03883@uga.edu](mailto:gd03883@uga.edu); 706-467-6094

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

ments, slow growing states), produce safe-ty, 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](mailto: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**  
Associate Professor  
Ph.D. University of Toledo  
[Malek.esseili@uga.edu](mailto:Malek.esseili@uga.edu); 770-228-7284

Ecology of human noroviruses; microbial pollution of surface waters.

**Ynes R. Ortega**  
Associate Professor  
Ph.D. University of Arizona  
[ortega@uga.edu](mailto: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 cayetanensis*; methods for parasites inactivation in food products.

## **Adjunct Faculty**

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### **Mark Berrang**

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

### **Department of Food Science and Technology**

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### **Center for Food Safety**

<https://cfs.caes.uga.edu/>

### **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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