

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

Athens, GA 30602 (Phone: 706-542-2286; FAX: 706-542-1050)  
<http://www.caes.uga.edu/departments/fst>

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**Casimir C. Akoh**

Research Professor  
Ph.D. Washington State University  
[cakoh@uga.edu](mailto:cakoh@uga.edu); 706-542-1067

Food chemistry and biochemistry. Chemical and enzymatic synthesis of fat substitutes and structured lipids. Food emulsifiers; enzymatic modification of lipids and phospholipids; synthesis of flavor and fragrance compounds. Recovery of frying oil; nutraceuticals, and phytochemicals.

**Jinru Chen**

Associate Professor\*  
Ph.D. University of Guelph  
[jchen@uga.edu](mailto:jchen@uga.edu); 770-412-4738

Microbial genetics - rapid detection of bacterial pathogens; epidemiological typing; microbial stress response; bacterial physiology and pathogenicity; elimination of pathogens from food.

**Manjeet S. Chinnan**

Professor\*  
Ph.D. North Carolina State University  
[chinnan@uga.edu](mailto:chinnan@uga.edu); 770-412-4741

Food Processing and Engineering. Mathematical modeling and computer simulation of food processes; frying of foods; utilization of edible films; food packaging; processing of cereal legumes; postharvest handling of peanuts.

**Ronald R. Eitenmiller**

Professor  
Ph.D. University of Nebraska  
[eiten@uga.edu](mailto:eiten@uga.edu); 706-542-1091

Basic and applied studies with food and microbial enzymes; amine formation in food and relation to safety and quality; food composition; vitamin analysis methods; processing effects on nutrient quality, functional foods, phytochemicals.

**Joseph F. Frank**

Professor  
Ph.D. University of Wisconsin  
[cmsjoe@uga.edu](mailto:cmsjoe@uga.edu); 706-542-0994

Dairy and food microbiology; growth and survival of microorganisms in the food processing plant; biofilms; microbial viability detection; dairy fermentations.

**Mark A. Harrison**

Professor and Graduate Coordinator  
Ph.D. University of Tennessee  
[mahfst@uga.edu](mailto:mahfst@uga.edu); 706-542-1088

Food microbiology and toxicology. Occurrence and survival characteristics of bacterial pathogens in processed food; shelf-life extension of processed food; pathogen detection methodology.

**Yao-wen Huang**

Professor  
Ph.D. University of Georgia  
[huang@uga.edu](mailto:huang@uga.edu); 706-542-1092

Aquatic food technology. Processing and microbiology of fishery and poultry products; new product; shelf-life extension of processed food; by-product recovery and utilization.

**Yen-Con Hung**

Professor\*  
Ph.D. University of Minnesota  
[yhung@uga.edu](mailto:yhung@uga.edu); 770-414-4739

Physical properties of foods; food quality enhancement; inactivation of pathogens on foods; mathematical and computer modeling of heat and mass transfer; nondestructive quality sensing; postharvest handling of fruits and vegetables.

**William C. Hurst**

Professor and Outreach Coordinator  
Ph.D. Louisiana State University  
[whurst@uga.edu](mailto:whurst@uga.edu); 706-542-0993

Postharvest technology of horticultural crops (fruits, nuts, vegetables). HACCP and SQC (Statistical Quality Control) instruction for fruit/vegetable processing, fresh produce handling, and minimally processed produce.

**William L. Kerr**

Professor and FPRDL  
Coordinator  
Ph.D. University of California  
[wkerr@uga.edu](mailto:wkerr@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.

**Karina G. Martino**

Assistant Professor and Extension Specialist  
Ph.D. Michigan State University  
[kgmart@uga.edu](mailto:kgmart@uga.edu); (706) 542-6673

Food processing. Modeling food quality Value-added processing of agricultural commodities. Food safety engineering. Predictive microbiology, including growth and inactivation. Parameters estimation, uncertainty assessment of model prediction. Microbial food safety and risk assessment determination by using predictive modeling.

**Jake H. Mulligan**

Assistant Professor  
Ph.D. University of Akron  
[jhmullig@uga.edu](mailto:jhmullig@uga.edu); 706-542-7773

Material science aspects of foods, particularly how process conditions affect structure and resulting properties with a focus on in-line monitoring of structural changes during processing. Nanotechnology focused on producing and utilizing food/ agricultural based nanoparticles and the use of nanoparticles in various food applications. Applications of polymer processing techniques to food systems and development/use of food/ agriculture based plastics as alternatives to petroleum-based plastics.

**Ronald B. Pegg**

Assistant 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.

**Robert D. Phillips**

Professor\*  
Ph.D. Auburn University  
[rphilli@uga.edu](mailto:rphilli@uga.edu); 770-412-4744

Nutritional and functional properties of plant proteins. Food protein from novel and underutilized sources. Detoxification of aflatoxin-contaminated peanut meal, reduction of allergenic potential of peanuts, generating new products from cereals and legumes. Nutraceutical formulations from muscadines and blueberries.

**Anna V. A. Resurreccion**  
Professor\*  
Ph.D. University of Georgia  
[aresurr@uga.edu](mailto:aresurr@uga.edu); 770-412-4736

Consumer preferences. Sensory evaluation. Food quality. Relationship between physico-chemical quality characteristics of raw, processed, packaged and stored food. Modeling and optimization of formulations and processes in food products that utilize plant protein sources. Nutrition.

**Robert L. Shewfelt**  
Meigs Professor & Undergraduate Coordinator  
Ph.D. University of Massachusetts  
[shewfelt@uga.edu](mailto:shewfelt@uga.edu); 706-542-5136

Flavor and color quality of foods as evaluated by instrumental techniques, sensory analysis and consumer testing; postharvest physiology of fresh fruits and vegetables.

**Rakesh K. Singh**  
Professor and Department Head  
Ph.D. University of Wisconsin  
[rsingh@uga.edu](mailto:rsingh@uga.edu); 706-542-1084

Thermal process modeling including aseptic processing and continuous high-pressure, recovery of food processing waste water, and biosensor development.

**Louise Wicker**  
Professor and MFT Coordinator  
Ph.D. North Carolina State University  
[lwicker@uga.edu](mailto:lwicker@uga.edu); 706-542-2574

Protein chemistry, pectin substances, pectic enzymes. Physical properties of foods. Enzymes as process aids. Pectin-protein interactions and colloidal stability of juices, juice drinks, acidified milk drinks, functional beverages. Prediction of performance of ingredients in complex food systems and value added processing of foods for quality, stability and performance.

\*Faculty located at:  
Dept. of Food Science and Technology  
Griffin, Georgia 30223-1797  
Phone: 770-412-4758  
FAX: 770-412-4748

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**Center for Food Safety**  
**Griffin, Georgia 30223-1797**  
**(Phone: 770-228-7284) (FAX: 770-229-3216)**  
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**Walid Alali**  
Assistant Professor  
Ph. D. Texas A & M  
[walali@uga.edu](mailto:walali@uga.edu); 770-467-6066

Analytical and molecular epidemiology of food borne pathogens. Epidemiology of infectious disease organisms. Developing novel quantitative molecular approaches to food safety. Developing multivariate statistical models to adjust for dependency (i.e., clustering) among phenotypic and genotypic data.

**Larry R. Beuchat**  
D. W. Brooks Distinguished Professor  
Ph.D. Michigan State University  
[lbeuchat@uga.edu](mailto:lbeuchat@uga.edu); 770-412-4740

Microbiology of fruits, vegetables, nuts, and legumes; methodology for detection of yeasts, molds and pathogenic bacteria; metabolic injury of bacteria and fungi; antimicrobial compounds in foods; fermented foods; thermal resistance of mold ascospores; food preservatives.

**Jennifer Cannon**  
Assistant Professor  
Ph.D. University of North Carolina

[jcannon@uga.edu](mailto:jcannon@uga.edu); 770-229-3000

Foodborne Viruses: Methods for detection of human noroviruses and Hepatitis A virus on ready-to-eat and minimally processed foods; virus transfer by handling, processing, and irrigation; physical and chemical treatments for virus inactivation.

**Faith Critzer**  
Assistant Professor  
Ph. D. University of Tennessee  
[fcritzer@uga.edu](mailto:fcritzer@uga.edu); 770-233-5495

Studies which examine gene expression profiles of foodborne pathogens and spoilage microorganisms. Rapid detection of foodborne pathogens using traditional and molecular techniques. Novel intervention and sampling technologies to improve the safety of food, such as, non-thermal plasma processing technology for the decontamination of foodborne pathogens from produce surfaces.

**Michael P. Doyle**  
Regents Professor and Director  
Ph.D. University of Wisconsin  
[mdoyle@uga.edu](mailto:mdoyle@uga.edu); 770-228-7284

Foodborne bacterial pathogens. Research focused on the development of methods for pathogen detection and the identification of means to control or eliminate pathogens from foods.

**Marilyn C. Erickson**  
Associate Professor  
Ph.D. Oregon State University  
[mericks@uga.edu](mailto:mericks@uga.edu); 770-412-4742

Food Biochemistry - Oxidative stability of foods; Antioxidant supplementation to tissues and formulated foods; Applications of oxidative stress for inactivation of foodborne pathogens.

**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

### **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.

### **Aaron L. Brody**

Adjunct Professor  
Ph.D. Massachusetts Institute of Technology  
Consultant, Packaging/Brody Inc.  
[aaronbrody@aol.com](mailto:aaronbrody@aol.com)

Food packaging and food product development.

### **Sandra E. Kays**

Adjunct Assistant Professor  
Ph.D. University of Georgia  
USDA-ARS, Russell Research Center  
[Sandra.Kays@ars.usda.gov](mailto:Sandra.Kays@ars.usda.gov)

Development of spectroscopic methods of analysis for nutritional quality of foods.

### **Jeffrey L. Kornacki**

Adjunct Assistant Professor  
Ph.D. University of Wisconsin  
President and Senior Technical Director,  
Kornacki Food Safety Associates, LLC  
[Jlkorn731@gmail.com](mailto:Jlkorn731@gmail.com)

Food safety and microbiology.

### **Young W. Park**

Adjunct Assistant Professor  
Ph.D. Utah State University  
Professor, Fort Valley State College  
[yw\\_park@yahoo.com](mailto:yw_park@yahoo.com)

Chemistry/biochemistry of foods and dairy products; chemical and biochemical characterization, isolation, quantification of nutrients and constituents in foods especially in goat milk and its products; cholesterol, volatile compounds, fat and protein moieties; degradation processes of foods in relation to their shelf-life.

### **Mary Alice Smith**

Adjunct Associate Professor  
Ph.D. University of Arkansas for Medical Sciences  
Associate Professor, Department of Environmental Health Science, UGA  
[masmith@uga.edu](mailto:masmith@uga.edu)

Effects of toxicants on reproduction and development; environmental and microbial risk assessment methodology; effects of pathogens on pregnancy and development.

### **Norman J. Stern**

Adjunct Professor  
Ph.D. Virginia Polytechnic Institute and State University  
Research Microbiologist--USDA-ARS,  
Russell Research Center  
[Norm.Stern@ars.usda.gov](mailto:Norm.Stern@ars.usda.gov)

Poultry microbiological safety-bacteriocins as an alternative treatment to control human enteropathogens in animal production and as a post-slaughter processing treatment; enhancing the efficient production and purification of these bacteriocins.

(Revised November 2008)

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