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.foodscience.caes.uga.edu/

Casimir C. Akoh
Research Professor
Ph.D. Washington State University
cakoh@uga.edu; 706-542-1067
Food chemistry and biochemistry. Chemi-cal and enzymatic synthesis of fat substi-tutes and structured lipids. Food emulsifi-ers; enzymatic modification of lipids and phospholipids; synthesis of flavor and fra-grance compounds. Recovery of frying oil; nutraceuticals, and phytochemicals.

Jinru Chen
Professor*
Ph.D. University of Guelph
jchen@uga.edu; 770-412-4738
Microbial genetics - rapid detection of bac-terial pathogens; epidemiological typing; microbial stress response; bacterial physi-ology and pathogenicity; elimination of pa-thogens from food.

Manjeet S. Chinnan
Emeritus Professor*
Ph.D. North Carolina State University
chinnan@uga.edu; 770-412-4741
Food Processing and Engineering. Ma-thematical modeling and computer simu-lation of food processes; frying of foods; utilization of edible films; food packaging; processing of cereal legumes; postharv-est handling of peanuts.

Ronald R. Eitenmiller
Emeritus Professor
Ph.D. University of Nebraska
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 me-thods, processing effects on nutrient quali-ty, functional foods, phytochemicals.

Joseph F. Frank
Professor
Ph.D. University of Wisconsin
cmsjoe@uga.edu; 706-542-0994
Dairy and food microbiology; growth and survival of microorganisms in the food processing plant; biofilms; microbial viabili-ty detection; dairy fermentations.

Mark A. Harrison
Professor and Graduate Coordinator
Ph.D. University of Tennessee
mahfst@uga.edu; 706-542-1088
Food microbiology and toxicology. Oc-currence and survival characteristics of bacterial pathogens in processed food; shelf-life extension of processed food; pa-thogen detection methodology.

Yao-wen Huang
Professor
Ph.D. University of Georgia
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Aquatic food technology. Processing and microbiology of fishery and poultry prod-ucts; 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; 770-412-4739
Physical properties of foods; food quality enhancement; inactivation of pathogens on foods; mathematical and computer modeling of heat and mass transfer; non-destructive quality sensing; postharvest handling of fruits and vegetables.

William C. Hurst
Professor and Outreach Coordinator
Ph.D. Louisiana State University
bhurst@uga.edu; 706-542-0993
Postharvest technology of horticultural crops (fruits, nuts, vegetables). HACCP and SQC (Statistical Quality Control) in-struction for fruit/vegetable processing, fresh produce handling, and minimally processed produce.

William L. Kerr
Professor and
FPRDL Coordinator
Ph.D. University of California
wlkerr@uga.edu; 706-542-1085
Physical properties of foods; food proc-essing. Rheological and textural properties of foods. NMR, ultrasound, and calorime-tric techniques as process sensors. Com-putational modeling of food components.

Ronald B. Pegg
Assistant Professor
Ph.D. Memorial University of Newfound-land
rpegg@uga.edu; 706-542-1099
Functional foods and health aspects of food products.

Robert D. Phillips
Emeritus Professor*
Ph.D. Auburn University
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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 pea-nuts, generating new products from ce-reals and legumes. Nutraceutical formu-lations from muscadines and blueberries.

Anna V. A. Resurreccion
Distinguished Research Professor*
Ph.D. University of Georgia
aresurr@uga.edu; 770-412-4736
Consumer preferences. Sensory evalua-tion. Food quality. Relationship between physico-chemical quality characteristics of raw, processed, packaged and stored food. Modeling and optimization of formu-lations and processes in food products that utilize plant protein sources. Nutrition.
(Continued next page)

Robert L. Shewfelt
Meigs Professor & Undergraduate Coordi-nator
Ph.D. University of Massachusetts
shewfelt@uga.edu; 706-542-5136
Flavor and color quality of foods as eva-luated by instrumental techniques, sensory analysis and consumer testing; postharv-est physiology of fresh fruits and vegeta-bles.
Rakesh K. Singh
*Faculty located at:
Dept. of Food Science and Technology
Griffin, Georgia 30223-1797
Phone: 770-412-4758
FAX: 770-412-4748
Professor and Department Head
Ph.D. University of Wisconsin
rsingh@uga.edu; 706-542-1084
Thermal process modeling including asep-tic 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; 706-542-2574
Protein chemistry, pectin substances, pec-tic enzymes. Physical properties of foods. Enzymes as process aids. Pectin-protein interactions and colloidal stability of juices, juice drinks, acidified milk drinks, function-al beverages. Prediction of performance of ingredients in complex food systems and value added processing of foods for quality, stability and performance.

Center for Food Safety
Griffin, Georgia 30223-1797
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http://www.ugacfs.org/

Walid Alali
Assistant Professor
Ph. D. Texas A & M
walali@uga.edu; 770-467-6066
Analytical and molecular epidemiology of food borne pathogens. Epidemiology of in-fectious disease organisms. Developing novel quantitative molecular approaches to food safety. Developing multivariate statis-tical models to adjust for dependency (i.e., clustering) among phenotypic and genotyp-ic data.
Larry R. Beuchat
Emeritus D. W. Brooks Distinguished Professor
Ph.D. Michigan State University
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;; an-timicrobial compounds in foods; fermented foods; thermal resistance of mold asco-pores; food preservatives.
Jennifer Cannon
Assistant Professor
Ph.D. University of North Carolina
jcannon@uga.edu; 770-467-6094
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.
Michael P. Doyle
Regents Professor and Director
Ph.D. University of Wisconsin
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; 770-412-4742
Food Biochemistry - Oxidative stability of foods; Antioxidant supplementation to tis-sues and formulated foods; Applications of oxidative stress for inactivation of food-borne pathogens.
Ynes R. Ortega
Associate Professor
Ph.D. University of Arizona
ortega@uga.edu; 770-233-5587
Parasitology; detection of human and ani-mal pathogenic parasites in food, biological and environmental samples; pathogenesis of coccidian parasites with emphasis on *Cryptosporidium parvum* and *Cyclospora cayetanensis*; methods for parasites inacti-vation 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.

Aaron L. Brody
Adjunct Professor
Ph.D. Massachusetts Institute of Technology
Consultant, Packaging/Brody Inc.
aaronbrody@aol.com
Food packaging and food product development.

Faith J. Critzer
Adjunct Assistant Professor
Ph. D. University of Tennessee
Bush Bros. and Company
fcritzer@bushbros.com
Studies which examine gene expression profiles of foodborne pathogens and spoi-lage 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.

Jeffrey L. Kornacki
Adjunct Assistant Professor
Ph.D. University of Wisconsin
President and Senior Technical Director, Kornacki Food Safety Associates, LLC
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Food safety and microbiology.

Karina G. Martino
Adjunct Assistant Professor
Ph.D. Michigan State University
kgmart@uga.edu
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.

Young W. Park
Adjunct Assistant Professor
Ph.D. Utah State University
Professor, Fort Valley State College
parky@fvsu.edu
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
Effects of toxicants on reproduction and development; environmental and microbial risk assessment methodology; effects of pathogens on pregnancy and develop-ment.

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.

(Revised January 2011)