GRADUATE PROGRAM IN

THE UNIVERSITY OF MAINE

FOOD & HUMAN NUTRITION SCIENCES

http://www.fsn.umaine.edu/grad.htm

Program of Study

The Department of Food Science and Human Nutrition is the only university program in Maine to offer both bachelor and graduate education in food science, human nutrition and dietetics. The Department conducts cutting edge research in food science and human nutrition, and provides service to the people and food industries of the State of Maine. Although the Department was formed in 1993 from two separate departments, the faculty and academic programs have made many contributions to the food industry and to the health of Maine citizens during the past sixty years.

The Department of Food Science and Human Nutrition provides students with the opportunity to obtain a M.S. degree in Food Science and Human Nutrition and a Ph.D. in Food and Nutrition Sciences, an interdisciplinary program. The major thrusts of the department are in the areas both basic and applied research, including human and animal models, fruit and vegetable products, food safety, food microbiology, seafood quality and product development. Competence in a foreign language is not required for a M.S. degree, but may be required for Ph.D. candidates.

Students

There are approximately 35 graduate students enrolled in the Department working towards their M.S. or Ph.D. degrees. A Student's program is planned in accordance with needs for competence according to the departmental faculty areas of expertise. Graduate thesis research is under the supervision of the student's major professor in the area of the student's interest.

Research Facilities

The department is housed in a new, air-conditioned facility on campus with expanded laboratory space for research. Food science labs are well-equipped and there is a large, new Pilot Plant and Consumer Testing Center for food product development. A clinical nutrition lab is available with a Beckman blood and urine analyzer. Human nutrition research projects carried out are both basic and applied in nature, and may involve international as well as domestic work. Several community nutrition projects are ongoing across the lifespan.

Financial Aid

Assistantships are limited, but all applicants are automatically considered for teaching or research assistantships. Many students are supported by research grants to individual faculty members; interested students should contact faculty members directly for further information on grant-supported assistantships.

Applying

Applicants are encouraged to identify an area of research interest and a potential advisor at the time of application; they should feel free to contact members of the faculty to discuss possible research projects even before submission of the application. The Department admits students for matriculation at the beginning of fall and spring semesters; in the case of certain research assistantships, matriculation may begin in the summer. Applications should be completed by January 31 in order to be considered for all types of assistantships commencing in the following fall semester.

Correspondence

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Graduate Faculty

Denise I. Skonberg, Ph.D. (University of Washington, 1997), Associate Professor and Graduate Coordinator. Aquatic food product technology; utilization of crustacean processing by-products; fish nutrition; effects of aquaculture feeds on food fish quality.

Robert C. Bayer, Ph.D. (Michigan State University, 1972), Professor. Fisheries and aquaculture nutrition, management and physiology.

Alfred A. Bushway, Ph.D. (Purdue, 1978), Professor. Fruit and vegetable post-harvest quality and product development.

Rodney J. Bushway, Ph.D. (Texas A&M, 1977), Professor. Food safety; fate of vitamins, natural toxicants, stress metabolites, pesticides, and food additives as they apply to fruits and vegetables; analytical methods development.

Beth L. Calder, Ph.D. (University of Maine, 2003), Assistant Professor and Extension Food Science Specialist. Assisting Maine food companies with product development. Value-added and food safety research. Improving the post-harvest quality of fresh-cut and processed Maine potatoes.

Mary Ellen Camire, Ph.D. (Texas Woman's University, 1989), Professor. Extrusion technology; nutrition policy, dietary fiber; sensory evaluation; phytochemicals.

Richard A. Cook, Ph.D. (University of Maine, 1973), Associate Professor. Community nutrition including nutritional status assessment, monitoring and surveillance. Particular interest in nutrition risk assessment of older adults.

Darrell W. Donahue, Ph.D. (North Carolina State University, 1992), Professor and Undergraduate Program Coordinator of Biological Engineering. Food engineering, process engineering, biosensors for liquid food systems, statistical process control, industrial process simulation and control, quantitative risk assessment modeling.

Dorothy Klimis-Zacas, Ph.D. (Pennsylvania State University, 1982), Professor. Cholesterol, lipoprotein, trace mineral nutrition and metabolism as related to cardiovascular disease. Transcultural studies on the role of Mediterranean diet(s) in certain degenerative diseases.

Linda J. Kling, Ph.D. (University of Maryland, 1980), Associate Professor. Larval fish nutrition and micro-diet development; development of aquaculture methodologies and strategies for alternative fish species.

L. Brian Perkins, Ph.D. (Univ. of Maine, 2002), Laboratory Manager and Research Chemist, Department of Food Science & Human Nutrition. Method development for the detection of pesticide residues in food and environmental samples by HPLC, GC, MS and ELISA. Naturally occurring toxins, phytochemicals and vitamins in food.

Clifford J. Rosen, M.D., (New York at Syracuse, 1975), Research Professor. Clinical and biological implications of osteoporosis.

Martin R. Stokes, Ph.D. (University of Glasgow, 1978), Professor and Chair, Department of Animal & Veterinary Sciences. Ruminant nutrition, silage preservation and utilization, dietary manipulation to maximize animal performance and efficiency. Mechanism of action of enzyme-based silage and feed additives.

Susan S. Sullivan, D.Sc., R.D. (Boston University, 1995), Senior Lecturer and Director of the Didactic Program in Dietetics. Clinical nutrition topics; calcium, vitamin D, and bone mineralization.

Charles R. Wallace, Ph.D. (University of Florida, 1986), Associate Professor. Reproductive efficiency of livestock.
Adrienne A. White, Ph.D., R.D. (University of Tennessee, 1988), Associate Professor and Dietetic Internship Director. Nutrition education, interventions, and theory-driven behavior change strategies. Food behavior across the life cycle.

Adrienne A. White, Ph.D., R.D. (University of Tennessee, 1988), Associate Professor and Dietetic Internship Director. Nutrition and behavior, interventions, and theory-driven behavior change strategies. Food behavior across the life cycle.

Vivian C.H. Wu, Ph.D. (Kansas State University, 2002), Assistant Professor. Food safety and security, food microbiology, food fermentation, and rapid methods and automation in microbiology. Particular interest in the development of new systems for rapid determination of pathogenic injured and non-injured microorganisms in foods, and the development of strategies to control, eliminate, or prevent foodborne pathogens in foods.