



Nutrition Research from Cells to Communities

Department of Nutrition, University of Massachusetts, Amherst, MA

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ABSTRACT

The mission of the Department of Nutrition, UMass Amherst, is to provide excellence and innovation in teaching, research, and outreach by applying a scientific foundation that addresses the nutritional needs of individuals and diverse populations. We conduct laboratory and applied community-based research that spans a wide range of issues. Housed within the Department of Nutrition, the UMass Extension Nutrition Education Program (NEP) collaborates with more than 100 agencies and provides nutrition education in over 46 communities in Massachusetts. This poster presents 1) the range of work undertaken by faculty, students, and NEP; and 2) highlight faculty research areas as well as emerging priorities for clinical and community-based nutrition research. We are interested in establishing collaborations for improved nutrition and health outcomes with researchers and community organizations across the Commonwealth.

INTRODUCTION

Nutrition research is important to establish dietary requirements, investigate the metabolic basis for therapies, and translate research to dietary behaviors and policies to improve health and prevent disease. The UMass Department of Nutrition research ranges from cellular and metabolic investigations to community-based and policy approaches. With over \$2.5 million in annual grant expenditures, the Department ranks among the top of the university departments in expenditures per faculty.

Nutrition faculty utilize laboratory facilities on the UMass campus, along with collaborative community research in Springfield, Holyoke, Lowell, and other communities in Massachusetts, nationally and internationally. In addition, the UMass Extension Nutrition Education Program provides nutrition education to thousands of limited income families annually through eight community-based sites throughout the state.



DEPARTMENT OF NUTRITION FACULTY RESEARCH INTERESTS



Patricia (Patsy) Beffa-Negrini, PhD, RD
Research Associate Professor
Program Coordinator, Online MPH in Nutrition

Research Interests:

- Distance education for adult learners
- Interaction and motivation in online education

Current Projects:

- Evaluation of the UMass online MPH in Nutrition Program



Elena Carbone, DrPH, RD, LDN
Associate Professor and
Graduate Program Director

Research Interests:

- Community-based behavior dietary change interventions among low income, multiethnic groups
- Health literacy and nutrition education
- Obesity, diabetes management, cancer prevention

Current Projects:

- Examination of the BMI Letter Among Massachusetts Families (CBPR/Baystate).



Nancy Cohen, PhD, RD, LDN
Professor and Department Head

Research Interests:

- Diet quality and food practices in older adults
- Evaluation of nutrition and food safety education programs
- Online education

Current Projects:

- Changing the Health Trajectory for Older Adults through Diet & Activity Modifications.(USDA)
- Food Safety from Farm to Preschool (USDA)



Lorraine S. Cordeiro, PhD
Assistant Professor

Research Interests:

- Food security, health and risk behaviors in adolescence and early adulthood
- Cross-national comparisons of health and nutrition outcomes

Current Projects:

- Food Security, Food Practices, and Health Risks among Pregnant and Postpartum Cambodian Women (USDA).
- Improving Food Security Among African American Faith-based Communities in Springfield, MA.



Young-Cheul Kim, PhD
Associate Professor

Research Interests:

- Impact of nutrients and dietary bioactive components on chronic diseases
- Adipocyte metabolism and gene regulation

Current Projects:

- Effects of Dietary Bioactive Phytochemicals on Fat Cell Differentiation and Function



Jerusha Peterman, PhD, RD, LDN
Assistant Professor

Research Interests:

- Causes and consequences of food security among immigrants and refugees
- Dietary changes upon immigration for immigrants and refugees

Current Projects:

- Cambodian Young Women's Project
- Health Education Programs for Lowell Adult Education (Design and Evaluation)
- The Role of EFNEP in Promoting Food Security (USDA)



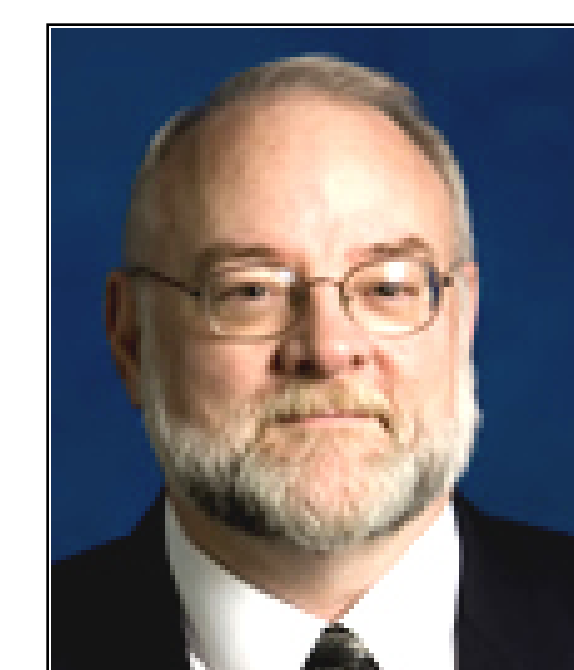
Alayne Ronnenberg, ScD
Associate Professor

Research Interests:

- Role of micronutrient status in reproductive health
- Obesity and pregnancy outcome
- Interactions between micronutrient status and both infectious disease and environmental toxins

Current Projects:

- UMass Vitamin D Study
- Epidemiology and Transmission of Dynamics of MDR/XDR Tuberculosis



Richard J Wood, PhD
Associate Professor

Research Interests:

- Functional genomics and the mechanisms responsible for controlling cellular vitamin D activity in the intestine and adipocyte
- Identification of molecular mediators of intestinal calcium absorption

Current Projects:

- Use of Bioactive Food Components to Modulate Vitamin D Receptor Function (USDA)

For further information, visit:
www.umass.edu/sphhs/nutrition