



Department of Nutrition and Food Science Summer Newsletter

Summer 2012

Special points of interest:

- A note from the Acting Chair
- Faculty Updates
- Updates in the Nutrition and Dietetics Profession
- Student Awards

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From the Acting Department Chair Dr. Robert Jackson



I hope that everyone had a restful and productive summer and will return to work in the Fall with renewed energy and focus. This summer has been a very eventful one. Dr. Hee-Jung Song formerly employed at Johns Hopkins University joined the faculty on July 1, as a new Assistant Professor. Her appointment is in Extension and Research. Please welcome her aboard.

In addition, we have some other changes in the department. Dr. Lucy Yu is planning to take the Fall semester off to collaborate with scientists at Shanghai Jiao Tong University in Shanghai, China. Dr. Bob Buchanan was honored with the International Association for Food Protection President's Lifetime Achievement Award. Several faculty members have been successful in obtaining internal and external competitive funding for their research. We also have several new students who will join us for the Fall semester. The Department is continuing to build collaborations with our nutrition and food science colleagues in the USDA and other nearby Federal Agencies. These should increase collaboration among our faculty and Federal researchers and also present new research and employment opportunities for our graduate students. Let's make this coming academic year the most productive ever!

Faculty and Staff News

Dr. Buchanan awarded lifetime

NFSC professor and Center for Food Safety and Security Systems Director Robert Buchanan, Ph.D. was recently honored with the International Association for Food Protection's (IAFP) President's Lifetime Achievement award at their annual meeting in Providence RI this summer. The President's Lifetime Achievement award is given to "an individual who has made a lasting impact on Advancing Food Safety Worldwide® through a lifetime of professional achievements in food protection." Congratulations!



Welcome Dr. Song!



A new member of the faculty joined us earlier this summer. Please welcome Dr. Hee-Jung Song to the University and the Department. Dr. Song comes to us from "up the road," having been awarded her doctorate from Johns Hopkins University (JHU). There she earned her degree in Human Nutrition in the Department of International Health, School of Public Health in 2008. Since graduation, she has been

working as a Postdoctoral Fellow and Research Project Coordinator in the Department of Health Systems and Outcomes in the JHU School of Nursing while being affiliated with JHU's Center for Human Nutrition as a Research Associate. Finally, just before joining us here in College Park, she was an Assistant Scientist in the Department of Health Systems and Outcomes in the JHU School of Nursing. Dr. Song's specialization is in developing, implementing, and evaluating programs to improve health and to address diet-related chronic diseases in ethnic minority communities, with an emphasis on improving healthy eating. She has published extensively in health care-related journals, listing 24 papers in peer-reviewed

journals in her CV. Dr. Song also has an impressive list of funded grants in which she serves as either PI or Co-I, including an NIH sponsored project to develop a collaborative community-based obesity prevention program in Baltimore City. Among her many awards she was the 2005 recipient of the Cynthia and Robert Lawrence Scholarship as well as the 2006 recipient of the Elsa Orent Keiles Fellowship, both at Johns Hopkins University. Her hobbies include watching movies, camping and exploring a variety of different cuisines, and her most recent vacation was in Spain.

Please stop by when you're in Marie Mount Hall and introduce yourself to NFSC's newest addition....You'll be glad you did!

Dr. Pradhan awarded grants from USDA-NIFA-AFRI



Dr. Abani Pradhan, Assistant Professor, has been awarded research funding for two separate projects from the USDA-NIFA-Agriculture and Food Research Initiative's (AFRI) Food Safety Competitive Grants Program. Dr. Pradhan's project on "*Risk Identification for Toxoplasma Transmission in Pasture Raised Animals*" (on which he will act as the PI) has been awarded in the amount of \$495,856 for four years. The goal of this project is to assess the scope of the emerging public health threat due to foodborne infection with *Toxoplasma gondii* from pigs and lambs from outdoor management systems that enter commerce. In recent years, meat from pasture and organically raised animals has become increasingly popular both with producers and consumers of organic or free range meats, which are perceived as healthier than meat from conventionally raised animals. Given the increasing consumer demand for organic

and free-range meat and the high risk of pasture and organically raised pigs and lambs being infected with *T. gondii*, these meats pose a significant public health risk. *Toxoplasma gondii* is responsible for 24% of all deaths attributed to foodborne pathogens in the U.S. with an estimated 327 deaths per year. Dr. Pradhan, along with Co-PIs, Drs. Dolores Hill and J. P. Dubey, from USDA-ARS at Beltsville, MD, aim to provide more insight on *T. gondii* infection in organic and free-range meats and obtain an understanding of the public health risk which may arise among consumers as a result of consumption of such meats. The knowledge and information from this project will help government regulatory agencies, producers, and consumers better understand foodborne human infection with *T. gondii* and facilitate implementation of practical approaches to control public health risks.

Dr. Pradhan will also work as a Co-PI on a project "*On-farm Optimal Intervention Programs Resulting in Reduction of MAP Bacterial Load in Milk*" focused on intervention programs to reduce *Mycobacterium avium* subsp. *paratuberculosis* (MAP) bacterial loads in milk, which will be led by Dr. Ynte Schukken (PI) from Cornell University. This project is funded for an amount of \$499,841 for four years. The goal of this project is to provide *dairy farmers with the tools to produce milk that is free of MAP bacteria. MAP is the causal*

organism of Johnes disease, a chronic, progressive disease that affects dairy cattle and other species. Because of similarities in disease presentation between Johnes disease in cattle and Crohns disease in humans, there is a concern over the potential role that MAP may play in Crohn's disease. Because there is evidence of a high proportion of dairy farms in the US has MAP infected cattle, reducing viable MAP in raw and pasteurized milk is important.

In addition to the above mentioned grants, Dr. Pradhan has been awarded a grant from Maryland Agricultural Experiment Station's (MAES) competitive grant program. The project "*Quantitative Risk Assessment for Listeria monocytogenes in Cantaloupes*" with an amount of \$30,000 has been funded for one year. In this project, Dr. Pradhan (PI), and Co-PI Dr. Micallef, Assistant Professor within the Department of Plant Science and Landscape Architecture, aim at generating critical microbiological data regarding *L. monocytogenes* prevalence on cantaloupes and within the farm and packing facilities, and developing a quantitative risk assessment model for *L. monocytogenes* in cantaloupes that would provide insights for making better informed food safety decisions and for evaluating potential intervention strategies.

Dr Wang, Dr. Sahyoun, and Dr. Cheng were also recipients of MAES competitive grants.

National and International experiences by the students and faculty of Dietetics Program

By: Dr. Margaret Udahogora



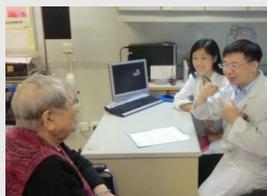
The NFSC Dietetics Program joined the School of Public Health for a Health Fair in Seat Pleasant, Prince George's County. **Danielle**

Mein, Sydney K. Richards and Dr. Udahogora discussed implementing healthy dietary practices, including answering residents' questions related to preventing and managing chronic diseases.

This summer, many students had incredible opportunities to volunteer in various communities and dietetic professions for various institutions both in the USA and abroad. They acquired practical knowledge essential to classroom learning and developed skills to promote and support the health of individual patients and communities. This training is initiated early in the educational program as part of professionalization.

Rosa Jazz Chan spent 5 weeks in Hong Kong at the Buddhist Li ZChong Yet Ming Nursing Home, which has about 270 patients, with more than half in need of enteral/parenteral nutrition support. She participated in the monthly Individual Care Plan with the medical team composed of doctors, nurses, occupational

therapists, and social workers. She was also involved in



designing menus for the facility.

Danielle Mein led 15 individuals to Chiquimula, Guatemala where she volunteered for 10 days at a feeding program and nutrition center. The team helped feed about 100 people in addition to distributing food to families. Danielle provided nutritional care for many malnourished and weak babies. She also volunteered at the University of MD center for Diabetes and Endocrinology at The Baltimore Washington Medical Center, and worked as a paid intern at Biometrics in Rockville.



Brittany Cines was part of a team in the National Institute of Child Health and Human Development on a 15-year longitudinal child growth study for 10 weeks. Her responsibilities included running the Bod Pod body composition machine, data collection and analysis. Brittany conducted a study on thyroid hormones and child obesity and presented her poster at the summer research poster fair.

She also shadowed numerous dietitians, providing her great insight into a range of career options.



Under the supervision of Dr. Udahogora, **Leigh Beynon, Caitlin Fields, Alexandra Raymond, Kimberly Lutkus, Vehik Nazaryan, and Nosheen Hayat**



From left: Sharon M. Desmond, Ph.D.; Danielle, Sydney, Dr. Udahogora, The Mayor of Seat Pleasant (right).

used online resources to participate in various projects such as the Frederick Restaurant Challenge Recipe Analysis Project to make sure the recipes are healthy for people with diabetes. Another project accomplished the menu modification for renal disease. Leigh helped to create an online orientation video for new dietetics students.

Dr. Margaret Udahogora traveled to St. Catherine, Jamaica to work with the Social Development Commission (SDC) Research Division. She held two nutrition workshops for the community health workers and the SDC interviewers on prevention and management of chronic diseases.

Dr. Nadine Sahyoun spent about a month in Lebanon working with colleagues at the American University of Beirut in analyzing data collected from surveys on food security among vulnerable populations in Lebanon. Sahyoun and colleagues developed and are now validating a food security tool that can be used in Lebanon and in the region.

Recent Updates in Nutrition and Dietetics Professions

The Shorb Lecture

From: ANSC Newsletter

Dr. Mary Shorb made a singular contribution and developed a novel assay for the quantitative determination of anti-pernicious factor later characterized by scientists at Merck and named vitamin B12. For her work Dr. Shorb received the prestigious Mead-Johnson Award in nutrition and the lectureship at Maryland is named after her. Additional information on Dr. Mary Shorb and past lectures by visiting the Department of Animal and Avian Sciences at <http://ansc.umd.edu/shorb/>.

This year's Shorb Lecture "Genomics of Trace Elements" was delivered by **Dr. Vadim Gladyshev** on May 10, 2012 in the Animal Sciences Lecture Hall. A reception for Dr. Gladyshev was held afterward. Dr. Gladyshev is currently the Head of the Center for Redox Medicine at Harvard Medical School. His research focuses on the role of the trace element Selenium and redox biology as applied to cancer, aging, and reproduction. Dr. Gladyshev has single handedly identified scores of new pathways and new proteins that are dependent on Se to control the redox state of an organism.

Student Awards



Congratulations to Wenting Ju who won the **J.Mac Geopfert Developing Scientists Awards** during International Association of Food Protection 2012, and first place in the poster competition.

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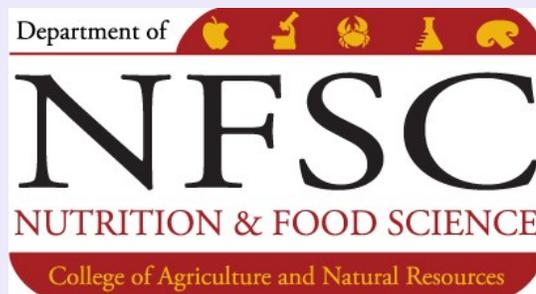
We're on the web!
www.nfsc.umd.edu

The Department of Nutrition and Food Science strives to prepare students for careers in the dynamic and global food industry, public health and community nutrition sectors, health care, or biomedical research. The program offers a Bachelor of Science degree in Nutrition and Food Science with three options for students interested in nutrition, food, and health.

The University of Maryland is an internationally recognized research university. It is also the most comprehensive institution of higher education, research, and service in the state of Maryland. The Department of Nutrition and Food Science offers two graduate programs; one in Nutrition and the other in Food Science.

FOR MORE INFORMATION

To learn more about our programs, please visit our website or contact us at the e-mail address provided on the side. For application and admissions information or to visit campus, contact the Undergraduate Admissions Office.



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If you have the means and desire, please consider making a commitment to supporting the educational mission of the Department of Nutrition and Food Science. Any gift will make a difference in preserving the quality education to our students. Please use the information provided on the sidebar to contact the Department for more information.