The Department of Nutrition and Food Science grew over the last one year period. We welcomed two new Assistant Professors, Dr. Shaik Ohidar Rahaman, in Nutritional Sciences, and Dr. Rohan Tikekar, in Food Process Engineering.

In addition, the Department improved in several important yardsticks. Competitive extra mural funding now stands at over $2.2 million, faculty and students won a variety of prestigious awards, including some from national disciplinary societies, like Federation of American Societies of Biology, the Institute for Food Technologists and Society for Risk Analysis.

Two faculty members earned promotion and/or tenure. Congratulate Dr. Nadine Sahyoun who was promoted to the rank of Professor and Dr. Qin Wang, who was promoted and tenured to Associate Professor.

Our undergraduate students won several college and University awards and some, after graduation, matriculated in other prestigious universities. The numbers of 2 + 2 students from China increased and several of our 2 + 2 graduates entered graduate school here at Maryland or elsewhere. The Department underwent two successful program reviews from the American Academy of Nutrition and Dietetics (ACEND) and one from the Institute of Food Technologists. The NFSC Dietetic Internship Program was awarded the highest level of accreditation by ACEND thus honoring their excellence and achievements.

Faculty of the Department developed a new study abroad course and developed an online course in Sports nutrition. We were successful in recruiting several Banneker-Key students to the Department, more than any other Department in the AGNR College. Dr. Margaret Udahogora developed a highly successful summer program that brought junior high and high school students for a summer of fun and learning about nutrition. Thanks Margaret!

NFSC renovated several rooms, including teaching areas to better serve our students and faculty, including in MMH 3104 and SKN 0101.

NFSC is exploring with other Departments on campus how to develop new research opportunities under the proposed new Center for Human Performance and Exercise. There is increased interest by several Departments and Colleges to partner with UMD faculty for the future.

Congratulations to NFSC students, staff, and faculty!!!
**Faculty and Staff News**

**Dr. Pradhan received AGNR’s “On–Campus Junior Faculty Award”**

Dr. Pradhan received the AGNR On-Campus Junior Faculty Award of excellence during the 2014 College of Agriculture and Natural Resources (AGNR) Convocation & Awards Ceremony held at the University of Maryland’s Riggs Alumni Center on May 08, 2014. His research has been focused in the area of food safety and risk assessment to address critical issues in microbial food safety that impact public health.

**Dr. Rahaman joined NFSC. Welcome!**

The Nutrition and Food Science Department welcomed a new Faculty in Fall 2014. Dr. Shaik Rahaman’s research is dedicated to understanding the fundamentals of inflammatory and wound-healing diseases – specifically atherosclerosis and fibrosis – at the molecular level. His work on this subject has been featured in several prestigious publications including Cell Metabolism and the Journal of Biological Chemistry. Rahaman’s goal is to better understand why people develop diseases like atherosclerosis or fibrosis and help to identify treatments. Most recently, Rahaman worked as an assistant professor at the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University. He earned a Ph.D. in Molecular Biology/Microbiology from Jadavpur University in India and received his M.S. and B.S. from the University of Calcutta.

**Dr. Qin Wang promoted to Associate Professor**

Dr. Qin Wang was promoted from Assistant Professor to Associate Professor in August, 2014. Dr. Wang studies food nanotechnology and biopolymer biophysics, focusing on development of novel and target-controlled delivery systems for bioactive compounds and drugs. She also researches on design and fabrication of bio-nanosensor for food safety evaluation.

As a PI, Dr. Wang has been awarded research funding for a project on “Validation of Chlorine Level in Sanitization System to Avoid Cross-Contamination” from center for produce safety (CPS), University of California at Davis, competitive grant in the amount of $161,947 for two years. This proposal focuses on development of a microfluidic mixer that simulates cross-contamination and pathogen survival scenarios in chlorinated produce wash water. Dr. Wang together with collaborators, Drs. Yaguang Luo, Patricia Millner, and Boce Zhang in the USDA-ARS-BARC will develop a microfluidic device that will have the unique capability of manipulating solutions at a miniaturized scale within instantaneous response times. Thus, the device will provide a technological solution to the limitations encountered in macroscale testing. This project will investigate the relationship between contact time and chlorine level to prevent cross-contamination in wash water. Minimal contact times for given chlorine levels will be determined for planktonic and biofilms of bacterial cells. (more in next page)
Several AGNR staff were recognized for their service at the Awards Ceremony that was held during the AGNR Convocation on May 8, 2014. The Service Award winners were:

- **Sara Kao** who was recognized for her service of 5 years
- **Margarita Vinogradova** who was recognized for her service of 10 years
- **Marythai Pandian** who was recognized for her service of 30 years
- **Nenita Harris** who was recognized for her service of 25 years
- **Eileen Morgan** who was recognized for her service of 25 years

Congratulations to the staff for their service and commitment over the years!
Research Day

The Annual Graduate Research Day took place on May 02 2014. Dr. Cutberto Garza, MD, PhD, visiting professor, Johns Hopkins Bloomberg School of Public Health and George Washington University Milken Institute school of Public Health and University professor, Boston College, came to speak to the graduate students about the topic "Nutrition Research: An Opportunity to Shape the Future of Health". Several Nutrition and Food Science graduate students received awards.

**Thank you:** The organizing committee would like to thank all the judges, students, and interns for their hard work and dedication and all those who contributed to the event. Congratulations to all students for your excellent poster presentations, especially those who won the poster competition.

Congratulations to all the winning graduate students.
Here is the list of the winners:

**First Year Nutrition Graduate Student**

**Bailey-Goldschmidt, Janice Therese** “Active Engagement: Enhancing Fruit and Vegetable Consumption for Young Adults with Autism”  
(Advisor: Dr. Song)

**First Year Food Science Graduate Student**

**Callahan, Mary Theresa Louise** “Horizontal and Vertical Movement of *E. coli*, *S. enterica* serovar Typhimurium, and *L. monocytogenes* Through Soil Under Flooding Conditions”  
(Advisor: Dr. Buchanan)

**Continuing Nutrition Graduate Students**

1st place **Hudgins, Samantha Morgan**  
“Hypothalamic Activity Suppressed by Coca-Cola as Measured by Functional Magnetic Resonance Imaging: A Dose-Response Study”  
(Advisor: Dr. Castonguay)  
2nd place **Sangha, Jasbir Kaur**  
“Relative Impacts of Proximate Determinants of Food Security on Child Nutritional Status”  
(Advisor: Dr. Jackson)

**Continuing Food Science Graduate Student**

1st place **Lu, Yingjian**  
“Characterization of organic and conventional sweet basil leaves using chromatographic and mass spectrometric fingerprints combined with principal component analysis”  
(Advisor: Dr. Yu)  
1st place **Wang, Miao**  
“Microbiological Survey of Pre-harvest Cantaloupes in Mid-Atlantic Region and Risk Assessment of *Listeria monocytogenes* and *Salmonella* in Cantaloupe”  
(Advisor: Dr. Pradhan)
NFSC Food Science & Nutrition Club Event

UMD Food Science Club successfully organized the FFA Food Science Event

The 2014 Maryland Future Farmers of America (MD FFA) Food Science and Technology Career Development Event (CDE) was successfully held at UMCP on April 01, 2014. This was a part of the National FFA Food Science and Technology CDE event, a food science competition held annually by the Maryland FFA Association and the Department of Nutrition and Food Science at UMCP.

The National FFA Organization is a research and support organization dedicated to making a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. Each year students from Maryland local high schools participate in the Maryland FFA Food Science and Technology CDE where they used their own ability to examine, evaluate, solve problems and make sound decisions in six CDE tasks.

A group of NFSC undergraduate and graduate students Ariella Feldman, Andrea Gilbert, Miao Guo, Abhinav Mishra, Guido Pelaez, Miao Wang, and Yangyang Wang led by Hao Pang prepared the written test, aroma test, sensory test, photo practicum, and team product development topic. They also served as judges to give scores and comments to the teams participating in the product development competition.

Team Nutrition Grant to train School Wellness Champion Award

The Maryland State Department of Education’s (MSDE) Office of School and Community Nutrition Programs has been awarded a $346,732 USDA Team Nutrition Grant to help train the next generation of school wellness champions. MSDE is partnering with the University of Maryland Extension (UME), University of Maryland Baltimore Division of Growth and Nutrition and the Department of Health and Mental Hygiene to improve the school health environment by effective implementation and monitoring of school wellness policies. Partners will provide training to create school level Wellness Champions from selected schools in five Maryland school districts. The training will be developed by UME and MSDE, and will focus on strategies to implement wellness policy goals and activities at the school level to enhance and improve the healthy eating and physical activity environment for students. Hee-Jung Song, Assistant Professor and Extension Nutrition Specialist will be involved with the formative evaluation and curriculum development, as well as serve as subject matter expert throughout the project. Through a sub-award for this project, UME FCS will receive more than $165,000 over a two year time frame for their contributions to this project.
The UM Dietetics Program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics. Our site visit was in March 2014 and we received praise for the strong academic curriculum/learning activities, a faculty body from different backgrounds and excellent Advisory Board. To continue improving the program, the University has recently provided a budget to improve the food service lab, we have started the process of modifying the curriculum to add a second Medical Nutrition Therapy NFSC460 and begin a Nutrition Education and Counseling course with a component of Entrepreneurship. With regards to registration exam pass rate and internship success rate, the most recent reports from the Commission on Dietetic Registration shows that on average, 97% of our students passed the exam within one year of the first attempt between 2009 and 2013. The internship matching rate of our graduates remains stronger (71%) compared to the National average of 50%. Fifteen out of twenty one applicants were matched to regular internship. We also have one advanced degree student who was recently accepted by Iowa ISPP Program thus increasing our success to 73%. The GPA remains an important determinant factor on the students’ success. Two out of 21 applicants had a GPA < 3 and were not matched.

At Maryland Academy of Nutrition (MAND) Dietetic Students/Graduates Posters

Two abstracts prepared by our senior dietetic students (Angelimar De Jesús Jiménez B.Sc., Krizia Fernandez B. Sc., on the left and right of Dr. Kavitha Sankaravam) were chosen among the best 10 abstracts selected in the students’ category. MAND accepted only 25 best abstracts due to limited space in both student and general category. The abstracts were based on the preliminary findings of the study conducted among Hispanics on their dietary and food purchasing habits in international stores and how that relates to their nutritional status and their nutrition education needs. Angelimar will be starting her internship VA Caribbean Healthcare Systems at the end of Summer 2014. Congratulations Angelimar!

Additionally, two of our 2013 Alumni (Danielle Colley Dietetic Intern at NIH) and Tituana Edita Veronica (Dietetic Intern WIC) were among the first three places. Danielle's and her NIH team got the first price.

During the Maryland Academy of Nutrition (MAND) 2014 Meeting

Alexandra Raymond (GPA 3.9), our senior dietetic student, was selected as the 2014 MAND Outstanding Dietetics Student.

She will be starting her internship at the end of summer with the University of Maryland Internship Program.

Congratulations Alex!
**Academy of Nutrition and Dietetics Public Policies**

Public Policy significantly influences and portrays the public image of the Academy and that of dietetics profession. At the recent Public Policy Workshop (see attached picture) on Capitol Hill, the Dietetic Program Director, Dr. Margaret Udahogora, joined the Academy Executive Team and members to participate in presenting to our Districts Congress Representatives - the Preventive Health Savings Act (H.R. 2663/S. 1422), The Treat and Reduce Obesity Act (H.R. 2415, S. 1184) and the Older Americans Act (OAA) Reauthorization. The meeting with the Legislators and Academy executives enhanced UMD visibility and the appreciation of our unique program. Three graduates from our Dietetic Program are now involved in Public Policy Workshop. There are Danielle Colley, Tituana Edita Veronica; and This helps enhance the value of Academy members in policy initiatives and to improve the nutritional health and care of Americans.

**The Dietetic Program has also started a Journal Club**

With the assistance of our student, Michael Merth, we have coordinated a joint venture with the Maryland Academy of Nutrition and Dietetics to hold a journal club three times a year on our campus. This will increase the interaction of our students with practicing dietitians to learn how research is translated into practices. They will also participate in discussion on how to develop a nutrition related project and the methods of collecting and reporting data. This is above the ACEND requirement of knowledge and competencies to include a research component. Our first meeting was held March 29th 2014 and was very successful.

**Summer Activities (DIET Program)**

“Eat Like an Expert”: The Dietetics Program held a five day “Eat Like an Expert” event for students attending the College Park Academy. Our Dietetics graduate (Lauren Pavone on the left and Danielle Wentz), and students Kyra Cappelucci coordinated the program and did an excellent job under the supervision of Dr. Margaret Udahogora. Klara Knezevic came to assist and did an excellent job with cooking meat the kids enjoyed! The main topics that were covered during that week included, digestive system, fruits and vegetables, baking, sugary beverages, purchasing food, developing a recipe, advertisement, and food preparation. The event was fun but it was also an opportunity for them to review some math, science concepts away from school.
NFSC DIET Program’s Summer Activities

“AG Discovery 2014”: The Dietetic Program remained busy during summer and held a program for the high school students who were participating in the AG Discovery 2014. This was a 3 week program promoting agriculture and natural resources to high school students from all over the country, which was sponsored by USDA/APHIS and UMD. The high school students got a taste of campus as well and visit different sites around Maryland like Capitol Hill and the Smithsonian National History Museum.

Two Dietetics students Jill Grimmer and Mary Stiles, and a high school junior Aida Manzi volunteered in delivering the information on Ag Discovery Nutrition Education, An Odyssey of the Exploration of Food, Culture and the Environment. Students learned about how certain foods are produced, processed, and prepared. The instructors emphasized the food safety concerns as well. They were able to explore various grains and methods of preparation. A demo was held to show them on how to prepare gluten free bread using various types of flour and they got taste and enjoy the bread and a porridge prepared with sorghum!

4th Annual Kenilworth/Parkside Community Crusade and Health Fair

African Americans have high levels of obesity and related chronic diseases. The promotion of health in this group has been shown to reach more people using churches, families or other social gathering.

July 19th, 2014, the Dietetics Program jointed Reid Temple AME Church in its efforts to educate low income families on how to prevent and manage obesity and related conditions. Dr. Margaret Udahogora and a high school volunteer Aida Manzi spent the day interacting with the local population. People suffering from type 1 and type 2 diabetes and obesity were very thankful to receive health tips on how to cope with their conditions by having a healthy diet.
NFSC Dietetic Internship (DI)

Awarded the Highest Level of Re-Accreditation by the Academy of Nutrition and Dietetics (formerly ADA)

- March 2014 – 3-day in-person accreditation site visit by 2 site visitors and an unplanned March snow storm.
- April 2014 – Site visit letter report received requesting minimal wording changes in 3 intern policies.
- July 9-11, 2014 – ACEND board meeting occurred.
- July 23, 2014 – ACEND letter states NFSC DI is placed on 10-year (not 7-year) re-accreditation cycle and no 5-year PAR report is due secondary to the NFSC DI’s outstanding performance. Next site visit is in 2024!

Many thanks to all who made this success possible – especially the USDA NAL FNIC team, the NFSC Internship Advisory Committee and special thanks to Janet Debelius (Sodexo DI Director) and Dr. Nadine Braunstein, RD (Robert Wood Johnson Health Policy Fellow) for Self Study editing.

Specific Spring Accomplishments

Publications


A.N.D. FNCE Abstract accepted for presentation and subsequent JAND publication

Fatzinger McShane, P., Worthington, L, Wilson, S and Schneider, JK. “Competencies for the Registered Dietitians” (CRD) in “real time”: Interns utilize DropBox with Success and Confidence. The abstract describes one approach to mapping AND training competencies to training activities and evaluation.

Intern Poster Presentations at DC State Dietetic (DCMADA) Meeting

All 10 interns had abstract-posters accepted for presentation at the District of Columbia Metropolitan Area Annual meeting on May 2, 2014. Rebecca Gates received the poster award for “project type” posters and Christina Kalafsky received the poster award for “case study” posters.

Professional Presentations

All 10 interns were invited speakers at the Maryland Dietitians in Health Care Communities (MD-DHCC) spring meeting on Tuesday April 8, 2014. Presentations, in partnered pairs, provided 90+ consultant dietitians technology overview to and training using project management software (Trello & Wunderlist), online brochures (SMORE), weebly website and iMovie.

Other Professional Activity

Intern Doyoung “Stacy” Kim was elected to the MD-DHCC Nominating Committee.

Interns represent NFSC at 2014 Maryland Day
Thank you to all Agencies and Facilities Who Have Provided Supervised Practice Training to Our NFSC Dietetic Interns

Baltimore Washington Medical Center, Baltimore VA Medical Center, Carroll Hospital Center, DC VA Medical Center, Franklin Square Hospital, Harbor Hospital, St Agnes Hospital, St Mary’s Hospital, Union Memorial Hospital, USDA Food & Nutrition Information Center, USDA Center for Nutrition Policy and Promotion, International Food Information Council, FoodMinds Inc, Riderwood Village, UMCP Dining Services, Montgomery County Public Schools, DC Public Schools/OSSE, Food and Friends Inc, PG County Office on Aging, Montgomery County Office on Aging, DaVita Dialysis, Collingswood Nursing and Rehabilitation Center, Good Samaritan Nursing Home, Charlestown Care Center, Baltimore VA Nursing home.

Congratulations to Our NFSC Dietetic Internship Graduates

Kate Fortunato Greenberg, RD LD – Co-author of Private Practice Workbook – “Welcome to the REBELUTION; Seven Steps to the Nutrition Practice of Your Dreams”. Invited speaker at AND: SCAN national meeting.
Wendy Baier, RD LD – Emerging Professional (award). Academy of Nutrition and Dietetics Woman’s Health DPG.
Catherine “Katy” Meassick, MS RD, selected as the Director of the Florida State University new sports nutrition department. http://tinyurl.com/p5kzrjk

A Special Thanks to Our Advisory Committee & Preceptors who “role model” the importance of professional involvement

Marie DeMarco, MA RD – private practice - MDA PAC Treasurer
Megan Larson, MS RD LDN – BWMC – MAND/MDA Chair, Council on Professional Issues
Kathleen Pellechia, RD – USDA NAL FNIC – Member, AND Informatics Subcommittee; Chair, AND Maternal and Child Health DPG
Desire Stapley, MA RD – USDA NAL FNIC – Member, AND Informatics Subcommittee
Laryessa Worthington, MS RD LDN – Part-time Webmaster, eXtension.org – Community Nutrition Community

June 20, 2014 – 10 Dietetic Interns graduate and Enter Dietetic Practice

Early Fall Accomplishments

- All 10 interns from the 2013-2014 class passed the dietetic registration examination on their first attempt; pass rate - 100%
- The NFSC Dietetic Internship distributed over 50 copies of its FNCE poster handouts describing how Dropbox can be used to track activities mapped to each of the 40 competency statements required for accreditation during the national dietetics (FNCE) meeting in Atlanta in October 2014.

Visit our Internship Blog – http://umdeticinternship.blogspot.com or Twitter @UMD_dietintern or our website http://nfsc.umd.edu/dietetic-internship for more information about the NFSC Dietetic Internship
Student Awards & Recognition

Congratulations to the Award Recipients

Goff Family Scholarship Award Winners
- Emily Peet
- Veronica Son

Feeding Tomorrow Scholarship Award Winners
- Ariel Bourne
- Kelsey Kanyuck

FMI Foundation Scholarship Award Winner
- YinZhi Qu

More about FMI

The Link of the FMI Foundation Scholarship 2014-2015 academic year:
More pictures can be found here:
http://www.fmi.org/Foundation/Scholarships

2014 Society for Risk Analysis (SRA) Meeting

Dr. Abani Pradhan’s five graduate students, (1) Miao Guo, (2) Hao Pang, (3) Huilin Cao (4) Miao Wang, and (5) Abhinav Mishra received travel awards to attend and present their research at the 2014 Society for Risk Analysis (SRA) annual meeting. The meeting was held on December 7-10, 2014, in Denver, Colorado. In addition, Abhinav Mishra received the SRA 2014 Specialty Group Merit Award from the Microbial Risk Analysis Specialty Group. Miao Wang received one of the four honorary mentions for his poster. His poster was selected as one of top seven among about 170 posters presented this year. Last year, Abhinav Mishra had won the one of the top five posters award, whereas Miao Wang had received the SRA 2013 Specialty Group Merit Award from the Microbial Risk Analysis Specialty Group at the SRA annual meeting held on December 8-13, 2013, in Baltimore, Maryland.
Alumni

Dr. Beilei Ge, Ph.D.

Dr. Beilei Ge works with Dr. Jianghong Meng through a research collaboration agreement between the U.S. Food and Drug Administration (FDA) and the University of Maryland on rapid detection of foodborne pathogens.

Dr. Ge is a Research Microbiologist at the FDA’s Center for Veterinary Medicine (CVM), Office of Research. Prior to joining FDA in September 2011, Dr. Ge was an Associate Professor in the Department of Food Science at Louisiana State University. Dr. Ge received her Ph.D. degree in Food Science/Food Microbiology from the University of Maryland, College Park, with Dr. Meng as her dissertation advisor.

Currently at FDA/CVM, Dr. Ge is leading a research program on feed and food safety microbiology, including developing rapid, sensitive, and specific molecular detection assays for foodborne pathogens particularly *Salmonella* in animal feed and pet food commodities; conducting surveillance studies to characterize the contamination levels, genotypes, and antimicrobial susceptibility profiles of foodborne pathogens and indicator organisms in animal feed and pet food; and investigating the development and mechanisms of antimicrobial resistance in foodborne pathogens.

While at LSU, Dr. Ge developed a strong nationally recognized research program in food safety microbiology, including rapid method development, food surveys, and antimicrobial resistance studies. In particular, her research group was a recognized leader in developing molecular assays for foodborne pathogens using a novel DNA amplification technique (loop-mediated isothermal amplification) and in applying such assays in various food commodities. In 2011, Dr. Ge was awarded a research grant ($152,591) entitled “Toward a Rapid and Reliable Pathogen Detection System in Produce” from the Center for Produce Safety at the University of California, Davis, which was later transferred to the University of Maryland, through the collaboration agreement established between the FDA and UMD.

Dr. Fei Wang, a previous LSU graduate and postdoctoral fellow with Dr. Meng and Dr. Qianru Yang, a former LSU Ph.D. candidate, worked on this grant project at FDA and UMD. One portion of the research on the rapid detection of Shiga toxin-producing *E. coli* in produce was recently published in the April 2014 issue of *Applied and Environmental Microbiology*. Another publication on *Salmonella* detection in produce is under preparation. On behalf of the research team, Dr. Ge will present their research findings in June at the 2014 Produce Safety Research Symposium.
The department would like to extend a big congratulations to its new graduates!

Congratulations on all your accomplishments here at UMD!
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.

Donate to the Department

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 our Department for more information.