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Nutritional Sciences

NSC Faculty Receive Salmon Awards

In May Dr. Emmanuelle Meuillet, Associate Professor in the Department of Nutritional Sciences, and Dr. David Alberts, UA Cancer Center Director and Joint Appointed Professor in the Department of Nutritional Sciences, were honored as recipients of the Salmon Awards. These prestigious awards recognize UA Cancer Center faculty members for their leadership in cancer research, grant support, publications, community service and clinical responsibilities. They were established to honor and remember Dr. Sydney E. Salmon, the Cancer Center's founding director.



Dr. Emmanuelle Meuillet presented her research on development of cancer treatment pharmaceuticals in a lecture entitled, "Small molecules, big therapeutic applications?" prior to receiving the award for *Distinguished Junior Investigator*.

Dr. David Alberts provided a brief history of his role in ovarian cancer research over the decades in a lecture entitled, "Loving my patients with ovarian cancer: a 45-year passion" prior to receiving the award for *Distinguished Senior Investigator*.



New Advisor

The Department of Nutritional Sciences welcomes Ashlee-Linares-Gaffer, MS, RD as the new undergraduate advisor.



Ashlee graduated from the UA in 2011 with a BS in Nutrition and then completed a distance internship combined with an online Master's degree at SUNY Oneonta. Through her internship, employment, and volunteer opportunities Ashlee has been exposed to a variety of food service, community, clinical, and academic environments related to nutrition; including a recent dietitian position at an eating disorder treatment facility.

Ashlee is excited to be back at the UA to help students navigate the nutritional science programs, achieve their academic goals and help students explore options for a successful future after graduation.

NSC Grad Student Receives UA Accolades Award



Danielle Vassallo, MS was awarded the Accolades Graduate Student Award at the end of the 2013 spring semester.

Accolades is a celebration of University Excellence. The award recognizes those who have distinguished themselves as outstanding members of our campus community and have shown a commitment to the University of Arizona. Danielle, a current PhD student, has demonstrated this commitment through both her research and service as a graduate teaching assistant.

Faculty Publications

Please visit <http://www.cals.arizona.edu/nutrition/content/new-publications> to view a list of recent faculty publications in peer reviewed journals.

Research

Dr. Melanie Hingle



Congratulations to Dr. Melanie Hingle for her promotion to Assistant Professor! Dr. Hingle's research interests include the behavioral components of weight and adiposity in children, adolescents and families and the development of approaches to elicit healthy lifestyle changes; including the use of mobile and wireless technologies.

It is estimated that one in every six overweight youth has "prediabetes," placing them at increased risk for early onset Type 2 diabetes and related illness. Diabetes risk can be reduced through modifications to lifestyle behaviors impacting metabolic health and weight status (e.g., diet and physical activity). However, the best way to motivate health behavior changes remains unclear. Dr. Hingle's Behavioral Nutrition Lab seeks to develop and test effective childhood "diabetesity" prevention strategies that are feasible, cost-effective and acceptable to youth and families. Understanding determinants of energy balance behaviors and identifying contributors to the success of interventions are critical first steps toward developing programs that effectively change behavior. As such, current projects include:

- The development and testing of SMS messages and social media designed to impact diet in adolescents and their parents
- The evaluation of nutritional quality of foods and beverages marketing to children
- The development of a series of interactive videos promoting healthy eating behaviors to parents of small children receiving food assistance
- The development and testing of a guided imagery intervention delivered via mobile software to weight concerned female smokers
- The development, implementation and evaluation of a higher education course designed to train future health professionals in obesity prevention

Dr. Jessica Miller

A warm welcome to Dr. Jessica Miller, who joins the Department of Nutritional Sciences as an Assistant Research Professor. Dr. Miller's research focuses on limonene, a potential breast cancer chemopreventive bioactive food compound found in citrus peel oil. She has developed and published analytical assays to extract limonene and its major metabolite from adipose tissue and biofluids using specific chromatographic methods for quantitation. She has also been involved in early phase clinical trials using other bioactive food compounds like resveratrol and green tea for breast cancer prevention.



Dr. Miller's research focus is moving into the area of metabolomics as a systemic approach to evaluate the effect of chemopreventive agents. Using metabolomics profiling with mass spectrometry-based techniques, Dr. Miller has collaborated with NSC joint appointed faculty Dr. Sherry Chow to investigate novel mechanisms and biomarkers of limonene activity after 4 weeks intervention in early stage breast cancer patients. Other collaborations include projects with Imperial College and Waters Corporation to characterize metabolite profiles in nipple aspirate fluid using multiple analytical platforms (nuclear magnetic resonance, gas chromatography mass spectrometry and liquid chromatography mass spectrometry). Within the context of a phase-III clinical trial led by Dr. Patricia Thompson and in collaboration with UC Davis, she aims to characterize changes in oxylipin metabolites of the arachidonic acid pathway after administration of a non-steroidal anti-inflammatory drug and relate these changes to colorectal adenoma outcomes.

Future work will focus on applying metabolomics to cancer prevention clinical trials in order to identify novel biomarkers of cancer risk or of response to interventions.



Education

Congratulations to our August Graduates!



Deepika Laddu defended her dissertation entitled, "Assessment of the effects of whole body and regional soft tissue composition on bone strength and development in females" to earn her PhD degree. Deepika was mentored by Dr. Scott Going. After graduation, Deepika will continue to work on publications with Dr. Going while pursuing a post-doc.

Larissa Marshel defended her thesis entitled, "The effect of motivational intervention on retention and adherence of ovarian cancer survivors in a lifestyle intervention" to earn her MS degree. Larissa was mentored by Dr. Cynthia Thomson. Larissa is getting married in August and will then move to Spain with her husband so that he can attend the University of Barcelona. While there, Larissa plans to pursue Clinical Research work with a biotech company.



Maria Morgan-Bathke defended her dissertation entitled, "The role of autophagy in salivary gland function following targeted head and neck radiation" to earn her PhD degree. Maria was mentored by Dr. Kirsten Limesand. After graduation Maria will begin a post-doc in the laboratory of Dr. Michael Jensen at the Mayo Clinic in Rochester, MN. Her work will focus on obesity and fatty acid signaling.

Lance Whitlock defended his thesis entitled, "Promotion of physical activity behavior change through staged progression of personal training using mobile technology delivery systems" to earn his MS degree. Lance was mentored by Dr. Nobuko (Kay) Hongu. After graduation, Lance will begin a dietetic internship at Lamar University in Beaumont, TX.



NSC 455: Mediterranean Diet & Health

This summer a group of seventeen individuals from different backgrounds and majors set out on a 3 week journey to Verona, Italy. Our purpose was to immerse ourselves into the Mediterranean diet and Italian culture. Upon our arrival, we were welcomed to the 500-year-old Villa Quaranta for an opening ceremony that showcased a variety of traditional Italian meats and cheeses.



Our course was a combination of lecture, cooking school and excursions. Through our daily lectures, Dr. Donato Romagnolo provided us with the knowledge and data behind the health benefits of the Mediterranean diet. To further our understanding, Antonia and Annalisa of Associazione Culturale Cucina di Casa skillfully demonstrated ways to incorporate each part of the Mediterranean diet into dishes that could be easily created in our own kitchens. The state of the art cooking school was set up to allow us to have hands on interaction in the preparation of the food and to socialize with one another during the process.



Throughout the course we visited many places involved in local food production; including the Turri Olive Oil Plant, the Cordioli Cheese Plant, Tortellini Remelli to see tortellini made by hand, the Vialone Nano Rice Plantation to see the origins of risotto and a retired quarry filled with award-winning wine at Zyme Winery. We witnessed many universal themes on our excursions; some of which were the importance of quality, honoring tradition, family owned and operated businesses, locality, the interconnection of local goods and the utilization of all products. Each element plays an integral role in and strengthened our understanding of the Mediterranean diet and lifestyle.

During the course of our stay we were welcomed by the Italian people and treated with kindness wherever we found ourselves. The city of Verona itself was full of history and character. I think the most important thing we learned was that the Mediterranean diet is not just about food; it is a way of life. One we should all try to adopt here at home.

Story and photos contributed by Christine Masenga Brown

Nutritional Sciences

OUR MISSION

To provide outstanding research, graduate and undergraduate programs, and outreach education that advances nutrition and physical activity in optimizing health for people in Arizona, the nation and the world.

OUR VISION

To discover, integrate, extend and apply knowledge of Nutritional Science to promote optimal health and to prevent chronic disease.



Like us on Facebook to share and learn about new opportunities and ideas! It's easy, just type *The U of A Department of Nutritional Sciences* into the Facebook search bar, then click on *like*.

Support Nutritional Sciences Through Charitable Giving

Supporting the Department of Nutritional Sciences has never been easier! All contributions are made to the UA Foundation, a 501(c)3 organization. Through this foundation donors may choose how their gift is applied. All gifts are tax deductible. Visit <http://cals.arizona.edu/nutrition/content/donations> for direct links to the UA Foundation for secure, online giving. Below are some examples of results of charitable giving that are helping current Nutritional Sciences students to complete their studies.

- The Darrel E. Goll Graduate Fellowship for Nutritional Sciences provides monetary support to select graduate students in the Department of Nutritional Sciences. During the 2012-2013 school year, this award supported research in the areas of children, healthy eating and physical activity.
- The Paul and Gladys Klingenberg Endowment in Nutritional Sciences awards monetary support to Nutritional Sciences students with priority given to a student from any Native American Nation or of Hispanic ancestry. During the 2012-2013 school year, this Endowment was awarded to 3 undergraduate students to help with education related costs, including tuition and books.



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