

NEWSLETTER

Spring/Summer 2012

GREETING FROM THE DEPARTMENT HEAD



Hello Everyone,

It is with mixed emotions that I write my last greeting to you as the Head of Nutritional Sciences. As many may know, I accepted the position of Associate Dean of Academic Programs and Career Development for the College of Agriculture and Life Sciences in February. I have continued to serve as the Nutritional Sciences Department Head as well for the past several months; however, as of July 1, I will step down as your Head.

There are so many people to thank for the help given me as Department Head that it well exceeds the capacity of this newsletter. Thank you to all of my faculty and staff for the kindness and respect you have shown me. Most of all thank you for all of your hard work and for working with me to create a strong culture of respect and high productivity. You have no idea how much I have been encouraged by our various accomplishments. In the past 4 years, grant and extension funding have nearly doubled, as have our numbers of undergraduate majors. We have launched five new online courses and introduced an online nutrition minor that can be completed in the summer. The Department is financially sound and we have maintained and increased our staff through our winter and summer programs. We have hosted two very successful "Research Frontiers" conferences, and delivered an outstanding graduate program. Five of our faculty members have been promoted and four granted tenure.

I thank all of our alumni and friends who have contributed time and money to the work of our Department from the bottom of my heart as well. A special thank you to all of those in our community who provide our students with learning experiences semester after semester. THANK YOU.

The Department of Nutritional Sciences is the driving force for academic programs, research and outreach activities in nutrition and physical activity for the University of Arizona. This position comes from our diversity in research and reflects our strong laboratory, behavioral and translational science. It is this scientific breadth and depth that makes us strong. I leave knowing the Department is in good hands as Dr. Scott Going has agreed to serve as the Interim Department Head. How fortunate we are to have so capable an individual who is willing to serve in this capacity. Congratulations Scott!!

Thank you all for the great opportunity to have served as your Department Head; it has been an honor.



NEW GRANTS AND FUNDING

Dr. Melanie Hingle along with Dr. Alon Efrat from the Department of Computer Science and Dr. Thienne Johnson from the Electrical and Computer Engineering Department received funding from the Collaborative Research Experience for Undergraduates. This project was sponsored by the Computing Research Association's Committee on the Status of Women in Computing Research, in cooperation with the National Science Foundation. Two undergraduate students from Nutritional Sciences - **Chelsea Doll** and **Madison Kramer** - will each receive a \$3,000 stipend for the 2012-13 academic year to work on a team with faculty and students from these departments to develop an "intelligent" food recommendation system. The goal of this initiative is to increase the number of women and minorities who continue on to graduate school in computer science, computer engineering, and allied disciplines.

For more information visit <http://cra-w.org/ArticleDetails/tabid/77/ArticleID/51/Default.aspx> or contact Dr. Hingle at 520-621-3087 or hinglem@u.arizona.edu.

TEAM Families on the Move

Investigator: **Jennifer Reeves, M.Ed.**

Funded by: General Mills Foundation Champions for Healthy Kids Legacy (SWAT)

University of Arizona Teens Advocating Sustainable Change (TASC) SCP Project

Investigator (Co-PI): **Jennifer Reeves, M.Ed.**

Funded by: USDA NIFA

Epigenetics of Colon Cancer

Investigator: **Donato Romagnolo, Ph.D.**

Funded by: Arizona Cancer Pilot Project

WELCOME

Welcome to **Carlyle Tait Hansen**, Communications Network Analyst.

Katharine Christmas joined Jennifer Teske's laboratory as a Research Technician.

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PUBLICATIONS

R. BURD ETAL.

Quercetin as a Systemic Chemopreventative Agent: Structural and Functional Mechanisms. (2011) *Mini Rev Med Chem*. December 1;11(14):1216-21.

R. BURD AND K. LIMESAND ETAL.

Control of Glycolytic Flux by AMPK in Tumor Cells Adapted to Low pH. (2012) *Trans Onc*. In Press.

D. GEISER AND J. WINZERLING ETAL.

Insect Transferrins: Multifunctional Proteins. (2012) *BBA – General Subjects*. Mar;1820(3):437-51.

Binding of PF2 Lectin From *Olneya Tesota* to Gut Proteins of *Zabrotes Subfasciatus* Larvae Associated with the Insecticidal Mechanism. (2012) *Journal of Agric Food Chem*. Mar;60(9):2398–2402.

S. GOING ETAL.

The Effects of Daily Consumption of Grapefruit on Body Weight, Lipids and Blood Pressure in Healthy, Overweight Adults. (2012) *Obesity Metabolism*. February 1. [Epub ahead of print].

Lower Physical Activity is Associated With Skeletal Muscle Fat Content in Girls. (2012) *Medical Science Sports Exercise*, pub ahead of print-3 January 2012. doi: 10.1249/MSS.0b013e31824749b2.

M. HINGLE, N. HONGU AND S. GOING ETAL.

Dietary Assessment Tools Using Mobile Technology. (2011) *Topics in Clinical Nutrition*, October/December, 26(4):300-311.

M. HINGLE ETAL.

Alcohol Consumption, Body Weight and Weight Change in Postmenopausal Women. (2012) *International Journal of Obesity*. Accepted.

Interventions to Improve Diet Quality in Children. (2012) *Diet Quality: An Evidence-Based Approach*. Preedy V. (ed) *Spring Science and Business Media, Inc*. In press.

Childhood Obesity and the Media. (2012) *Pediatric Clinics of North America*. Accepted.

Youth-Participatory Research to Inform the Development of Text Messages to Promote Healthy Lifestyle Behaviors in Adolescents. (2012) *Journal of Nutrition Education and Behavior*. Accepted.

N. HONGU ETAL.

Successful Statewide Walking Program Websites. (2012) *Journal of Extension*, 50(1) Available Online: <http://www.joe.org/joe/2012february/tt9.php>.

E. MEUILLET ETAL.

Synthesis and Biological Activity of 2-Aminothiazoles as Novel Inhibitors of PGE₂ Production in Cells. (2012) *Bioorg. Med. Chem. Let*. 22(10):3567-70.

The Matrix Protein CCN1/CYR61 is Required for $\alpha_v\beta_5$ -mediated Cancer Cell Migration. (2012) *Cell Biochem. Funct*. In press.

D. ROMAGNOLO ETAL.

Phytoalexins in Cancer Prevention. (2012) *Front Bioscience*, June, 1;17:2035-58.

PUBLICATIONS , CON'T.

Proteomic Approaches to Predict Bioavailability of Fatty Acids and Their Influence on Cancer and Chronic Disease Prevention. (2012) *J Nutr.*, Jul;142(7):1370S-6S. Epub 2012 May 30.

D. ROMAGNOLO AND O. SELMIN ETAL.

Flavonoids in Cancer Prevention: A Review of the Evidence. (2012) *J Nutr Gerontology*. Accepted.

J. WINZERLING ETAL.

Risk Factors Associated with Anemia, Iron Deficiency and Iron Deficiency Anemia in Rural Nepali Pregnant Women. (2012) *Southeast Asian J Trop Med Public Health*. May;43(3):735-746.

AWARDS, NOTABLES AND IN THE NEWS

Congratulations to **Dr. Randy Burd** who was accepted as a Fellow into the University of Arizona Academic Leadership Institute.

Congratulations to **Dr. Nobuko (Kay) Hongu** on her promotion to Associate Specialist.

Nobuko (Kay) Hongu 2012 the Walk Across Arizona Update

Walk Across Arizona is a statewide walking promotion program through the University of Arizona Cooperative Extension. In Spring 2012, 847 walkers (440 walkers from Maricopa county teams, 236 walkers from Green Valley teams, and 171 walkers from UA campus teams) participated in the program and walked the total of 171,534 miles during the 8 weeks.



Dr. Wanda Howell was nominated for the Pi Kappa Alpha Annual Administration & Staff Member of the Year Award.

Dr. Scottie Misner was invited to be part of the National Planning Committee for the Annual EFNEP Conference held February, 2012, in Washington, DC.

Dr. Scottie Misner is on the Interview Selection Committee for six awards for Outstanding Graduating Senior (Nugent Award, Robie Medal and Freeman Medal) from the University of Arizona. She is also a part of the Dietetic Interns Selection Committee for Carondelet St. Mary's Hospital Dietetic Internship Program.

Jennifer Reeves was honored as the Southwest District Nominee for the American Alliance for Health, Physical Education and Sport Hall of Fame Award. The Hall of Fame Physical Education/Physical Activity Award, honors individuals who have made significant contributions in the development and promotion of physical education or physical activity, and its identified sub-disciplines as an important part of the total educational program.

Jennifer Reeves served as the Principal Investigator on the National Dairy Council and Fuel Up to Play 60 Program. This program highlighted the efforts of Desert View High School Student Wellness Advocacy Team, Sunnyside School District, in January 2012.

Jennifer Reeves also served as the Principal Investigator for the Action for Healthy Kids Breakfast Grant Program. Challenger Middle School was selected as the highlighted school in an upcoming Action for Healthy Kids National campaign for model schools increasing breakfast participation.

PRESENTATIONS, SEMINARS AND CONFERENCES

DRS. GEISER AND WINZERLING

Poster Presentation: "Visualization of Ferritin in *Anopheles gambiae* 4a3b Cells." Undergraduate Biology Research Program, 23rd Annual Conference, Tucson, AZ, January, 2012, and the University of Arizona Honors College Spirit of Inquiry Expo, Tucson, AZ, February, 2012.



Conference Attended and Two Poster Presentations: "Visualization of Ferritin in *Anopheles gambiae* 4a3b Cells" and "Characterization of a Novel *Aedes aegypti* Ferritin Subunit Identified Utilizing Proteomic Techniques." Experimental Biology Meeting 2012, San Diego, CA, April, 2012.

DR. HONGU

Poster Presentation: "A Nutrition and Physical Activity Intervention Using Smart Phones in Physical Education Classes at a Junior High School." Mini-Symposium, Experimental Biology Meeting 2012, San Diego, CA, April, 2012.



Dr. Nobuko Hongu and Asuka Suzuki

Poster Presentation: "Food Photo Records for Assessing Daily Food Intake Using a Smart Phone Application in College Students." Mini-Symposium, Experimental Biology Meeting, San Diego, CA, April, 2012.



Asuka Suzuki

DR. LIMESAND

Poster Presentation: "The Role of Autophagy in Radiation Induced Salivary Gland Dysfunction." Experimental Biology Meeting, San Diego, CA, April, 2012.

Two Seminar Presentations: "Signaling Pathways Involved in IGF-1 Mediated Protection of Normal Tissues From Radiation Damage." Oral Health Sciences Program Seminar, University of Michigan School of Dentistry, Ann Arbor, MI, February, 2012 and the Cancer Prevention and Control Seminar Series, University of Arizona, Tucson, AZ, March, 2012.

Oral Presentation: "Contribution of Notch Signaling to Chronic Radiation-Induced Salivary Gland Damage." American Association for Dental Research, Tampa, FL, March, 2012.

DR. MEUILLET

Symposium: "Mechanistic and Translational Studies of the Inflammatory Response in Pancreatic Cancer." 8th Annual Agi Hirshberg Symposium for Pancreatic Cancer – a Think Tank for Pancreatic Cancer Research Being Conducted Across the Nation, University of California, Los Angeles, CA, January, 2012.

Work of Dr. Meuillet is included on the website: http://www.pancreatic.org/site/c.htYJ8MPIwE/b.7875079/k.67B6/Symposium_2012.htm

Abstract Presentation: "PH-427 Reduces the Survival of Fat-Treated Pancreatic Cancer Cells." Experimental Biology Meeting, San Diego, CA, April, 2012.

PRESENTATIONS, SEMINARS AND CONFERENCES, CON'T.

Five Abstract Presentations:

- "In Silico Identification and Biological Evaluation of Potent Small Molecule Inhibitors Targeting GAB1 Pleckstrin Homology Domain."
- "Role of the Inflammatory Response in Pancreatic Cancer Treatment."
- "Discovery of Novel Inhibitors for ECT2 as a Novel Therapeutic Strategy for Lung Cancer."
- "Nanoparticles Delivery of a Novel AKT/PDPK1 Inhibitor Inhibits Pancreatic Cancer Tumor Growth."
- "Discovery of a Novel Class of Prostaglandin E2 Synthesis Inhibitors with Anti-Tumor Activity in Colorectal Cancer." American Association of Cancer Research Annual Meeting, Chicago, IL, March-April, 2012.

DR. MISNER

Invited Presentation: "SNAP to it: Nutrition Education Statewide, video of the SNAP-Ed program." College of Agriculture and Life Sciences Spring Faculty & Staff luncheon, University of Arizona, April, 2012.

Conference Attended and Abstract Presentation: "Perceptions of Key Parental Benefits from Practices that Promote Intake of Calcium-Rich Foods and Beverages in Preadolescent Children." W-2003 Researchers, Experimental Biology Meeting, San Diego, CA, April, 2012.

JENNIFER REEVES

Invited Presentation: "Let's Move-Integrating Nutrition in Physical Activity." physical activity and nutrition integration effort. Desert View High School Student Wellness Advocacy Team. National Association for Sports Recreation and Dance Webinar, Tucson, AZ, March, 2012.

Invited Presentation: "Smarter Lunchrooms." Arizona Coordinated School Health Conference, Phoenix, AZ, January, 2012.

Invited Presentation: "Pima County Schools Meet Health Guidelines to Promote Healthy Eating and Physical Activity." Communities Putting Prevention to Work Celebration, Tucson, AZ, March, 2012.

DONATO ROMAGNOLO

Invited Presentation: "Diet-Nuclear Receptors Interactions and Epigenetic Diseases." Experimental Biology Meeting, San Diego, CA,

Nsc SEMINARS

Dr. Martina Cartwright, Nutrition Consultant, Adjunct Faculty, "Molecular Mechanisms & Clinical Outcomes of ICU Acquired Muscle Weakness: A Novel Area of Research."

Dr. Craig Stump, Chief of Endocrinology, Diabetes & Hypertension, Associate Professor, Department of Medicine, "Physical Activity in the Prevention and Care of Diabetes."



Dr. Michael Riehle, Associate Professor, Department of Entomology, "The Many Roles of Insulin Signaling in Mosquitos."

GRADUATE DEGREES AND AWARDS



Doctors of Philosophy



Andreas Paptousis

Andreas accepted a position as a Test Development Scientist at Quest Diagnostics in California. The science group focuses on personalized medicine.

Masters of Science

Danielle Vassallo

Danielle plans to continue working with Dr. Scott Going and work towards obtaining her Ph.D.

Awards and Notables

Congratulations to **Maria Morgan** who was awarded 1st place for her poster entitled "The Role of Autophagy Following Radiation Induced Salivary Gland Dysfunction." She received the award at the American Society for Nutrition Diet and Cancer Research Interest Session, Poster Session, Experimental Biology Meeting, San Diego, CA, April, 2012.

Congratulations to **Danielle Vassallo** who was chosen as 1 of 12 U.S. and International students to compete in the Student Research Presentations. She received a \$750.00 travel award from the American Society for Nutrition, to attend the Experimental Biology Meeting in San Diego, CA, April, 2012.

UNDERGRADUATE STUDENT NEWS

Congratulations to **Zachary Conley** who was accepted into the Accelerated Master's Program in Molecular and Cellular Biology at the University of Arizona. He was also honored with a 2012 American Society for Biochemistry and Molecular Biology Undergraduate Competitive Travel Award, to attend the Experimental Biology Meeting in San Diego, CA, April, 2012.

Congratulations to **Emily Lentz** who is the recipient of the Outstanding Dietetic Student Award representing the Southern region Dietetic Association, May, 2012.

Chelsea Page presented "Promoting Physical Activity and Nutrition Awareness in Middle School Youth Through the Design of Activities Using Geospatial Technologies" at the 21st Annual Statewide Arizona/NASA Space Grant Symposium. Kuiper Space Science Building, University of Arizona, April, 2012.



Congratulations to **Benjamin Truong** who is the recipient of the University of Arizona Outstanding Dietetic Student Award (ODSA) and the ODSA recipient from the Arizona Dietetic Association, May 2012.



MOBILE HEALTH INTEREST GROUP

Announcing the University of Arizona Mobile Health Interest Group!

Several NSc faculty are founding members of the University of Arizona Mobile Health ("mHealth") Interest Group. The overall goal of the interdisciplinary mHealth Interest Group is to understand and address the use and application of mHealth approaches to public health problems such as the prevention and treatment of chronic diseases and conditions (e.g. obesity, diabetes), whose outcomes may be modified through lifestyle behavior changes. The group's activities primarily focus on the use of mobile devices to conduct measurements or intervention activities related to improving the health status of individuals and populations. The inaugural meeting took place on May 3, 2012 to bring together interested UA faculty and professional staff who will comprise the Interest Group. Outside speakers included representatives of the National Institutes of Health, academia, and the private sector in the area of wireless health. More information can be found at <http://mhealth.arizona.edu> or contact Dr. Melanie Hingle, at hinglem@u.arizona.edu.

ALUMNI UPDATE - MONICA LAUDERMILK, PH.D.



Monica Laudermilk earned her Ph.D. in Nutritional Sciences at the University of Arizona in 2011 studying components of dietary intake and skeletal development in young girls under the advisement of Dr. Scott Going. After graduating, she accepted a postdoctoral appointment in the Department of Biostatistics and Epidemiology in the Perelman School of Medicine at the University of Pennsylvania (Philadelphia, PA). Her current position involves active engagement in a large clinical intervention study through the supervision, coordination and tracking of recruitment, measurement and intervention activities for WISER Survivor (Project 2 of the Penn TREC Center; Schmitz, PI). Monica has secured recruitment contracts with state cancer registries, guided recruitment of minority participants, identified intervention sites, and manages the randomization process. She is also responsible for all regulatory aspects of conducting human subjects research, leads the group consent sessions and contributed to the development of the intervention materials.

In January, 2012, Monica received a competitive university wide Postdoctoral Fellowship for Academic Diversity at the University of Pennsylvania. This fellowship has afforded her an opportunity to further study the underlying mechanisms of nutrition and bone health outcomes in breast cancer survivors. Under the direction of Dr. Kathryn Schmitz, she plans to accomplish this by adding bone health measures to the WISER Survivor trial, expanding the focus of the parent study to answer vital and unanswered set of questions about the effects of exercise, weight loss, and their combined effects on bone health in this population. This proposed research will contribute to her K Award that is currently in development.

Monica has benefited from the guidance and encouragement of numerous scholars who generously offered their knowledge, mentorship, and invested immense time into her training at the University of Arizona. She is grateful for the continued support in her early success and growth as an academic in the field of Nutritional Sciences.

This newsletter is also available online at: <http://nutrition.arizona.edu>. If you would like to receive our newsletter via email, please contact Theresa Spicer at 621-7126 or email tspicer@ag.arizona.edu. The University of Arizona is an equal opportunity, affirmative action institution. The University does not discriminate on the basis of race, color, religion, sex, national origin, age, disability, veteran status, or sexual orientation in its programs and activities.