Aging and Chronic Disease RIS Newsletter
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Recap of EB 2015

Congratulations!
ASN’s Emerging Leaders in Nutrition Science Poster Competition featured eleven graduate students and four postdoctoral fellows from the ACD RIS.

Congratulations to the winners who earned travel stipends:

Graduate First Prize: Kristy Du
University of Illinois Urbana-Champaign

Graduate Second Prize: Jaime Houdek
Rush University Medical Center

Grand Prize: Marshall Miller, PhD,
USDA-Agricultural Research Service
Featured Speaker

Our annual business meeting featured Clara Lau, PhD, the Director of Human Nutrition Research at the National Cattlemen’s Beef Association (NCBA), a contractor to the Beef Checkoff Program. NCBA is the oldest and largest trade association and marketing organization representing America’s one million cattle ranchers and farmers. Alongside the Executive Director of Nutrition Research, Dr. Lau assist in the planning, developing, managing and implementing of beef nutrition research programs. These programs are designed to establish, monitor and disseminate scientific evidence on beef’s role in a healthy diet and support the overall initiatives of the beef industry nutrition program.

Dr. Lau holds a bachelor’s degree in Nutrition Science from the University of California, Davis and a doctorate in Human Nutrition, Foods and Exercise from Virginia Tech. She currently lives in the Washington DC area and continually works towards maintaining a healthy and active lifestyle.

Thank you!

Our late-breaking symposium on the, “Nutritional Approaches for Osteosarcopenic Obesity: Interrelationships between Bone, Muscle, and Fat” was a success with a packed ballroom! Thank you to our symposium speakers: Jasminka Ilich-Ernst, PhD, RD, FACN from Florida State University, Clifford Rosen, PhD from Maine Medical Center Research Institute, Ronenn Roubenoff, MD, MHS, FACP, FACR from Novartis Institutes for Biomedical Research, and Wayne W. Campbell, PhD from Purdue University.

Feedback

We are looking for feedback on our events at EB 2015 in Boston. Please let us know what you thought about the 1. new poster competition format and 2. business meeting and breakfast, so we can improve our events for next year: c.sceppa@neu.edu
Member Spotlight

BRUCE S. KRISTAL, PhD
Associate Professor of Neurosurgery, Department of Neurosurgery, Harvard Medical School in the Department of Neurosurgery, Brigham and Women’s Hospital

The Kristal laboratory has active projects in three areas: metabolomics, lipidomics, and proteomics for personalized risk analysis based on diet and obesity, the analysis of megavariate data sets, and mitochondrial roles in neurologic injury. The lab is testing whether blood tests based on studies of food intake in rats and humans can enable scientists to predict risk of human disease. Rats maintained on low calorie diets have reduced risk of certain diseases, such as cancer. This is analogous to the reduced risk of diseases seen in humans who are comparatively lean.

The lab and their collaborators have developed approaches to simultaneously examine metabolites in the blood using HPLC separations with Coulometric electrode array detection. The use of HPLC coupled with high resolution mass spectrometric (Orbitrap) approaches enables us to look >5,000 lipidomics features (e.g., >100 structurally unique triglycerides). They then use mathematical approaches to identify sets of these compounds that can be used as dietary biomarkers (giving information about the diet). The goal is to be able to use blood tests developed in these studies to predict long-term disease risk in individuals and use this information for possible protective interventions and increased monitoring. These tests are expected to complement genetic testing. The Kristal lab has initially focused on chronic diseases where preventative intervention and/or early diagnostic screening are available (e.g., breast cancer, Type II diabetes, hypertension).

Dr. Kristal received his BS in Life Sciences from MIT (1986) and his PhD from Harvard's Graduate School of Arts and Sciences, Division of Medical Sciences, Committee on Virology (1991). He was a post-doc (with Byung Pal Yu) through Research Assistant Professor at University of Texas Health Science Center at San Antonio (1991-1996); he then moved to Burke Medical Research Institute (1996) and the Departments of Biochemistry/Neuroscience (1997/1998) at Weill Medical College of Cornell University (Associate Professor, 2004). He joined Brigham and Women’s Hospital/Harvard Medical School (Neurosurgery/Surgery) in 2007/2008. He was the founding secretary of the Metabolomics Society (2004-2008) and on their Board of Directors (2004-2011).
Dr. Murphy joined the Centre of Excellence in Cancer Prevention a partnership between the Canadian Cancer Society and the University of British Columbia in 2015. Prior to this Dr. Murphy was employed at DSM Nutritional Products, a leading supplier of vitamins and other nutrients. She received her PhD in Nutrition and Metabolism from the University of Alberta. Her work characterized the clinical role of omega-3 fatty acids on cancer cachexia and response to chemotherapy and was recognized by the Canadian Nutrition Society’s PhD Dissertation award. Dr. Murphy received post-doctorate training in epidemiology at the National Institute on Aging under Dr. Tamara Harris. Her post-doctorate focused on understanding the role of nutrition and obesity on chronic disease risk in aging populations and was supported by a prestigious Banting Fellowship from the Canadian Institutes of Health Research. She was also awarded an NIH/Office of Dietary Supplements grant during her fellowship.

The overarching goal of Dr. Murphy’s research program is to reduce the risk of chronic disease through modifiable factors. Around one-third of cancers can be prevented by a healthy diet, healthy body weight and being active. Dr. Murphy’s research focuses on optimal nutrition and body composition with an interest in older adults and other populations who have a greater risk of cancer and chronic disease. Additional research interests include nutrition throughout the disease continuum from diagnosis to survivorship and novel markers of diet, obesity and metabolism such as metabolomics; the study of small molecule metabolites in biological systems that may help identify markers as well as pathways linking risk factors and disease.

Dr. Murphy is active in population research, public health and community knowledge translation. She aims to translating her research to health promotion strategies with the goal of reducing preventable cancers and chronic diseases. She is a member of the American Society for Nutrition as well as the Canadian Nutrition Society.
Dr. Yang Pan is a Principal Scientist of Global R&D Nutrition Sciences at PepsiCo. In this role, Dr. Pan supports the Global Snacks business by driving the nutrition research and innovation programs on Better-For-You/Good-For-You snack categories globally, and leading Frito-Lay’s Health & Wellness outreach programs in US. Dr. Pan’s areas of expertise include pediatric and adult nutrition, medical nutrition, energy and performance, epidemiology, cardiometabolic health, immunology, etc. Dr. Pan joined PepsiCo in August 2014.

Prior to joining PepsiCo, Dr. Pan worked at The Coca-Cola Company for 7 years as Senior Scientist of Global Scientific and Regulatory Affairs. In this capacity, Dr. Pan served as a Subject Matter Expert and provided scientific and research expertise to guide and support a wide array of beverage business and innovation platforms globally. Before joining the Coca-Cola Company, Dr. Pan completed her research internship at National Heart, Lung and Blood Institute (NHLBI) of National Institutes of Health (NIH) where she conducted and published her research on the relationship between lifestyle behaviors (diet and physical activity) and metabolic syndrome in U.S. adolescents.

Dr. Pan currently serves on Small Business Innovation Research (SBIR) Special Emphasis Panel to review phase I and phase II research grants for the Risk, Prevention and Health Behavior (RPHB) Integrated Review Group (IRG) of NIH. She is on the Dietary Lipids Committee of International Life Sciences Institute (ILSI) North America. Dr. Pan also serves as ad hoc reviewer for several scientific journals related to nutrition, epidemiology and public health. She is an active member of American Nutrition Society, Academy of Nutrition and Dietetics and Institute of Food Technologists.

Dr. Pan received her doctoral degree in Nutrition Sciences from University of Maryland at College Park, Maryland. While pursuing her doctoral degree, Dr. Pan taught the core nutrition course and was the two-time winner of Distinguished Graduate Teaching Assistant Annual Award of University of Maryland (2003 & 2004). She was also the two-time winner of the Annual Nutrition Poster Competition at University of Maryland (2005 & 2006).
Dr. Pan received her Medical Degree from Wuhan University School of Medicine, Wuhan, China. She completed her medical residency and practiced medicine at Wuhan General Hospital of Guangzhou Military Command, Wuhan, China. During her medical training, she was the winner of the Golden Prize of Medical Education Scholarship for Outstanding Academic Performances at Wuhan University School of Medicine.

Recent ACD RIS Member Publications

(Please send your new and imminent citations to gordon72@purdue.edu so that we can share these with the entire membership.)


**Upcoming Events**

**White House Conference on Aging**
July 13, 2015
Online

**Healthy Aging Summit**
July 27-28, 2015
Washington, DC

**Food & Nutrition Conference & Expo**
October 3-6, 2015
Nashville, TN

**Cardiometabolic Health Congress**
October 21-24, 2015
Boston, MA

**Advances and Controversies in Clinical Nutrition**
December, 2015
[https://www.nutrition.org/meetings/other-upcoming-meetings-and-professional-development-events/](https://www.nutrition.org/meetings/other-upcoming-meetings-and-professional-development-events/)

**Experimental Biology**
April 2-6, 2016
San Diego, CA

**Announcements**

Do you have an announcement you would like included in the next newsletter and/or listserv? Please let us know! Send announcements to: c.sceppa@neu.edu