Emerging Leaders in Nutrition Science Competition

Recognizing the highest quality research presented by students and young investigators at ASN’s Scientific Sessions and Annual Meeting at Experimental Biology

Organized by ASN’s Research Interest Sections and Councils

Thank you to those that were able to make the event on Saturday, March 28, 2015 from 5:00 PM – 7:00 PM held in the Boston Convention and Exhibition Center - Grand Ballroom East

The following individuals have been announced as the winners of the competition.

Please join us in congratulating them!

Number and type of award (e.g., first/second/third place, grand prize winners) varied by each participating ASN Research Interest Section and Council.

This event was sponsored by an unrestricted grant from:

PEPSICO
Medical Nutrition Council

5. “Balancing the Risk of Infant Low Birth Weight and Macrosomia: an Examination of Gestational Weight Gain or Weight Loss among Obese Women.” Nicholas P. Deputy, Emory University

12. “Dietary Protein Source Impacts Bone, Acid Load and Calcium Excretion in Murine and Human Phenylketonuria.” Bridget M. Stroup, University of Wisconsin-Madison

13. “Improvement of Metabolic Parameters in Mice Supplemented with Vitamin D throughout Life.” Christopher R. Villa, University of Toronto

Aging and Chronic Disease RIS

Graduate Student First Place:
23. “Dietary Supplementation with Quercetin Rejuvenates Cognitive Performance Independent of Adult Hippocampal Neurogenesis.” Kristy Du, University of Illinois at Urbana-Champaign

Graduate Student Second Place:
25. “Dietary Inflammatory Index Scores and C-Reactive Protein Concentrations among Older Adults.” Jamie M. Houdek, Rush University Medical Center

Postdoctoral Fellow Winner:
32. “Effects of dietary blueberry on cognition and in vivo and in vitro inflammatory status.” Marshall G. Miller, USDA-ARS, HNRCA at Tufts University

Graduate Student Winners:

First Place:
39. “Relationships of Prostaglandin E2 with Fatty Acid Concentrations and Gene Expression in Colon of Individuals at Increased Risk of Colon Cancer.” Elkhansa H. Sidahmed, University of Michigan

Second Place:
37. “Obesity-induced Intestinal Tumorigenesis is Associated with Inflammatory Cytokines and Activation of Pro-tumorigenic Signaling Pathways in the Colon.” Anna C. Pfalzer, HNRCA, Tufts University

Third Place:
38. “Delta Tocotrienol Inhibits MMP-9 Dependent Invasion and Metastasis of Non-Small Cell Lung Cancer (NSCLC) Cell by Suppressing Notch-1 Mediated NF-κb and uPA Pathways.” Lichchavi D. Rajasinghe, Wayne State University

Postdoctoral Fellow Winners:

First Place:
46. “Fatty Acid Patterns and the Risk of Prostate Cancer in the Physicians’ Health Study.” Meng Yang, Harvard School of Public Health

Second Place:
45. “Global DNA Methylation and Hydroxymethylation Differ in Hepatocellular- and Cholangio-Carcinoma and Relate to Survival Rate.” Silvia Udali, University of Verona

Diet & Cancer RIS

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Lactation RIS

48. “The Role of ZnT2 in the Mammary Gland during Lactation.” Sooyeon Lee, Penn State Hershey College of Medicine/Pennsylvania State University

49. “Milk Mineral and Cytokine Concentrations Differ in Guatemalan Mothers with Subclinical Mastitis (SCM) by Stage of Lactation.” Chen Li, McGill University

50. “A Longitudinal Study of Human Milk Composition Beyond One Year Postpartum.” Maryanne T. Perrin, North Carolina State University

53. “Infection-Specific Responses of Breastmilk Leukocytes.” Foteini Hassiotou, University of Western Australia

54. “Diet influences the oral microbiota of infants during the first six months of life.” Hannah D. Holscher, University of Illinois
55. “Milk osteopontin may promote brain development via up-regulating osteopontin expression in vivo.” Rulan Jiang, University of California, Davis (presenter will be available from 5:00 pm – 6:00 pm)

57. “Human Milk Leptin, Insulin and N6/N3 Fatty Acids are associated with Early Differences in Gut Microbiome of Infants Born to Normal Weight and Obese Mothers.” Dominick Lemas, University of Colorado Anschutz Medical Campus

Nutrient-Gene Interactions RIS

67. “Diet-gene interaction in arachidonic (ARA) and docosahexaenoic (DHA) acid synthesis shows compensatory upregulation.” Hang Su, University of Illinois at Urbana-Champaign

69. “Pulsatile Delivery of Cortisol Regulates Lipid Storage in Adipocytes in Vitro and Human Adipose Gene Expression in Vivo.” Kalypso Karastergiou, Boston University School of Medicine

Nutritional Immunology RIS

First Place, Shaklee Emerging Leader in Nutritional Immunology Award:
72. “Effects of Early Life Pathogenic Exposures and Obesity on Childhood Inflammation Levels in Galápagos, Ecuador.” Kelly M. Houck, University of North Carolina

Second Place:
71. "Vitamin D Status and Respiratory Tract Infections: A Systematic Review and Meta-Analysis of Observational Evidence.” Kayla Furlong, University of Toronto/The Hospital for Sick Children

Third Place:
76. “Citrobacter rodentium Infection Alters Murine Colonic microRNA Signature.” Bijun Wen, University of Toronto

Nutritional Education & Behavioral Sciences RIS

First Place:
89. “Skin carotenoids correlate with plasma carotenoids and reported intake in 4th-grade children.” Lori M. Nguyen, University of California, Davis

Second Place:
90. “Educator Interactions at Head Start Lunches: A Context for Nutrition Education.” Taren M. Swindle, University of Arkansas for Medical Sciences

Third Place:
92. “Plotting of a Learner-Centered Nutrition Curriculum for School Nutrition Staff.” Anna M. Jones, University of California, Davis

Nutrition Translation RIS

94. “Evaluating the Discrimination of Sugar Content Thresholds in the Canadian Nutrient File Classification System.” Jodi T. Bernstein, University of Toronto

98. “Understanding Aspects of Carbohydrate Quality in Rice Related to Differences in Gastric Emptying Rate.” Elizabeth Pletsch, Purdue University

100. “Beverage Groups Consumed by US Children and Their Impact on Nutrient Intake.” Elizabeth A. Parker, USDA, Beltsville

Global Nutrition Council

First Place Winners:
107. “An Evaluation of Two Methods to Measure Hemoglobin Concentration among Women with Genetic Hemoglobin Disorders in Cambodia: A Method-Comparison Study.” Crystal Karakochuk, University of British Columbia

115. “How Does Homestead Food Production Improve Child Nutrition? Path Analysis of the AAMA Project in Nepal.” Julie L. Self, Emory University (presenter will be available from 6:00 pm – 7:00 pm)

Second Place Winners:
105. “Effect of vitamin B12 supplementation on B12 status and neurophysiological function in older Chileans analyzed by the combined indicator of B12 status.” Alex Brito, USDA-ARS WHNRC

117. “Elevated Umbilical Cord Cytokines are Related to Birth Size in HIV-exposed and Unexposed Infants.” Amanda L. Wilkinson, Cornell University
Community and Public Health Nutrition RIS

First Place:
129. “Employed US Adults’ Support for Food and Beverage Worksite Wellness Strategies and Sugar-Sweetened Beverage Intake during the Workday.” Seung HeeLee-Kwan, Centers for Disease Control and Prevention

Second Place:
121. “Pulse Pressure and Blood Triglyceride Levels among a Young Multi-Ethnic Group Living in South Florida.” Sahar Ajabshir, Florida International University

Third Place:
125. “Validation of ALIVE!® Block Food Frequency Questionnaire for Use with College Students.” Jamisha Ross, University of Maryland

Nutritional Epidemiology RIS

Graduate Students:

First Place:
143. “Dietary Patterns and Risk of Age-Related Macular Degeneration After More Than Two Decades of Follow-Up.” Juan Wu, Harvard School of Public Health

Second Place:

Third Place:
137. “Vitamin B6 Status is Associated with Depression Among Women with Inflammation.” Joycelyn M. Faraj, University of Massachusetts

Postdoctoral Fellow:

First Place:
154. “Index-based Dietary Patterns and All-cause and Cause-specific Mortality Stratified by Body Mass Index and Race/Ethnicity: NIH-AARP Diet and Health Study.” Tusarebecca E. Schap, National Cancer Institute, NIH

Second Place:
147. “Quantity and Variety in Fruit and Vegetable Intake and Cardiovascular Disease (CVD) Risk: The Women’s Health Initiative (WHI).” Shilpa N. Bhupathiraju, Harvard School of Public Health

Second Place:
153. “Adherence to the DASH Diet and Risk of Incident Chronic Kidney Disease: the Atherosclerosis Risk in Communities (ARIC) Study.” Casey M. Rebholz, Johns Hopkins University

Obesity RIS

First Place:
168. “Does the recommendation to drink 8 cups of water per day promote weight loss?” Julia M.W. Wong, Boston Children’s Hospital

Second Place:
167. “Dyslipidemia Induces Independent Mechanisms Regulating Skeletal Muscle Protein Metabolism and Glucose Balance in Human Obesity.” Lee Tran, Arizona State University/ Mayo Clinic

Third Place:
159. “Diet Quality and Adiposity in Adolescents.” Kevan Mellendick, University of North Carolina Greensboro

Energy & Macronutrient Metabolism RIS

173. “High Fructose Corn Syrup and Sucrose do not Differ in Their Effects on Cardiometabolic Risk Factors: A Series of Systematic Reviews and Meta-Analyses of Randomized Controlled Trials.” Vivian L. Choo, St. Michael’s Hospital/University of Toronto

174. “Influence of High Fat Diet on Macrophage Behavior and Metabolic Processes in Obesity Sensitive and Resistant Mice: Role of Monocyte Chemoattractant Protein 1.” Taryn L. Cranford, University South Carolina
189. “Glycemic and insulinemic responses are blunted by the consumption of a smoothie-type beverage containing a whole-grain fiber composite ingredient.” Lauren E. O’Connor, Purdue University

202. “Low Serum Sphingolipids in Attention Deficit Hyperactivity Disorder (ADHD).” Marcela Henríquez-Henríquez, Columbia University/Pontificia Universidad Católica de Chile

203. “Omega-3 Fatty Acids Modify Treatment Effect of High-Dose B Vitamins in Cognitively Impaired Elderly.” Fredrik Jernerén, University of Oxford

**Experimental Animal Nutrition RIS**

**Grad Prize:**
219. “Leucine Antagonizes Protein Degradation Induced by Endotoxin in Skeletal Muscle of Neonatal Pigs.” Adriana Hernandez-Garcia, Baylor College of Medicine

**First Place:**

**Second Place:**

**Dietary Bioactive Components RIS**

**Graduate Students**

**First Place:**

**First Place:**
252. “Sulforaphane Reduces Inflammatory Gene Expression in Microglia from Aged Mice.” Brigitte E. Townsend, University of Illinois at Urbana-Champaign

**Second Place:**
226. “Effect of Fresh Preparation and Industrial Processing on Stability of Potato Phytochemicals.” Amber Furrer, Purdue University

**Third Place:**
230. “Ellagic Acid Supplementation Attenuates Sucrose-Induced Obesity and Metabolic Complication in C57BL/6 mice.” Inhae Kang, University of Nebraska-Lincoln

**Third Place:**
241. “Potato Phenolics Modulate Rate of Glucose Transport in a Caco-2 Human Intestinal Cell Model.” Sydney E. Moser, Purdue University

**Postdoctoral Fellows**

**First Place:**
261. “The Change in Human Microvascular Function and its Relationship to Plasma Epoxide Content After Short-Term Walnut Intake.” Roberta R. Holt, University of California, Davis

**Undergraduate Student**

**First Place:**
265. “Probiotics Do Not Enhance Anti-hypertensive Effect of Blueberry Diets in Hypertensive Rats.” Leo He, UPEI

**Vitamins and Minerals RIS**

272. “Novel Ferroxidases in Mammalian Intestinal Epithelial Cells.” Caglar Doguer, University of Florida

274. “Maternal Choline Supplementation Modulates Fetal Growth Patterns in a Mouse Model of Placental Insufficiency.” Julia H. King, Cornell University
281. “Placental Zip 8 expression is associated with heme and non-heme iron trafficking proteins.” Yuan Ru, Cornell University

283. “Association between Transcobalamin II C776G Polymorphism and Neuropathy is Modified by Folate Intake in Vitamin B-12 Sufficient Elders.” Hathairat Sawaengsri, Jean Mayer USDA HNRCA, Tufts University

288. “Vitamin D (VD) prevents oxidative stress via regulating NOX4/Nrf2/Trx signaling cascade and upregulates SIRT1-mediated AMPK/IRS1/GLUT4 pathway and glucose uptake in high glucose treated 3T3L1 adipocytes.” Prasenjit Manna, LSU Health Sciences Center


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