

Agenda

Tuesday, October 20, 2009

4:00 p.m. - 8:00 p.m. **Registration at Hyatt Regency Hotel**

Wednesday, October 21, 2009

7:30 a.m. - 8:30 a.m. **Registration at Natcher Conference Center, National Institutes of Health (NIH)**

8:30 a.m. - 9:00 a.m. **Welcome**
Artemis P. Simopoulos, President, ISNN, Washington, DC
John A. Milner, National Cancer Institute (NCI), NIH, Bethesda, MD

Session 1: **Frontiers in Nutrigenetics**
Cochairs: Artemis P. Simopoulos, President, International Society of Nutrigenetics/Nutrigenomics (ISNN),
Washington, DC
John A. Milner, NCI, NIH, Bethesda, MD

9:00 a.m. - 9:25 a.m. **Opportunities and Challenges in Nutrigenetics/Nutrigenomics and Health**
Raffaele De Caterina, Gabriele d'Annunzio University, Chieti, Italy

9:25 a.m. - 9:30 a.m. **Discussion**

9:30 a.m. - 9:55 a.m. **Role of Human Genetic Variation in Nutritional Epidemiology Research**
David J. Hunter, Harvard School of Public Health, Boston, MA

9:55 a.m. - 10:00 a.m. **Discussion**

10:00 a.m. - 10:25 a.m. **Assessing Gene-Environment Interactions**
TBD

10:25 a.m. - 10:30 a.m. **Discussion**

10:30 a.m. - 10:50 a.m. **Break**

Session 1: **Frontiers in Nutrigenetics (*continued*)**
Cochairs: Cindy D. Davis, NCI, NIH, Bethesda, MD
Sergio Muntoni, Center for Metabolic Diseases and Atherosclerosis, Cagliari, Italy

10:50 a.m. - 11:15 a.m. **Copy Number Variation and Human Dietary Adaptations From an Evolutionary Perspective**
Anne C. Stone, Arizona State University, Tempe, AZ

11:15 a.m. - 11:20 a.m. **Discussion**

11:20 a.m. - 11:45 a.m. **Copy Number Variation, Purified Eicosapentaenoic Acid, and Central Nervous System Disorders**
Mehtar S. Manku, Amarin Pharmaceuticals Ltd., Oxford, United Kingdom

11:45 a.m. - 11:50 a.m.	Discussion
11:50 a.m. - 1:20 p.m.	Lunch
Session 2:	Frontiers in Nutrigenetics (<i>continued</i>) Cochairs: Jack A. Yanovski, Eunice Kennedy Shriver National Institute of Child Health and Human Development, NIH, Bethesda, MD Louis Pérusse, Laval University, Quebec City, Quebec, Canada
1:20 p.m. - 1:45 p.m.	FTO Variants Are Associated With Overeating and Many Long-Term Health Problems Associated With Obesity Colin N.A. Palmer, University of Dundee, Dundee, United Kingdom
1:45 p.m. - 1:50 p.m.	Discussion
1:50 p.m. - 2:15 p.m.	Genotype-Dependent Response to Energy-Restricted Diets in Obese Subjects J. Alfredo Martínez, University of Navarra, Pamplona, Spain
2:15 p.m. - 2:20 p.m.	Discussion
2:20 p.m. - 2:45 p.m.	The Genetics of Hypertension and Salt Sensitivity Steven C. Hunt, The University of Utah, Salt Lake City, UT
2:45 p.m. - 2:50 p.m.	Discussion
2:50 p.m. - 3:10 p.m.	Break
Session 2:	Frontiers in Nutrigenetics (<i>continued</i>) Cochairs: Raffaele De Caterina, Gabriele d'Annunzio University, Chieti, Italy David M. Klurfeld, Agricultural Research Service (ARS), U.S. Department of Agriculture (USDA), Beltsville, MD
3:10 p.m. - 3:35 p.m.	Physiological Significance of SNPs: The Folate Example Cornelia M. Ulrich, Fred Hutchinson Cancer Research Center, Seattle, WA/ German Cancer Research Center, Heidelberg, Germany
3:35 p.m. - 3:40 p.m.	Discussion
3:40 p.m. - 4:05 p.m.	Xenobiotic Metabolizing Genes, Meat Intake, and Risk of Advanced Colorectal Adenoma Rashmi Sinha, NCI, NIH, Bethesda, MD
4:05 p.m. - 4:10 p.m.	Discussion
4:10 p.m. - 4:35 p.m.	Genomics of a Slothful Lifestyle: Insights From a Founder Population Alan R. Shuldiner, University of Maryland, Baltimore, MD
4:35 p.m. - 4:40 p.m.	Discussion
4:40 p.m. - 5:05 p.m.	FADS 2 Polymorphisms Modify the Effect of Breastfeeding on Child IQ Joseph R. Hibbeln, National Institute on Alcohol Abuse and Alcoholism (NIAAA), NIH, Bethesda, MD
5:05 p.m. - 5:10 p.m.	Discussion

5:10 p.m. - 6:30 p.m. **ISNN Members Business Meeting**

5:10 p.m. - 7:30 p.m. **Poster Session/Discussion**
Reception

Thursday, October 22, 2009

Session 3: Frontiers in Epigenetics
Co-chairs: Pamela E. Starke-Reed, NIDDK, NIH, Bethesda, MD
Enitan Bababunmi, University of Ibadan, Ibadan, Nigeria

8:15 a.m. - 8:40 a.m. **Interindividual Epigenetic Variation: When, Why, and So What?**
Robert A. Waterland, Baylor College of Medicine/USDA Children's Nutrition Research Center, Houston, TX

8:40 a.m. - 8:50 a.m. **Discussion**

8:50 a.m. - 9:15 a.m. **Diet and Genomic Modification**
Alan Jackson, University of Southampton, Southampton, UK

9:15 a.m. - 9:25 a.m. **Discussion**

9:25 a.m. - 9:50 a.m. **The New Epigenetics: Adaptability and Diversity Through Fidelity**
Robert H. Lane, The University of Utah, Salt Lake City, UT

9:50 a.m. - 10:00 a.m. **Discussion**

10:00 a.m. - 10:25 a.m. **Choline: Its Interaction With SNPs and Epigenetic Control**
Steven H. Zeisel, The University of North Carolina at Chapel Hill, Chapel Hill, NC

10:25 a.m.-10:35 a.m. **Discussion**

10:35 a.m. - 10:45 a.m. **Break**

Session 3: Frontiers in Epigenetics (continued)
Co-chairs: John Paul SanGiovanni, National Eye Institute, NIH, Bethesda, MD
Lisa A. Spence, National Dairy Council, Rosemont, IL

10:45 a.m. - 11:10 a.m. **Dietary Polyphenols Mediate Regulation of Oxidative Stress and Chromatin Remodeling in Inflammation**
Irfan Rahman, University of Rochester, Rochester, NY

11:10 a.m. - 11:20 a.m. **Discussion**

11:20 a.m. - 11:45 a.m. **Dietary Manipulation of Histone Structure and Function**
Emily Ho, Oregon State University, Corvallis, OR

11:45 a.m. - 11:55 a.m. **Discussion**

11:55 a.m. - 12:55 p.m. **Lunch**

Session 4: The Impact of Transcriptomics on Nutrigenomics
Co-chairs: Edwin Mariman, Maastricht University, Maastricht, The Netherlands
Antonio Velazquez, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico

- 12:55 p.m. - 1:20 p.m. **Nrf2 Mediates Cancer Protection but Not Longevity Induced by Caloric Restriction**
Kevin J. Pearson, University of Kentucky, Lexington, KY
- 1:20 p.m. - 1:30 p.m. **Discussion**
- 1:30 p.m. - 1:55 p.m. **Dietary and Lifestyle Interventions Alter Human Gene Expression**
Per-Arne Svensson, Gothenburg University, Gothenburg, Sweden
- 1:55 p.m. - 2:05 p.m. **Discussion**
- 2:05 p.m. - 2:30 p.m. **Laboratory Diet Profoundly Alters Gene Expression and Confounds Genomic Analysis**
Joshua W. Hamilton, Woods Hole Marine Biological Laboratory, Woods Hole, MA/Dartmouth College, Hanover, NH/Brown University, Providence, RI
- 2:30 p.m. - 2:40 p.m. **Discussion**
- 2:40 p.m. - 3:05 p.m. **Toxicogenomic Concepts Applicable to Studies of the Genomic Effects of Dietary Components**
Karol L. Thompson, U.S. Food and Drug Administration (FDA), Silver Spring, MD
- 3:05 p.m. - 3:15 p.m. **Discussion**
- 3:15 p.m. - 3:25 p.m. **Break**
- 3:25 p.m. - 5:35 p.m. **Poster Session/Discussion**
- 6:25 p.m. - 8:25 p.m. **Congress Dinner Presentation**
Building the Cairns on the Path to Personalized Medicine
Lawrence C. Brody, National Human Genome Research Institute, NIH, Bethesda, MD

Friday, October 23, 2009

Session 5:

Noncoding RNAs and Posttranslational Gene Regulation

Cochairs: Young S. Kim, NCI, NIH, Bethesda, MD

Charles N. Serhan, Brigham and Women's Hospital/Harvard Medical School, Boston, MA

- 8:15 a.m. - 8:40 a.m. **Dietary Regulation of microRNA Expression in Cancer Cells**
Sharon A. Ross, NCI, NIH, Bethesda, MD
- 8:40 a.m. - 8:50 a.m. **Discussion**
- 8:50 a.m. - 9:15 a.m. **Dietary Methyl Deficiency, microRNA Expression, and Susceptibility to Liver Carcinogenesis**
Igor P. Pogribny, FDA, Jefferson, AR
- 9:15 a.m. - 9:25 a.m. **Discussion**
- 9:25 a.m. - 9:50 a.m. **Alcohol, miRNA Expression, and Its Role in Alcoholic Liver Disease**
Yeuming Tang, Rush University, Chicago, IL
- 9:50 a.m. - 10:00 a.m. **Discussion**
- 10:00 a.m. - 10:10 a.m. **Break**

Session 6:

Moving Beyond Genomics

Chair: Jing X. Kang, Massachusetts General Hospital/Harvard Medical School, Boston, MA

10:10 a.m. - 10:35 a.m.

Redox Dysregulation and Oxidative Stress in Schizophrenia: Nutrigenetics as a Challenge in Psychiatric Disease Prevention

Kim Q. Do, Lausanne University Hospital, Lausanne, Switzerland

10:35 a.m. - 10:45 a.m.

Discussion

10:45 a.m. - 11:10 a.m.

Utilizing Animal Models To Understand Complex Diseases and Dietary Influences: Obesity as an Example

Daniel Pomp, The University of North Carolina at Chapel Hill, Chapel Hill, NC

11:10 a.m. - 11:20 a.m.

Discussion

11:20 a.m. - 11:45 a.m.

Using Pathway Analysis To Go Beyond Simple Genomics

Chris Evelo, Maastricht University, Maastricht, The Netherlands

11:45 a.m. - 11:55 a.m.

Discussion

11:55 a.m. - 12:20 p.m.

Metabolomics in the Study of Aging and Caloric Restriction

Bruce S. Kristal, Harvard Medical School/Brigham and Women's Hospital, Boston, MA

12:20 p.m. - 12:30 p.m.

Discussion

12:30 p.m. - 1:30 p.m.

Lunch

Session 7:

Frontiers in Nutrigenetics/Nutrigenomics: Building Partnerships

Cochairs: Artemis P. Simopoulos, President, ISNN, Washington, DC

John A. Milner, NCI, NIH, Bethesda, MD

1:30 p.m. - 1:55 p.m.

Opportunities and Challenges for the U.S. Food and Drug Administration (FDA)

Claudine J. Kavanaugh, FDA, Rockville, MD

1:55 p.m. - 2:05 p.m.

Discussion

2:05 p.m. - 2:30 p.m.

Opportunities and Challenges for the U.S. Department of Agriculture (USDA)

Joseph T. Spence, USDA, Beltsville, MD

2:30 p.m. - 2:40 p.m.

Discussion

2:40 p.m. - 3:05 p.m.

The Assessment of Diet-Genome Interactions and Their Translation for Public Health Impact: Opportunities and Challenges for the Centers for Disease Control and Prevention (CDC)

Renée M. Ned, CDC, Atlanta, GA

3:05 p.m. - 3:15 p.m.

Discussion

3:15 p.m. - 3:40 p.m.

Genes, Agriculture, Human Health, and the Climate Issue: Opportunities and Challenges

Ole Faergeman, Aarhus University, Aarhus, Denmark

3:40 p.m. - 3:50 p.m.

Discussion

3:50 p.m. - 4:00 p.m.

Break

4:00 p.m. - 4:25 p.m.

Building Industry-Academia Partnerships

Peter J. Gillies, Dupont, Wilmington, DE

4:25 p.m. - 4:50 p.m.

Tailoring New Zealand Foods To Match People's Genes

Lynette R. Ferguson, The University of Auckland, Auckland, New Zealand

4:50 p.m. - 5:20 p.m.

General Discussion

5:20 p.m. - 5:35 p.m.

Adjournment

Raffaele De Caterina, Gabriele d'Annunzio University, Chieti, Italy

Planning Committee

Chairpersons:

John A. Milner, NCI, NIH

Artemis P. Simopoulos, ISNN

Participants:

Cindy D. Davis, NCI, NIH

Joseph R. Hibbeln, NIAAA, NIH

David M. Klurfeld, ARS, USDA

John Paul SanGiovanni, NEI, NIH

Pamela E. Starke-Reed, NIDDK, NIH