

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

**Nutrigenomics and the Future of Nutrition
Food Forum Meeting
December 5, 2017**

**The National Academy of Sciences Building
2101 Constitution Avenue, NW Washington, D.C.
Lecture Room**

8:30 AM **Welcome and Food Forum Member Recognition**
Sylvia Rowe, M.A., Food Forum Chair

8:40 AM **Setting the Stage: Introduction & Overview**
Patsy Brannon, Ph.D., R.D., Cornell University

SESSION 1: Nutrigenomics and Chronic Disease Endpoints

Moderator: Naomi Fukagawa, M.D., Ph.D., U.S. Department of Agriculture

9:00 AM **Genotypes and Disease Risk: What Do We Currently Know about Nutrition and Epigenetics?**
José Ordovás, Ph.D., Tufts University

9:30 AM **Mitochondrial Genetics and Disease Risk: What Is the Current Evidence?**
Douglas Wallace, Ph.D., University of Pennsylvania Perelman Medical School

10:00 AM **Break**

Personalized Nutrition in the Real World

10:15 AM **Personal, Dense, Dynamic Data Clouds and the Future of Personalized Nutrition**
Nathan Price, Ph.D., Institute for Systems Biology

10:35 AM **Sickle Cell Disease: An Arginine Deficiency Syndrome with Distinctive Nutritional Requirements**
Claudia Morris, M.D., Emory University

10:55 AM **Personalized Nutrition in the Real World: Where Do We Stand?**
David Alpers, M.D., Washington University (*via WebEx*)

11:15 AM **Is Genetic Testing for Personalized Nutrition Ready for Prime Time?**
Ahmed El-Sohehy, Ph.D., University of Toronto; Nutrigenomix

11:35 AM **Moderated Discussion**

12:05 PM **Food and Nutrition Board Member Recognition**
Bert Garza, M.D., Ph.D., Food and Nutrition Board Chair
Ann Yaktine, Ph.D., R.D., Food and Nutrition Board Director

12:15 PM LUNCH

SESSION 2: Nutrigenomics Applications: Dietary Guidance and Food Product Development

Moderator: Wendy Johnson, Ph.D., M.P.H., R.D., Nestlé

1:15 PM **Nutrient Requirements as Complex Traits – What Consumers Will Need to Know**

Patrick Stover, Ph.D., Cornell University

1:45 PM **Gene Guided Nutrition Interventions**

Steven Zeisel, M.D., Ph.D., University of North Carolina, Chapel Hill

2:15 PM **Moderated Discussion**

2:45 PM BREAK

SESSION 3: Nutrigenomics: Regulatory, Ethical, and Science Policy Considerations

Moderator: Patsy Brannon, Ph.D., R.D., Cornell University

3:00 PM **Scientific Basis of Genetically-Personalized Nutrition: Ethical Implications of Methodological Limitations**

Cecile Janssens, M.Sc., Ph.D., Emory University

3:20 PM **Vetting Personalized and Genomically-Guided Nutrition: Issues and Strategies**

Nicholas Schork, Ph.D., J. Craig Venter Institute; University of California, San Diego
(via WebEx)

3:40 PM **Regulatory Policy Considerations Presented by Nutrigenomics in the Commercial Context**

Sarah Roller, J.D., R.D., M.P.H., Kelley Drye & Warren

4:00 PM Moderated Discussion

SESSION 4: Rethinking the Relationship Between Diet and Health: Can Nutrigenomics Help? A Panel Discussion

Moderator: Patrick Stover, Ph.D., Cornell University

4:30 PM Panelists:

- Cecile Janssens, Ph.D., Emory University
- Tim Morck, Ph.D., Spectrum Nutrition LLC
- Douglas Wallace, Ph.D., University of Pennsylvania Perelman Medical School
- Steven Zeisel, M.D., Ph.D., University of North Carolina, Chapel Hill

5:15 PM ADJOURN

About Us

The Food Forum convenes scientists, administrators, and policymakers from academia, government, industry, and public sectors on an ongoing basis to discuss problems and issues related to food, food safety, and regulation and to identify possible approaches for addressing those problems and issues. The Forum provides a rapid way to identify areas of concordance among these diverse interest groups. It does not make recommendations, nor does it offer specific advice. It does compile information, develop options, and bring interested parties together.

The Food and Nutrition Board (FNB) established the Food Forum in 1993 to allow selected science and technology leaders in the food industry, top administrators in the federal government, representatives from consumer interest groups, and academicians to periodically discuss and debate food and food related issues openly and in a neutral setting. The Forum provides a mechanism for these diverse groups to identify possible approaches for addressing food and food safety problems and issues surrounding the often complex interactions among industry, academia, regulatory agencies, and consumers.

About the FNB: The FNB falls within the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine. The Academies are private, nonprofit institutions that provide independent, objective analysis and advice to the nation to solve complex problems and inform public policy decisions related to science, technology, and medicine. The Academies operate under an 1863 congressional charter to the National Academy of Sciences, signed by President Lincoln.

<http://www.nationalacademies.org/foodforum>