

A Food Forum Workshop on
The Human Microbiome, Diet, and Health

February 22-23, 2012

The Keck Center of the National Academies
500 Fifth Street, NW
Washington, DC 20001
Room 100

Wednesday, February 22, 2012 – Current & Emerging Knowledge

8:00 AM **Registration**

8:30 **Welcome and Introductions**
FRANCIS BUSTA, *Food Forum Chair*
GORDON JENSEN, *Workshop Planning Committee Chair*

8:45 **Keynote: The Future Impact of Beneficial Microbes and Gut Health**
J. Craig Venter, *J. Craig Venter Institute*

Session 1 – The Study of the Human Microbiome

9:15 **Session 1 Introduction**
Moderator: Cindy Davis, *Office of Dietary Supplements, NIH*

9:20 **Defining the Human Microbiome**
Lita Proctor, *Human Microbiome Project, NHGRI, NIH*

10:10 **Break**

10:20 **Tools and Models of Assessment for the Microbiome**
Jennifer Russo Wortman, *The Broad Institute*

10:50 **Metabolome and Microbiome**
Jeremy Nicholson, *Imperial College of London*

11:20 **Panel Discussion with Session 1 Speakers**

12:05 PM **Lunch**

Session 2 – Interaction between the Microbiome and Health & Environment

1:00 Session 2 Introduction
Moderator: Jennifer Brulc, *General Mills, Inc.*

1:05 Overview of Pediatric Clinical Implications and Interventions
Josef Neu, *University of Florida*

1:35 Impact of Microbiome on Oral Health and Disease
Richard Darveau, *University of Washington*

2:05 Impact of Microbiome on Gastrointestinal Health
Vincent Young, *University of Michigan*

2:35 Microbiome, Obesity, and Malnutrition
Peter Turnbaugh, *Harvard University*

3:05 Break

Session 3 – Influence of the Microbiome on Diet and Dietary Components

3:15 Session 3 Introduction
Moderator: Bruce German, *University of California, Davis*

3:35 Host-Microbe Interactions in the Perinatal Period: Role of Early Nutrition
Sharon M. Donovan, *University of Illinois*

4:05 Microbial Metabolites of Dietary Components
Johanna Lampe, *Fred Hutchinson Cancer Research Center*

Session 4 – Day 1 Summary Panel

4:35 Review and Discussion with Day 1 Speakers
Moderator: Gordon Jenson, *Pennsylvania State University*

5:35 Adjourn

Thursday, February 23, 2012 – Nutrition Translation: From Lab Bench to Food Product

8:00 AM Registration

Session 5 – Influence of Diet and Dietary Components on the Microbiome

8:30 Session 5 Introduction
Moderator: David Mills, *University of California, Davis*

8:40 Human Breast Milk
Bruce German, *University of California, Davis*

9:05 Inadvertent Perturbations of the Gut Microbiome through Antimicrobials in the Food and Water Supplies
Ellen Silbergeld, *Johns Hopkins University*

9:30 Probiotic Mechanisms of Action
James Versalovic, *Baylor College of Medicine*

9:55 Prebiotic Mechanisms of Action
George Fahey, *University of Illinois*

10:20 Translation of Probiotic Science into Probiotic Foods
Mary Ellen Sanders, *Dairy & Food Culture Technologies*

10:45 Developing Delivery Systems
D. Julian McClements, *University of Massachusetts Amherst*

11:10 How the Microbiome Revolution Fuels Function Food Research – Practical Examples and Prospects
Johan van Hylckama Vlieg, *Danone Research*

11:35 General Discussion

12:05 PM Lunch

Session 6 – Societal and Policy Implications

1:05 Session 6 Introduction
Moderator: Mary Ellen Sanders, *Dairy & Food Culture Technologies*

1:10 How Americans Eat and Drink to Improve Health
Darren Seifer, *The NPD Group*

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1:35 **Consumer Insights from the Industry Perspective**
Peggy Steele, *DuPont Nutrition & Health*

2:10 **Probiotic and Prebiotic Health Claims in Europe: Scientific Assessment and Requirements**
Seppo Salminen, *University of Turku, Finland*

2:35 **Evaluation of Viable Microbes Using Regulatory Requirements Developed for Inanimate Ingredients**
Dan Levy, *U.S. FDA Center for Food Safety and Applied Nutrition*

3:00 **Health Claims and False Advertising**
Michelle Rusk, *Federal Trade Commission*

3:25 **Regulatory Frameworks – The Industry Experience**
Stuart Craig, *DuPont Nutrition & Health*

3:50 **Synthesis of the Regulatory Environment**
Sarah Roller, *Kelley, Drye & Warren LLP*

4:15 **Break**

Session 7 – Summary Panel:
Research & Product/Technology Development Directions for the Future

4:25 **Open discussion with all speakers and audience**
Discussant: Fergus Clydesdale, *University of Massachusetts Amherst*

6:00 **Adjourn**