

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**

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**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**

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

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**8:00 AM      Registration**

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

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- 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**

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**Session 6 – Societal and Policy Implications**

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- 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*

- 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**