Diet is the most important environmental factor for maintaining health and preventing disease. The goals and outcomes of this meeting include: 1) Bringing together researchers from traditionally rather separated disciplines: nutrition, (gen)omics, clinics, physiology, epidemiology, analytics, biomathematics; 2) Advancing nutrition research as a quantitative, holistic and molecular science; 3) Reviewing/challenging classical pre-clinical models and clinical study designs and incorporating improved translational in vitro and in vivo models, human intervention study designs, and innovative new tools/technologies for molecular phenotyping and capture of human diet and lifestyle; and 4) Connecting basic laboratory science to patient- and consumer-relevant outputs in terms of personalized dietary/nutritional counseling and monitoring/diagnostics.

Session Topics:
• The Interaction between Human Genome, Diet and Environment
• Translational Models for Human Nutrition and Health
• Human Nutritional and Lifestyle Interventions
• Capturing and Monitoring Human Individuality
• From Nutrigenomics to Systems Nutrition
• Nutrition 2.0 – Translation into Solutions for Human Health
• Global Nutrition and Sustainability
• Joint Session with Grand Challenges and Keystone Symposia plus one workshop

Note that special subsidized registration rates are available to meeting participants in China.

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Note that abstracts can continue to be submitted online through the discounted registration deadline, and you can register up until the meeting begins.

Discounted Registration Deadline: September 10, 2015
For additional details, visit www.keystonesymposia.org/15T1.
**KEYSTONE SYMPOSIA**

**Human Nutrition, Environment and Health (T1)**

October 14-18, 2015 • China World Hotel • Beijing, China

Scientific Organizers: Martin Kußmann, Hannelore Daniel and Jacqueline Pontes Monteiro

Organized in collaboration with BGI. Sponsored by Nestlé Institute of Health Sciences. Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation.


**WEDNESDAY, OCTOBER 14**

Arrival and Registration

**THURSDAY, OCTOBER 15**

Welcome and Keynote Address

- Martin Kußmann, University of Auckland, New Zealand
- Jacqueline Pontes Monteiro, Universidade de São Paulo, Brazil
- Hannelore Daniel, Technische Universität München, Germany
- José M. Ordovás, Tufts University, USA

*Human Health, Genes and Diet*

- Martin Kußmann, University of Auckland, New Zealand
- Claudio Franceschi, University of Bologna, Italy
- Leroy E. Hood, Institute for Systems Biology, USA
- Liping Zhao, Shanghai Jiao Tong University, China
- Alexander M. Vaiserman, Institute of Gerontology, Ukraine

*Translational Models for Human Nutrition and Health*

- Kendal Hirschi, Baylor College Medicine, USA
- Vijayalakshmi Varma, National Center for Toxicological Research, FDA, USA
- Aldons J. Lusis, University of California, Los Angeles, USA
- Patrick J. Stover, Cornell University, USA
- Liping Zhao, Shanghai Jiao Tong University, China
- Sumei Hu, Institute of Food and Health, University College Dublin, Ireland

Posters Session 1

**FRIDAY, OCTOBER 16**

**Human Nutritional and Lifestyle Interventions**

- Patrick J. Stover, Cornell University, USA
- Hannelore Daniel, Technische Universität München, Germany
- Ben van Ommen, TNO, Netherlands
- Hugh MacEwan, Institute of Food and Health, University College Dublin, Ireland

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*Session Chair † Invited but not yet accepted  Program current as of June 18, 2017. Program subject to change. Meal formats are based on meeting venue.

For the most up-to-date details, visit www.keystonesymposia.org/16T1.
MARIA-CARLOTA DAO, Institute of Cardiometabolism and Nutrition, ICAN, France
Gut Microbiota and Cardiometabolic Risks

MICHAEL FENECH, CSIRO Food and Nutrition, Australia
Short Talk: Plasma Micronutrient Levels and Telomere Length in Children

Poster Session 2

SUNDAY, OCTOBER 18

Global Nutrition and Sustainability

*Ben van Ommen, TNO, Netherlands
Enabling Nutrient Security and Sustainability through Systems Research

Nina V. Fedoroff, Pennsylvania State University, USA
The Safety, Nutritional Value, and Sustainability of Organically and Conventionally Grown Food

Panel Discussion: Perspectives and Needs for research in the Food, Diet and Health Relationship

*Martin Kussmann, University of Auckland, New Zealand
Jim Kaput, Nestlé Institute of Health Sciences, Switzerland
Ben van Ommen, TNO, Netherlands
Lorraine Brennan, University College Dublin, Ireland
Claudio Franceschi, University of Bologna, Italy

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

Workshop

*Jacqueline Pontes Monteiro, Universidade de São Paulo, Brazil
G. Bhanuprakash Reddy, National Institute of Nutrition, India
Influence of Micronutrients on Biochemical Pathways Involved in Diabetic Complications

Padmapriyadarsini Chandrasekaran, National Institute for Research in Tuberculosis, India
Dietary Intake, Nutritional Status and Relationship to Serum Lipids among Antiretroviral Naïve HIV-Infected Children in South India

Neil A. Hanchard, Baylor College of Medicine, USA
DNA Methylation Changes in Severe Childhood Malnutrition

Shuxin Han, Case Western Reserve University, USA
Circadian Control of Bile Acid Synthesis by a KLF15-Fgf15 Axis

Efrat Monsonego Ornan, Hebrew University of Jerusalem, Israel
Nutritional Aspects of Skeletal Development

Abena S. Amoah, Noguchi Memorial Institute for Medical Research, Ghana
Breastfeeding Duration and Asthma in Urban Schoolchildren in Ghana

Edwin Andres Higuerta, Corporación Universitaria Remington, Colombia
Immunomodulation of T Cells Subpopulations and NK Cells in Elderly Adults during a 12 Weeks Intervention with a Nutritional Complement Enriched with Biotechnologically Ganoderma lucidum Extracted Beta Glucans (ISRCTN 53126301)

PIETER JOHAN GIESBERTZ, Technische Universität München, Germany
Metabolic Signatures of Obesity and Diabetes Revealed in Corresponding Genetic Mouse Models

Joint Session with Grand Challenges and Keystone Symposia

Godfrey Oakley, Emory University, USA
Epidemic Folic Acid Preventable Spina Bifida and Anencephaly--Important Preventable Contribution to Perinatal, Neonatal, Infant and Under 5 Child Mortality

Daniel L. Marks, Oregon Health & Science University, USA
A Comprehensive Approach to Healthy Birth, Growth and Development

MONDAY, OCTOBER 19

Departure