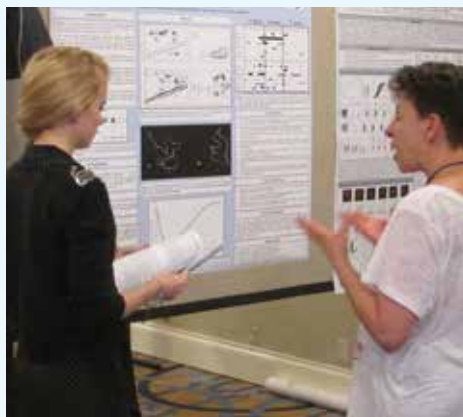




Join Keystone Symposia
for the 2016 conference on:

Gut Microbiota, Metabolic Disorders and Beyond

April 17–21, 2016

Hyatt Regency Newport | Newport, Rhode Island | USA

Scientific Organizers:

Rémy G. Burcelin, Sven Pettersson and Tak W. Mak

The hologenome theory of evolution proposes that natural selection acts not on the individual organism but rather on the “holobiont,” which consists of the organism together with microbiome (its genes and metabolites). Effective study of the holobiont requires a systems biology approach: remove one component of the holobiont to study it in reductionist style and other parts also altered will be overlooked. Decades of reductionist research aimed at understanding the mechanisms responsible for the current dramatic epidemic of man-made metabolic diseases have not considered the holobiont perspective and have consequently missed the adaptation strategies of the microbiome and set the stage to explore the inchoate holobiont perspective. This meeting will discuss how the gut microbiome and its metabolites influence major molecular and physiological mechanisms responsible for man-made metabolic diseases.

Session Topics:

- Gut Microbiota Biology, Microbiome and Evolution throughout Metabolic Diseases
- Tissue Communication
- Early Development – Maternal Life, Brain and Metabolic Development
- Therapeutic Strategies
- Small Intestine Liver Function, Bile Acids, Therapy
- Immunity and Metabolism
- Fat Muscle Function Therapeutic Aging Immunity
- Gut Immunity, Barrier Function and Effects on Metabolism
- Workshop: Microbiota-Related Biomarkers
- Workshop: Novel Mechanisms of Microbiota Regulated Metabolic Functions



Submitting an abstract is a great way of participating in the conference through poster presentation and possible selection for a short talk.

Scholarship & Discounted Abstract Deadline: Dec 17, 2015

Abstract Deadline: Jan 20, 2016

Discounted Registration Deadline: Feb 17, 2016

For additional details, visit www.keystonesymposia.org/16D4.

KEYSTONE SYMPOSIA™
on Molecular and Cellular Biology

Accelerating Life Science Discovery

www.keystonesymposia.org/meetings | 1.800.253.0685 | 1.970.262.1230

a 501(c)(3) nonprofit educational organization

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Gut Microbiota, Metabolic Disorders and Beyond (D4)

April 17-21, 2016 • Hyatt Regency Newport • Newport, Rhode Island, USA

Scientific Organizers: Rémy G. Burcelin, Sven Pettersson and Tak W. Mak

Sponsored by Curemark LLC and Nestlé Institute of Health Sciences

Abstract & Scholarship Deadline: December 17, 2015 / Abstract Deadline: January 20, 2016 / Discounted Registration Deadline: February 17, 2016

SUNDAY, APRIL 17

Arrival and Registration

MONDAY, APRIL 18

Welcome and Keynote Address

Lewis C. Cantley, Weill Cornell Medical College, USA
Gut Microbiota Biology, Microbiome and Evolution throughout Metabolic Diseases

Gut Microbiota Biology, Microbiome and Evolution throughout Metabolic Diseases

Martin Kussmann, Nestlé Institute of Health Sciences, Switzerland
The Human GI Tract and its Microbiome: From Associations to Interactions

Stephan C. Schuster, Nanyang technological University, Singapore
Holobiont Concept and Tissue Compartment and Microbiome

Michael A. Fischbach, University of California, San Francisco, USA
Small Molecules from the Human Microbiota

Short Talk(s) Chosen from Abstracts

Workshop 1: Microbiota-Related Biomarkers

Short Talks Chosen from Abstracts

Tissue Communication

James Versalovic, Texas Children's Hospital, USA
Gut Microbiome and Amino Acid Metabolism

Ruth E. Ley, Cornell University, USA
Host Genetic Regulation of the Microbiome with Consequences for Phenotype

David A. Relman, Stanford University, USA
Open Wide: Oral Microbiota in Health and Disease

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, APRIL 19

Early Development – Maternal Life, Brain and Metabolic Development

Kjersti Marie Aagaard, Baylor College of Medicine, USA
Placenta and Microbiome

Bernard Thorens, University of Lausanne, Switzerland
Glucose Signaling: Is There a Room for Microbiota?

Berengere Coupe, VAIOMER, France
Next Microbiota Derived Therapeutic Strategies in Metabolic Disease

Martin J. Blaser, New York University School of Medicine, USA
Obesity Antibiotics in Early Life

Short Talk(s) Chosen from Abstracts

Poster Session 2

Workshop 2: Novel Mechanisms of Microbiota Regulated Metabolic Functions

Short Talks Chosen from Abstracts

Therapeutic Strategies

Max Nieuwdorp, AMC, Netherlands
Fecal Transplantation – Ongoing Trials Pros and Cons

Felipe Cabreiro, University College London, UK
Targeting the Microbiota to Treat Aging

Elaine Holmes, Imperial College London, UK
Bariatric Surgery and Microbiota Metabolites

Short Talk Chosen from Abstracts

WEDNESDAY, APRIL 20

Small Intestine Liver Function, Bile Acids, Therapy

Lora V. Hooper, University of Texas Southwestern Medical Center, USA

Circadian Regulation of Intestinal Host-Microbe Interactions

Lotta Stenman, DuPont Nutrition and Health, Finland
Therapeutic Efficacy and Mechanisms of Probiotics and Prebiotics in Metabolic Disease: The Next Generation Probiotics

Fredrik Bäckhed, University of Gothenburg, Sweden
Gut Microbial Regulation of Bile Acids and FXR Signaling in Metabolic Disease

Paolo Sassone-Corsi, University of California, Irvine, USA
Circadian Control of the Gut Microbiome

Short Talk(s) Chosen from Abstracts

Immunity and Metabolism

Gérard Eberl, Institut Pasteur, France
The Regulation of Type 2 and Type 3 Immunity by Microbiota

Tak W. Mak, Campbell Family Institute for Breast Cancer Research at Princess Margaret Hospital, University Health Network, Canada
Low Grade Inflammation and Impact on Metabolic Circuits

Rémy G. Burcelin, Institute of Molecular Medicine, France
Tissue Microbiota and Immunometabolism

Short Talk Chosen from Abstracts

Poster Session 3

THURSDAY, APRIL 21

Fat Muscle Function Therapeutic Aging Immunity

Diane J. Mathis, Harvard Medical School, USA
Fat Tissue Development: Is There a Room for Microbiome Regulation?

Jorge L. Ruas, Karolinska Institutet, Sweden
Skeletal Muscle Kynurenine Metabolism in Metabolic and Psychiatric Diseases

Charles R. Mackay, Monash University, Australia
Microbial Metabolites in the Regulation of Inflammatory Diseases

José Manuel Fernández-Real, Biomedical Research Institute of Girona - IDIBGI, Spain
Iron, Microbiota and NASH

Short Talk(s) Chosen from Abstracts

Workshop 3

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Gut Microbiota, Metabolic Disorders and Beyond (D4)

April 17-21, 2016 • Hyatt Regency Newport • Newport, Rhode Island, USA

Scientific Organizers: Rémy G. Burcelin, Sven Pettersson and Tak W. Mak

Sponsored by Curemark LLC and Nestlé Institute of Health Sciences

Abstract & Scholarship Deadline: December 17, 2015 / Abstract Deadline: January 20, 2016 / Discounted Registration Deadline: February 17, 2016

Short Talks Chosen from Abstracts

Gut Immunity, Barrier Function and Effects on Metabolism

Dan R. Littman, HHMI/New York University School of Medicine, USA

The Gut Microbiota to Immune System Molecular Crosstalk

Sven Pettersson, Karolinska Institutet, Sweden

Aging Microbiome and Impact on Metabolic Function

Closing Keynote Address

Jeremy K. Nicholson, Imperial College London, UK

Towards Personalized Medicine and Microbiome Regulation

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

FRIDAY, APRIL 22

Departure