

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Metabolic Decisions in Development and Disease (C6)

March 21-24, 2021 • Eldorado Hotel & Spa • Santa Fe, NM, USA

Scientific Organizers: Irene Miguel-Aliaga, Ralph J. DeBerardinis and A.J. Marian Walhout

Supported by the Directors' Fund

Scholarship Deadline: December 8, 2020 / Abstract Deadline: December 18, 2020 / Discounted Registration Deadline: January 20, 2021

SUNDAY, MARCH 21

Arrival and Registration

MONDAY, MARCH 22

Welcome and Keynote Address

David M. Sabatini, Whitehead Institute for Biomedical Research, USA
mTOR and Lysosomes in Growth Control

Metabolic Control of Gene Expression

Kathryn E. Wellen, University of Pennsylvania, USA
Crosstalk between Metabolic Pathways, Signaling Networks and the Epigenome

Jason Locasale, Duke University School of Medicine, USA
The Impact of Cellular Metabolism on Chromatin Dynamics and Epigenetics

Lydia Finley, Memorial Sloan Kettering Cancer Center, USA
Metabolic Control of Cell Fate Decisions in Stem Cells and Cancer Cells

Short Talk(s) Chosen from Abstracts

Metabolic Switches in Development

Alexander Aulehla, European Molecular Biology Laboratory, Germany
Glycolytic Flux Control of Mouse Embryo Segmentation

Alex Gould, Francis Crick Institute, UK
Metabolic Responses to a Stressful Start in Life

Aurelio Teleman, Deutsches Krebsforschungszentrum, Germany
Regulation of Growth and Signaling by a Lipid Metabolite

Tadashi Uemura, Kyoto University, Japan
Impacts of Nutrition Histories in Juvenile Stages on Growth and Later Life Events

Short Talk(s) Chosen from Abstracts

Poster Session 1

TUESDAY, MARCH 23

Metabolic Communication across Cells and Tissues

Irene Miguel-Aliaga, Imperial College London, UK
Sex Differences in Inter-Organ Metabolic Coupling

Speaker to be Announced

Norbert Perrimon, Harvard Medical School, USA
*Communication between Cells and Organs in *Drosophila**

Wendy S. Garrett, Harvard School of Public Health, USA
Metabolic Crosstalk between the Gut and its Microbiota

Lora V. Hooper, University of Texas Southwestern Medical Center, USA
Regulation of Lipid Metabolism by the Microbiome and the Circadian Clock

Short Talk(s) Chosen from Abstracts

Metabolic Control of Cell Signaling

Jared Rutter, University of Utah, USA
Mitochondrial Metabolism and Cellular Decisions

Navdeep S. Chandel, Northwestern University, USA
Mitochondrial Metabolic Signaling in Stem Cell Function and Immunity

Heather Christofk, University of California, Los Angeles, USA
Metabolic Control of Signaling and Cell Fate Decisions

Short Talk(s) Chosen from Abstracts

Poster Session 2

WEDNESDAY, MARCH 24

Metabolic Developments: Technologies and Network Approaches

Markus Ralser, Francis Crick Institute, UK
Dynamics in Metabolic Networks

Theodore Alexandrov, European Molecular Biology Laboratory, Germany
Spatial Metabolomics in Tissues and Single Cells

Sarah-Maria Fendt, VIB Leuven, Belgium
Metabolic Plasticity in Development and Cancer

A.J. Marian Walhout, University of Massachusetts Medical School, USA
Structure, Function and Evolution of Biological Networks

Short Talk(s) Chosen from Abstracts

Metabolic Disorders

Ralph J. DeBerardinis, University of Texas Southwestern Medical Center, USA
Inborn Errors of Metabolism

Ayelet Erez, Weizmann Institute of Science, Israel
Dynamics of Cellular Metabolism in Disease States

Joshua D. Rabinowitz, Princeton University, USA
Metabolic Remodeling in Cancer and Infection

Closing Keynote Address

Olivier Pourquié, Harvard Medical School, USA
Role of Warburg-Like Metabolism in Cell Fate Control in Vertebrate Development

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

THURSDAY, MARCH 25

Departure