

CONFERENCE PROGRAM

DAY 1 TUESDAY 29 MAY

- 15:30 Registration
- 17:00 **Introduction**
Matthew Cockerill, BioMed Central
- 17:15 **Keynote – Leptin and the physiological circuitry of weight control**
Jeffrey Friedman, The Rockefeller University, USA
- 18:00-20:00 **Poster Session 1 and Welcome Reception (Odd-numbered posters to be presented)**

DAY 2 WEDNESDAY 30 MAY

- 8:30-10:30 **Session 1. Adipogenesis and insulin resistance.**
Chair: Richard Bergman
- 08:30 **Keynote – Irisin and the therapeutic benefits of exercise**
Bruce Spiegelman, Harvard Medical School and Dana-Farber Cancer Institute, USA
- 09:15 **Novel mechanisms by which fat cells regulate systemic insulin sensitivity and diabetes risk**
Barbara Kahn, Harvard Medical School and Beth Israel Deaconess Hospital, USA
- 09:45 **Obesity, insulin resistance, and the pathway to type 2 diabetes**
Richard Bergman, Cedars-Sinai Medical Center, Los Angeles, USA
- 10:15 **Selected talk - Effects of serotonin on skeletal muscle growth**
Suchismita Chandran, National Institute of Diabetes and Digestive and Kidney Diseases, NIH, Bethesda, MD, USA
- 10:30-11:00 Coffee
- 11:00-12:00 **Session 2. Metabolism and mechanism.**
Chair: Christopher Newgard
- 11:00 **Regulation of nutrient metabolism by nuclear receptor/FGF signaling pathways**
David Mangelsdorf, University of Texas Southwestern Medical Center, USA
- 11:30 **Finding mechanism from metabolic signatures of disease**
Christopher Newgard, Duke University Medical Center, USA
- 12:00-13:00 Lunch
- 13:00-15:15 **Session 3. Metabolism and the cancer cell.**
Chair: Michael Pollak
- 13:00 **Keynote – Beyond insulin: rethinking cellular metabolism**
Craig Thompson, Memorial Sloan-Kettering Cancer Center, USA
- 13:45 **Energy input and cancer risk at the cellular and whole organism level: modification by metformin**
Michael Pollak, McGill University and Jewish General Hospital, Canada
- 14:15 **Growth control and metabolism**
David Sabatini, Massachusetts Institute of Technology, USA
- 14:45 **Selected talk - Amplification of phosphoglycerate dehydrogenase diverts glycolytic flux and contributes to oncogenesis**
Jason W Locasale, Harvard Medical School and Beth Israel Deaconess Hospital, USA

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DAY 2 WEDNESDAY 30 MAY (*continued*)

- 15:00 Selected talk - MCT4 is an important determinant for the growth of highly glycolytic and aggressive malignancies
Kezi Unsal-Kacmaz, Pfizer Worldwide Research and Development, Pearl River NY, USA
- 15:15-15:45 Coffee
- 15:45-17:00 **Session 4. Linking diabetes and cancer.**
Chair: Lewis Cantley
- 15:45 **PI 3-kinase and disease**
Lewis Cantley, Harvard Medical School and Beth Israel Deaconess Hospital, USA
- 16:15 **AMPK - a nutrient and energy sensor with roles in diabetes, cancer and viral infection**
Grahame Hardie, University of Dundee, UK
- 16:45 **Selected talk - Loss of RBF1 induces changes to central carbon metabolism and hypersensitizes animals to starvation**
Brandon Nicolay, Massachusetts General Hospital Cancer Center, Harvard Medical School, USA
- 17:00-17:15 **Sponsored technical presentation - Real-time analysis of substrate oxidation, glycolytic flux and mitochondrial oxidative phosphorylation of cells in a microplate with the XF Analyzer**
Min Wu, PhD, Director Biology, Seahorse Bioscience
- 17:15-19:00 **Poster Session 2 with pre-dinner drinks (Even-numbered posters to be presented)**
- 19:00 **Keynote – Surviving starvation: essential role of the ghrelin-growth hormone axis**
Joseph L Goldstein, University of Texas Southwestern Medical Center, USA

Conference dinner

DAY 3 THURSDAY 31 MAY

- 8:30-10:45 **Session 5. Epigenetics, metabolism and aging.**
Chair: Leonard Guarente
- 8:30 **Sirtuins, aging and metabolism**
Leonard Guarente, Massachusetts Institute of Technology, USA
- 9:00 **Sirtuin activators as interventions for healthy aging**
Rafael de Cabo, National Institutes on Aging, NIH, USA
- 9:30 **Regulation of metabolism by sirtuins**
Marcia Haigis, Harvard Medical School, USA
- 10:00 **Up, down, and all around the epigenomic regulation of metabolism**
Mitchell Lazar, University of Pennsylvania, USA
- 10:30 **The histone deacetylase SIRT6, a critical modulator of metabolism and tumorigenesis**
Raul Mostoslavsky, Massachusetts General Hospital and Harvard Medical School, USA.
- 10:45-11:15 Coffee

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DAY 3 THURSDAY 31 MAY (*continued*)

- 11:15-12:30 **Session 6. Dietary factors in metabolic diseases.**
Chair: Gary Taubes
- 11:15 Does fructose play a role in metabolic disorders?
Luc Tappy, University of Lausanne, Switzerland
- 11:45 Carbohydrate restriction uniquely benefits metabolic syndrome and saturated fat metabolism
Jeff Volek, University of Connecticut, USA
- 12:15 TBA
Eric Westman, Duke University Medical Center, USA
- 12:30-13:30 Lunch
- 13:30-15:00 **Session 7. Obesity, metabolism and cancer: lessons from transdisciplinary research.**
Chair: Stephen Hursting
- 13:30 Energy balance, metabolism and cancer: mechanistic insights from transdisciplinary studies
Stephen Hursting, University of Texas and MD Anderson Cancer Center, USA
- 14:00 Excess body weight, diabetes and cancer: epidemiologic evidence implicating hormonal and metabolic mechanisms
Rudolf Kaaks, German Cancer Research Center, Germany
- 14:30 A transdisciplinary approach to obesity and cancer: from cells to society.
Linda Nebeling, National Cancer Institute, USA
- 14:45 Reconsidering the policy options to combat obesity
Christine Ferguson, The George Washington University, USA
- 15:00-15:15 Coffee
- 15:15-16:30 **Panel discussion:**
'What is the obesity-cancer connection? And what can we do about it?'
Sponsored by Cancer & Metabolism, Editors-in-Chief: Chi Van Dang & Michael Pollak
Speakers plus:
Gregory Petsko, Brandeis University, USA – **Chair**;
Gary Taubes, Robert Wood Johnson Foundation Independent Investigator in Health Policy Research at the U.C. Berkeley School of Public Health
- 16:20 Final remarks – Gregory Petsko
- 16:30 Close of meeting