



Nobelforsamlingen

The Nobel Assembly at Karolinska Institutet

Nobel Conference No. 62

Combat Metabolic Diseases – New Strategies

Nobel Forum, Karolinska Institutet, Stockholm, May 28 - 29, 2015

Program for the speakers and guests

Wednesday 27th of May, 18:30 (6:30 am)

Buffet dinner at the Nobel Museum, Gamla Stan, with a guided tour

Day 1 Thursday 28th of May

08:15 - 09:00 Registration

09:00 - 09:10 **Welcome Note**

Per -Olof Berggren, Kerstin Brismar, Juleen Zierath

09:10 - 09:30 **Living with Diabetes**

Karin Hehenberger, Karolinska Institutet and Lyfebulb, NY, USA

Islet Cell Biology and Pathophysiology

Chair: Helena Edlund, Umeå University, Sweden

09:30 - 10:00 **Insight into Pancreatic Islet Cell Physiology/Pathology**

P-O Berggren, Karolinska Institutet

10:00 - 10:30 **New Biology of Diabetes: Implications for Metabolic Disorders**

Roger Unger, Southwestern Medical School, University of Texas, Dallas, TX, USA

10:30 - 11:00 COFFEE BREAK

11:00 - 11:30 **Genetic Insights into Human Beta Cells**

Andrew Hattersley, University of Exeter Medical School, Exeter, UK

Regulation of Metabolism through Specific Cell Signaling

Chair: Claes-Göran Östenson, Karolinska Institutet

11:30 - 12:00 **New Mechanisms of Insulin Receptor Signaling and Tissue Crosstalk in Insulin Resistance**

C Ronald Kahn, Joslin Diabetes Center, Harvard Medical School, Boston, MA, USA

12:00 - 13:30 LUNCH AT NOBEL FORUM

13:30 - 14:00 **FGF21: Fasting, Feasting and Pharmacology**

David J Mangelsdorf, Southwestern Medical School, University of Texas, Dallas, TX, USA

14:00 - 14:30 **AMP -Activated Protein Kinase: Regulating Energy Balance at the Cellular and Whole Body Levels**

Grahame Hardie, University of Dundee, Dundee, Scotland, UK

14:30 - 15:00 **Altered DNA methylation of glycolytic and lipogenic genes in skeletal muscle and liver from obese and type 2 diabetic patients**

Juleen Zierath, Karolinska Institutet

15:00 - 15:30 COFFEE BREAK

Regulation of Food Intake and Energy Balance

Chair: Martin Ingvar, Karolinska Institutet

- 15:30 - 16:00 **Leptin and the Neural Circuit Regulating Food Intake and Metabolism**
Jeffrey Friedman, Rockefeller University, NY, USA
- 16:00 - 16:30 **Metabolic Disease: Lessons from human genetics**
Sir Stephen O'Rahilly, Cambridge University, Cambridge, UK
- 16:30 - 17:00 **Role of Gut Microbiota in the Pathogenesis of Diabetes**
Fredrik Bäckhed, Wallenberg Laboratories Göteborg University, Sweden
- 18:30 **Buffet dinner at Faculty Club Karolinska University Hospital**

Day 2 Friday 29th of May

Fat metabolism

Chair: Bo Angelin, Karolinska Institutet

- 9:00 - 9:30 **Brown and Beige Fat: Mitochondrial Bioenergetics and a Novel Thermogenic Pathway**
Bruce Spiegelman, Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA, USA
- 9:30 - 10:00 **Turnover of Human Fat Cells and their Lipid Content**
Peter Arner, Karolinska Institutet
- 10:00 - 10:30 **Human Brown Fat as a Therapeutic Target**
Sven Enerbäck, Göteborg University, Sweden
- 10:30 - 11:00 COFFEE BREAK

Late Complications

Chair: Mikael Rydén, Karolinska Institutet

- 11:00 - 11:30 **Diabetes Complications, New Mechanisms**
Kerstin Brismar, Karolinska Institutet
- 11:30 - 12:00 **Genetics of Diabetic Nephropathy**
Karl Tryggvason, Karolinska Institutet, Duke-NUS Graduate Medical School, Singapore
- 12:00 - 13:30 LUNCH AT Svarta Råven, Aula Medica
- 13:30 - 14:00 **Immune Modulation of Lipoprotein Metabolism and Atherosclerosis**
Göran Hansson, Karolinska Institutet
- 14:00 - 14:30 **Epigenetic Changes, Oxidative Stress and Vascular Disease in Diabetes**
Francesco Cosentino, Karolinska Institutet
- 14:30 - 15:00 **Insulin: the Diabetes-Cancer connection**
Lewis Cantley, Weill Cornell Medical College, NY, USA
- 15:00 - 15:30 COFFEE BREAK
- 15:30 - 16:15 **Discussion and conclusions**
- 17:00 **Bus to Skeppsbron, Gamla Stan, for a sea voyage with dinner in the archipelago**