

# Diabetes (Joint with "Islet Biology")

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Scientific Organizers: Juleen R. Zierath, Philippe Froguel, Nancy A. Thornberry and Michael P. Czech

## PROGRAM FACULTY & TALKS

**Victor Ambros**<sup>\*o</sup>, University of Massachusetts, USA  
*MicroRNAs in Model Systems and Human Disease*

**Peter Arner**<sup>o</sup>, Karolinska Institute, Sweden  
*Dysfunctions in Human Adipose Tissue and Insulin Resistance*

**Johan Auwerx**<sup>o</sup>, Ecole Polytechnique Federale de Lausanne, Switzerland  
*The Biology of Sirtuins*

**Per-Olof Berggren**<sup>o</sup>, Karolinska Institutet, Sweden  
*Systems Biology Approach to Study Beta Cell Function and Survival*

**Morris J. Birnbaum**<sup>o</sup>, University of Pennsylvania, USA  
*The Role of Akt/PKB in Insulin Action and Secretion*

**Fatima Bosch**, Universitat Autònoma de Barcelona, Spain  
*Gene Therapy and Diabetes*

**Remy G. Burcelin**, Institute of Molecular Medicine, France  
*Gut Microbiota and Bacterial Translocation: New Paradigms for the Control of Insulin Resistance and Adipose Tissue Plasticity*

**David E. Cummings**<sup>†</sup>, University of Washington, USA  
*Gastrointestinal Control of Glucose Homeostasis*

**Michael P. Czech**, University of Massachusetts Medical School, USA  
*RNAi-Based Therapeutic Strategies for Metabolic Disease and Inflammatory Diseases*

**Roger J. Davis**, University of Massachusetts Medical School, USA  
*Pathogenesis Mechanisms of the JNK Pathway*

**Richard D. Dimarchi**<sup>o</sup>, Indiana University, USA  
*Novel Incretin Mimetics*

**Jose C. Florez**, Massachusetts General Hospital, USA  
*Genetic Epidemiology of T2D and Related Traits in General Populations*

**Philippe Froguel**, Imperial College of London, UK  
*Copy Number Variations and Diabetes Risk*

**Mark H. Ginsberg**, University of California, San Diego, USA  
*Integrin Function in Immune Cell Migration and Inflammation*

**Andrew Hattersley**<sup>o</sup>, Peninsula Medical School, UK  
*Learning from Genetic Beta Cell Defects in Man*

**Barbara B. Kahn**, Beth Israel Deaconess Medical Center, USA  
*RBP4 and Diabetes*

**C. Ronald Kahn**<sup>o</sup>, Joslin Diabetes Center, USA  
*Insulin Signaling and Insulin Resistance: The Ultimate Systems Biology Problem*

**Jennifer A. Lippincott-Schwartz**<sup>\*o</sup>, National Institutes of Health, USA  
*Talk Title to be Determined*

**Diane J. Mathis**, Harvard Medical School, USA  
*Talk Title to be Determined*

**Mark McCarthy**, University of Oxford, UK  
*Type 2 Diabetes: Susceptibility Variants across the Allele Frequency Spectrum*

**Kelle H. Moley**, Washington University at St. Louis, USA  
*Glucose Metabolism in Pregnancy and Embryogenesis*

**David E. Moller**<sup>o</sup>, Eli Lilly and Company, USA  
*Challenges and Opportunities for Diabetes Drug Discovery*

**Anna Moore**<sup>o</sup>, Harvard Medical School, USA  
*Human Beta Cells at a Glance*

**Susan Ozanne**, University of Cambridge, UK  
*Early Life Programming of Obesity and Metabolic Disease*

**Eric Schadt**, Pacific Biosciences, USA  
*Multi-Tissue Networks Elucidate T2D Circuits*

**Philipp E. Scherer**, University of Texas Southwestern Medical Center, USA  
*Discovery of Novel Adipokines*

**Nancy A. Thornberry**, Merck Research Laboratories, USA  
*Developing Novel Treatment for Type 2 Diabetes*

**Kenneth Walsh**, Boston University School of Medicine, USA  
*Discovery of Novel Myokines*

**Phil Zeitler**, University of Colorado Denver, USA  
*Insulin Resistance Syndrome in Children and Adolescents*

**Bei B. Zhang**, Merck Research Laboratories, USA  
*Talk Title to be Determined*

**Juleen R. Zierath**<sup>o</sup>, Karolinska Institute, Sweden  
*Insulin Action in Human Skeletal Muscle*

<sup>\*</sup>Keynote speaker. Program subject to change. <sup>†</sup>Invited, not yet confirmed. <sup>o</sup>Joint speaker. Current as of November 9 2009.



*The increased incidence of Type 2 diabetes mellitus is a growing threat to global health. This chronic and progressive metabolic disease is characterized by insulin resistance and beta cell defects, arising from environmental and genetic factors. Multi-disciplinary approaches that capitalize on genetic, genomic and physiological disciplines are required to gain insight into Type 2 diabetes pathogenesis through an increased understanding of the complicated biology that contributes to the development of insulin resistance and beta cell failure. This meeting will focus on the latest advancements in our understanding of the molecular pathogenesis of Type 2 diabetes to accelerate the translation of experimental and clinical discoveries to link phenotype to genotype. Particular emphasis will be placed on 1) epigenetics, genetics and pharmacogenomics of metabolic responses; 2) links between pathways linking obesity, inflammation and insulin resistance; and 3) Type 2 diabetes in children and adolescents.*

## PROGRAM PLENARY SESSIONS:

- Genetics of Diabetes
- Cell and Tissue Signaling Mechanisms in Diabetes
- Intertissue Communication
- Molecular Mechanisms in Insulin Secretion and Action (Joint)
- Inflammatory Mechanisms and Insulin Resistance
- Emerging Targets for Improving Insulin Action and Secretion (Joint)
- Insulin Secretion and Action in Humans (Joint)
- Type 2 Diabetes in Children and Adolescents

## DEADLINES:

Abstract & Scholarship: December 14, 2009

Late-Breaking Abstract: January 15, 2010

Early Registration: February 12, 2010

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