

# Islet Biology (Joint with "Diabetes")

Sponsored by Bristol-Myers Squibb Company

April 12–17, 2010 • Whistler Conference Centre • Whistler, British Columbia • Canada

Scientific Organizers: Markus Stoffel, Doris A. Stoffers and Per-Olof Berggren

## 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*

**Alan D. Attie**, University of Wisconsin-Madison, USA  
*Networks of QTLs, mRNAs, and microRNAs in Beta Cell Growth and Function*

**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*

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

**Marc Y. Donath**, Universitätsspital Zürich, Universität Zürich, Switzerland  
*Inflammation in Pancreatic Beta Cell Dysfunction*

**Yuval Dor**, Hebrew University-Hadassah Medical School, Israel  
*Vascular in Islet Development and Regeneration*

**Herbert Y. Gaisano**, University of Toronto, Canada  
*Molecular Mechanism of Compound Exocytosis in Pancreatic Islet Beta Cells*

**Anne Grapin-Botton**, Ecole Polytechnique Fédérale de Lausanne, Switzerland  
*Differentiation of Beta Cells from Progenitors*

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

**Bernhard J. Hering**, University of Minnesota, USA  
*Islet Transplantation: Today and Tomorrow*

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

**Gerard Karsenty**, Columbia University Medical Center, USA  
*Regulation of Glucose Metabolism by the Osteoblast*

**Wilhelm Krek**, ETH Zurich, Switzerland  
*HIF Signaling in Beta Cells*

**Rohit N. Kulkarni**, Joslin Diabetes Center, USA  
*Metabolic Stress and Pancreatic Beta Cell Mass*

**Eckhard Lammert**, Heinrich-Heine-University of Duesseldorf, Germany  
*Endothelial-Beta Cell Interaction*

**Ingo B. Leibiger**, Karolinska Institutet, Sweden  
*Insulin Signaling in Pancreatic B-Cells*

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

**Thomas Mandrup-Poulsen**, Hagedorn Research Institute, Denmark  
*Beta-Cell Cytokine Signaling*

**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*

**Marc A. Prentki**, CRCHUM/ University of Montreal, Canada  
*Metabolic Signaling and Beta Cell Dysfunction in Type 2 Diabetes*

**Patrik Rorsman**, Oxford Centre for Diabetes, Endocrinology and Metabolism, UK  
*Calcium Channels and Insulin Exocytosis*

**Maike Sander**, University of California, San Diego, USA  
*Control of Cell Fate Choice in the Pancreas*

**Michele Solimena**, University of Technology Dresden, Germany  
*Signaling from the Insulin Granule to the Nucleus*

**Markus Stoffel**, Institut f. Molekulare Systembiologie, Switzerland  
*MicroRNA Networks*

**Doris A. Stoffers**, Institute for Diabetes, Obesity and Metabolism, University of Pennsylvania, USA  
*Pdx1 Partners and Targets in Beta Cell Development and Function*

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

\*Keynote speaker. <sup>o</sup>Invited, not yet confirmed. <sup>o</sup>Joint speaker. Program subject to change.

Current as of November 9, 2009.



This symposium will focus on advances in our understanding of normal pancreatic b-cell function and mechanisms of beta-cell failure in Type 2 diabetes, which has become a pandemic disease with estimates of affected individuals reaching 350 million in 2030. Defects in pancreatic b-cell function and reduced beta cell mass are now recognized as the event that triggers the transition from pre-diabetes/metabolic syndrome to overt Type 2 diabetes. Major advances have been made in our understanding of fundamental beta-cell biology, signaling pathways regulating islet growth, apoptosis, regeneration in normal and disease states and development of new strategies for enhancing beta-cell survival and function. Leading academic and industrial contributors alike will carefully discuss recent advances in knowledge in several disciplines, including development, regeneration, stem cells, transcription factors, novel signaling pathways, cell biology, genetics, gene regulation and drug targeting, as well as emerging technologies in islet research.

## PROGRAM PLENARY SESSIONS:

- From Stem Cell Development to Transplantation
- Signaling in Pancreatic B-Cells
- Transcriptional Networks Signaling
- Molecular Mechanisms in Insulin Secretion and Action (Joint)
- Control of Insulin Secretory Machinery in Diabetes
- Emerging Targets for Improving Insulin Action and Secretion (Joint)
- Insulin Secretion and Action in Humans (Joint)
- Beta Cell Stress in Diabetes

## DEADLINES:

Abstract & Scholarship: December 14, 2009

Late-Breaking Abstract: January 15, 2010

Early Registration: February 12, 2010

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