POSTER PRESENTATIONS
– Wednesday May 21st & 22nd 2014 –

ISLET DEVELOPMENT & DIFFERENTIATION

Poster 01 - Iljana Gaffar - Complementary Roles for Glucagon Receptor and GLP-1 Receptor Signaling in Insulin Cell Differentiation.
Poster 02 - John Wiersch - Alpha Cell Ablation Leads to Delayed Beta Cell Development in Embryonic Mice.
Poster 03 - Fong Cheng Pan - Mnx1 as a critical determinant in beta/delta fate selection during endocrine lineage diversification and beta cell differentiation.
Poster 04 - Anna B. Osipovich - Insml Promotes Endocrine Cell Differentiation by Modulating Expression of a Network of Genes That Includes Neurog3 and Ripply3.
Poster 05 - Pavana Rotti - 3D Differentiation of human induced pluripotent stem cells generates functional insulin producing cells in vitro.

ISLET ß-CELL GROWTH, REGENERATION & REPROGRAMMING

Poster 06 - Angela Criscimanna - Differentially Activated Macrophages Create Lineage-Specific Microenvironments for Pancreatic Regeneration in Mice.
Poster 07 - Audra L. Kauffman - A small molecule kinase inhibitor induces insulin gene expression in pancreatic alpha cells.
Poster 08 - Maria L. Golson - Activated FoxM1 enhances insulin secretion and beta cell survival in young mice while increasing beta cell proliferation in aged mice.
Poster 09 - Nathaniel J. Hart - Islet Cell Composition, Proliferation and Mass in the Human Juvenile Pancreas.
Poster 10 - Raymond C. Pasek - Connective Tissue Growth Factor Promotes Beta Cell Proliferation During Pregnancy.
Poster 12 - Yanqing Zhang - Pax4 Induced Alpha-to-beta Cell Phenotypic Change.
Poster 13 - Hannah N. Worchel - The Outcome of Pdx1/Ngn3/MafA Reprogramming of Acinar Cells Varies Greatly Depending on Specific Experimental Conditions.
Poster 14 - Kristie I. Aamodt - Signals Derived From The Islet Microenvironment Modulated By Vascular Endothelial Growth Factor-A Promote Beta Cell Proliferation.

ISLET TRANSCRIPTING & TRANSCRIPTION FACTORS

Poster 15 - Junqin Chen - Thioredoxin-Interacting Protein Self-Induction: Role of ChREBP and AMP-Kinase.
Poster 16 - Jason M. Spaeth - FoxP1/2/4 Transcription Factors Are Required For Endocrine Alpha- and Beta-cell Proliferation and Function
Poster 17 - David Scoville - Identification of New Co-regulatory Partners of the MafA Transcription Factor
**METABOLISM, SECONDARY SIGNALS & SECRETION**

**Poster 18** - Mark Perelis - Clock Silencing in Adulthood Impairs Rhythmic Insulin Release and Reprograms Protein Secretion Transcription Networks.

**Poster 19** - Anton E. Ludvik - A possible role of HKDC1 in maternal glucose homeostasis.

**Poster 20** - Medha Priyadarshini - Potential Role of FFAR3 in Pancreatic Beta Cell Function.

**Poster 21** - Xiaodong Zhu - Microtubules Negatively Regulate Insulin Secretion In Pancreatic Beta Cells.

**Poster 22** - Scott A. Soleimanpour - The diabetes susceptibility gene Clec16a regulates mitophagy.

**Poster 23** - Latha Ramalingam - Doc2b serves as a scaffolding platform for concurrent binding of multiple Munc18 proteins.

**ISLET ION CHANNELS**


**Poster 25** - Nicholas Vierra - The C-Terminus of TALK-1 is a Charge-Sensitive Module Critical for Regulation of Channel Activity.

**Poster 26** - Kristen E. Syring - In the Absence of ZnT7, Deletion of ZnT8 Impairs Glucose Tolerance.

**Poster 27** - Xin Tong - Beta Cell SERCA2b Protein Stability Is Regulated via NO- and AMPK-Dependent Pathways under Inflammatory Diabetic Conditions.

**Poster 28** - Evan P.S. Pratt - Disruption of Ca\(^{2+}\)-Induced Ca\(^{2+}\) Release and Glucose-Stimulated ERK1/2 Activation in INS-1 Cells Expressing the Ca\(^{2+}\)v1.2 II-III Loop.

**Poster 29** - Jennifer S. Stancill - Exploring beta-cell excitotoxicity as a cause for Type 2 Diabetes.

**ISLET STRESS & SURVIVAL**

**Poster 30** - Guanlan Xu - TXNIP-Induced microRNA-204 Inhibits Beta Cell Function.

**Poster 31** - Stephen Filios - miR-200b Increases Beta Cell Apoptosis and is Induced by TXNIP.

**Poster 32** - Leena Haataja - Successful and Unsuccessful Folding in the Oxidation of Proinsulin.

**Poster 33** - Daleep Arora - Identification of small molecules that protect pancreatic beta cells against ER stress induced cell death.

**Poster 34** - Lance Thielen - Oxidative Stress Cannot Mimic TXNIP-Induced microRNA Expression in INS-1 Beta-Cells.

**Poster 35** - Carly Kibiel - Cholecystokinin Protects Pancreatic Beta Cells From Stress-Induced Apoptosis.

**Poster 36** - Wataru Yamamoto - SERCA2b Overexpression Improves Beta Cell Survival Under Inflammatory and ER Stress Conditions.

**Poster 37** - Justin Bushkofsky - Tcf19 is a Novel Islet Factor Involved in Proliferation and Atf6 Mediated Endoplasmic Reticulum Stress.
ALPHA-CELLS & GLUCAGON SECRETION

Poster 38 - David Jacobson - Two-Pore-Domain TASK-1 Potassium Channels Modulate Pancreatic Islet Glucagon Secretion.
Poster 39 - E. Danielle Dean - Hepatic-Derived Factor Stimulates Human Alpha Cell Proliferation.
Poster 40 - Camille Allard - Estrogen Suppresses Glucagon Secretion In Diabetic Mice And Cultured Islets.
Poster 41 - Mingyu Li - Modeling alpha cell hyperplasia to search for the liver-derived inducer in zebrafish.

TYPE-1 DIABETES PATHOGENESIS & TREATMENT

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Poster 44 - Yong Wang - Preconditioning with Diazoxide Reduces Ischemic Injury to Non-Human Primate Islets.
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Poster 46 - Ivan Restrepo-Angulo - Effect of IL-12/23(p40) Inhibition on Diabetes Outcomes in Non-Obese Diabetic Mice
Poster 47 - Emily Sims - Beta Cell Derived miR-21 as an Intrinsic Protective Response and Biomarker in Type 1 Diabetes Mellitus.

TYPE-2 DIABETES PATHOGENESIS

Poster 48 - Brandon B. Boland - The Cell Biology of the Adaptive Plasticity for Insulin Production in Pancreatic Beta-Cells from Obese Diabetic Mice.
Poster 49 - Miles H. Fuller - Genetic Deletion of the Short Chain Fatty Acid Receptor, FFAR2, leads to Impaired Gestational Glucose Homeostasis.
Poster 50 - Genevieve E. Fava - The Progression of Intra-Islet GLP-1 Expression Differs in Mouse Models of Type 1 versus Type 2 Diabetes.
Poster 51 - Stephanie M. Yoder - PAK1 Knockout Mice Harbor an Increased Susceptibility to Diet-Induced Diabetes

NOVEL ISLET METHODOLOGIES

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Poster 55 - Yong Wang - Development of A Microfluidic-based Array for High-Resolution and High-Content Imaging of Islets.
Poster 56 - Cynthia M. Cipolla - Validation of LC-MS Metabolomics Method in Whole Islets and Application to Studies of Gluco/Lipotoxicity.
Poster 57 - Diana Gutierrez - Development and Optimization of a Microfluidic-based Multi-Parametric Assay for Evaluating Human Islet function prior to Transplantation.
Poster 58 - Sonia Rawal - Multi-donor reaggregated 3D islets for drug testing.
Poster 59 - Patrick Gillespie - High Content Screening And Analysis Of Beta Cell Function.
Poster 60 - Maria L. Golson - Automated Quantification of Pancreatic Beta Cell Mass.