PROGRAM

SCHEDULE

SUBJECT TO POTENTIAL ADJUSTMENT

11TH ANNUAL MIDWEST ISLET CLUB (MIC)

MEETING

Monday and Tuesday, May 14 - 15, 2018

located at the

Eric P. Newman Education Center
320 S. Euclid Avenue
St. Louis, Missouri

(On the Washington University School of Medicine Campus)
Monday May 14, Afternoon.

12:00-2:00 PM LUNCH AND REGISTRATION

2:00 PM WELCOME INTRODUCTION

SESSION 1: DIVERSITY OF ISLET SECRETION AND CONTROL

2:05 PM- Inactivation of Acyl-Protein Thioesterase 1, a Major Mediator of Depalmitoylation, Promotes Insulin Secretion in Mice. Guifang Dong (abstract 65)

2:20 PM- Cdk2-dependent activation of β-cell metabolism is eclipsed by its inhibitory effect on plasma membrane excitability and insulin secretion. Sophia M. Sdao (abstract 40)

2:35 PM- SWELL1 is a glucose sensor regulating β-cell excitability and systemic glycaemia. Chen Kang (abstract 112)

2:50 PM- Coordinated Cross-talk between Ca2+ and cAMP in regulating pulsatile insulin secretion: A novel role for the unique inhibitory G-protein, Gαz, in regulating β-cell function. MD Schaid (abstract 47)

3:05 PM- A novel role for phosphofructokinase M (PFKM) in mouse and human beta cell function. Vishal S. Parekh (abstract 63)

3:20-3:55 PM AFTERNOON BREAK

SESSION 2: CYTOKINES AND INFLAMMATION IN THE ISLET

4:00 PM- Use of a Computational Biology Workflow to Identify and Prioritize Altered PremRNA Splicing Events in Cytokine-Stressed Human Islets and Subjects with New-Onset T1D. Wenting Wu (abstract 18)

4:15 PM- Assessment of Proinflammatory Mediators of Beta Cell Circadian Clock Dysfunction in Diabetes. Naureen Javeed (abstract 11)

4:30 PM- The “not-so-vulnerable” β-cell. Jennifer S. Stancill (abstract 28)

4:45 PM- Resident macrophages of the pancreatic islet constantly probing their environment – sampling beta cell granules and blood particles. Bernd H. Zinselmeyer (abstract 31)
5:00 PM - Modification of β cells lipid metabolism by interferon gamma (IFNγ) and its association with anti-viral response. Nguyen Truong (abstract 3)

5:15-6:00 PM FREE TIME AND MIXER

6:00-7:30 PM DINNER

7:30-10:00 PM POSTER SESSION AND MIXER

Tuesday May 15, Morning

8:00-8:55 AM CONTINENTAL BREAKFAST

SESSION 3: ISLET CELL FUNCTION, HORMONE PRODUCTION AND PROCESSING

9:00 AM - Golgi-derived microtubules in pancreatic β-cells are regulated by glucose through cAMP and EPAC2 Kathryn P. Trogden (abstract 13)

9:15 AM - Loss of β-cell function and mass in severely diabetic mice is improved by sodium glucose transporter (SGLT2) inhibition therapy. Zeenat Asghar Shyr (abstract 16)

9:30 AM - Loss of eIF4G1 in pancreatic β-cells leads to glucose intolerance by altering insulin production and secretion, but not insulin processing. Seokwon Jo (abstract 99)

9:45 AM - Loss of Chromogranin-B diminishes β-cell function via reduced insulin secretory granule biogenesis Shelby C. Bearrows (abstract 64)

10:00 AM - The role of endoplasmic reticulum (ER) localized TALK-1 channels in β-cell insulin secretion, mitochondrial function and the ER stress response. Sarah Milian (abstract 103)

10:15-10:55 AM COFFEE BREAK

SESSION 4: THE ISLET IS NOT JUST ABOUT THE β-CELL

11:00 AM - An alpha-cell secreted protein, complement 1q like-3 inhibits insulin secretion via BAI3 adhesion G-protein coupled receptor from pancreatic beta-cells. Rajesh Gupta (abstract 67)
11:15 AM- Novel Cell Extrinsic Factors that Regulate Pancreatic α-cell Proliferation and Glucagon Secretion. Lu Zhang (abstract 37)

11:30 AM- Glucocorticoid receptor is instrumental for beta-cell compensation in response to metabolic stress. Jun Yamauchi (abstract 29)

11:45 AM- Role of dopamine in α-cell Ca2+ heterogeneity and glucagon secretion. Zeno Lavagnino (abstract 78)

12:00 noon- A Novel Pancreatic Factor? Neuronostatin Promotes Glucagon Production and Dampens Insulin Release. Stephen M. Grote (abstract 74)

12:15-1:45 PM LUNCH

Tuesday May 15, Afternoon.

SESSION 5: ROUTES TO ISLET CELL DISAPPEARANCE

1:50 PM- IL-6 stimulation of autophagy and the antioxidant response protects β-cells from oxidative stress. M.R. Marasco (abstract 76)

2:05 PM- An iron-mitophagy axis balances beta cell responses to cytokine toxicity. Vaibhav Sidarala (abstract 73)

2:20 PM- Tcf19 regulates DNA damage response genes in the β-cell. Sukanya Lodh (abstract 107)

2:35 PM- PLIN2 deficiency in beta cells impairs beta cell function. A. Mishra (abstract 52)

2:50 PM- A Soluble Endoplasmic Reticulum Factor for the Treatment of Wolfram Syndrome. Shuntaro Morikawa (abstract 44)

3:05-3:25 PM AFTERNOON BREAK
SESSION 6: FINGERPRINTING ISLET CELLS

3:30 PM- 12-HETE signaling through the G protein-coupled receptor 31 (GPR31) regulates β cell inflammatory responses and pancreas development. Marimar Hernandez-Perez (abstract 111)

3:45 PM- The S64F MAFA mutation has strikingly different effects on glucose homeostasis in male and female mice, as observed in human patients. Emily Walker (abstract 4)

4:00 PM- Effects Of In Utero High Fat Diet Exposure on the Endocrine Pancreas of the Offspring. Joseph Elsakr (abstract 48)

4:15 PM- The Ldb1 transcriptional co-regulator is required for pancreatic islet cell differentiation, proliferation, and survival. Eliana Toren (abstract 79)

4:30 PM- Genetic drivers of pancreatic islet function Mark Keller (abstract 26)

4:45-5:00 PM BREAK

5:00 – 6:15 PM- LACY LECTURE AND PRESENTATIONS

6:30 PM COCKTAILS

7:00-9:00 PM BANQUET DINNER AND PRIZES