



PROGRAM SCHEDULE

SUBJECT TO POTENTIAL ADJUSTMENT

11TH ANNUAL MIDWEST ISLET CLUB (MIC)

*On behalf of the MIC Organizing Committee and the MIC Organizing and Research Committee:
Alan D. Attie, PhD; John Corbett, PhD; George K. Gittes, MD; Raghu Mirmira, MD, PhD; Colin G. Nichols, PhD; Leslie S. Satin, PhD; Anath Shalev, MD;
Roland Stein, PhD (Chair); Maria Remedi, PhD; Henry Dong, PhD; Dawn B. Davis, MD, PhD; Scott Soleimanpour, MD; Camella Evans-Molina, MD, PhD.; Maureen Gannon, PhD.*

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 Ca^{2+} and cAMP in regulating pulsatile insulin secretion: A novel role for the unique inhibitory G-protein, *Gaz*, 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 Pre-mRNA 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 (IFN γ) 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 Ca^{2+} 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 Elsagr (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