



The 9th Annual MIC Meeting
Indiana University School of Medicine
Indianapolis, Indiana

Agenda
(“Subject to change”)

Wednesday, May 18, 2016

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|--------------------------|--|--------------------------|
| 11:30 am - 4:00 pm | Poster Set up | MS Atrium |
| 11:30 am - 2:00 pm | Check In & On-site Registration | R3 Atrium |
| 12:00 pm - 1:45 pm | Lunch | MS Atrium |
| 1:00 pm - 1:30 pm | Upload Session I Oral Presentation | R3 203/Auditorium |
| 2:00 pm - 2:15 pm | Welcome & Introductions | R3 203/Auditorium |
| 2:15 pm - 3:30 pm | Session I Building Functional Beta Cell Mass <i>Session Moderator: Emily Sims</i> | R3 203/Auditorium |
| 2:15 pm - 2:30 pm | Abstract # 37 <i>“Ldb1 co-regulator loss from pancreatic progenitors impairs neonatal glucose homeostasis”</i> Chad Hunter, University of Alabama at Birmingham | |
| 2:30 pm - 2:45 pm | Abstract # 53 <i>“Polyamine and hypusine biosynthesis is required for proper pancreas development”</i> Teresa Mastracci, Indiana University | |
| 2:45 pm - 3:00 pm | Abstract # 41 <i>“Threshold-dependent cooperative function of Pdx1 and Oc1 within pancreatic progenitors establishes competency for endocrine differentiation and β-cell function”</i> Peter Kropp, Vanderbilt University | |
| 3:00 pm - 3:15 pm | Abstract # 64 <i>“Histone Chaperone ASF1B Mediates Transcriptional Regulation of Human Pancreatic β-Cell Proliferation”</i> Pradyut Paul, University of Wisconsin-Madison | |
| 3:15 pm - 3:30 pm | Abstract # 24 <i>“Underlying mechanisms of remission in a mouse model of neonatal diabetes”</i> Christopher Emfinger, Washington University | |
| 3:30 pm - 3:50 pm | Upload Session II Oral Presentations | R3 203/Auditorium |

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| 3:30 pm - 4:00 pm | Break & Refreshments | R3 Atrium |
| 4:00 pm - 5:15 pm | Session II T1D: Triggers and Biomarkers Session Moderator: Dawn Davis | R3 203/Auditorium |
| 4:00 pm - 4:15 pm | Abstract # 72 <i>"Mechanisms of β-cell and islet responses to viral infection: the protective role of nitric oxide"</i> Zachary Shaheen, Medical College of Wisconsin | |
| 4:15 pm - 4:30 pm | Abstract # 26 <i>"Loss of the inhibitory G-protein, G_z, protects against Type I Diabetes-like hyperglycemia by stimulating islet signaling pathways that promote β-cell function and survival"</i> Rachel Fenske, University of Wisconsin-Madison | |
| 4:30 pm - 4:45 pm | Abstract # 78 <i>"Circulating Preproinsulin (PPI) mRNA As a Potential Biomarker of β Cell Stress"</i> Farooq Syed, Indiana University | |
| 4:45 pm - 5:00 pm | Abstract # 42 <i>"Elevated Levels of miR-21 in Circulating Extracellular Vesicles Predate Onset of Type 1 Diabetes Mellitus"</i> Alexander Lakhter, Indiana University | |
| 5:00 pm - 5:15 pm | Abstract # 35 <i>"Engineering a Pancreatic Islet Bioinstructive Microenvironment for Improved Survival and Function"</i> Clarissa Hernandez, Purdue University | |
| 5:30 pm - 6:00 pm | Reception | MS Atrium |
| 6:00 pm - 7:00 pm | Dinner | MS Atrium |
| 7:00 pm - 8:30 pm | Poster Session | MS Atrium |
| 9:00 pm | Entertainment (<i>on own</i>) | |

Thursday, May 19, 2016

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| 7:00 am - 9:30 am | Breakfast | Hotel |
| 8:15 am - 8:45 am | Upload Session III Oral Presentations | R3 203/Auditorium |

9:00 am - 10:00 am

**Session III
A Trip to ER**

R3 203/Auditorium

Session Moderator: Maria Remedi

9:00 am - 9:15 am

Abstract # 85

"ER Calcium levels help regulate K(ATP) Channel trafficking to the Plasma membrane of pancreatic islet Beta Cells"

Suryakiran Vadrevu, University of Michigan

9:15 am - 9:30 am

Abstract # 87

"TALK-1 K⁺ channels modulate β -cell endoplasmic reticulum Ca²⁺ homeostasis"

Nicholas Vierra, Vanderbilt University

9:30 am - 9:45 am

Abstract # 40

"A Role for Altered STIM1 Function and β Cell ER Ca²⁺ Dyshomeostasis in Diabetes Pathophysiology"

Tatsuyoshi Kono, Indiana University

9:45 am - 10:00 am

Abstract # 1

"Functional characterization of WFS1 in β -cell viability and function"

Damien Abreu, Washington University

10:00 am - 10:15 am

Abstract # 77

"Delayed apoptosis allows islet β -cells to implement an autophagic mechanism to promote cell survival"

Samuel Stephens, Duke University

10:15 am - 10:35 am

Upload Session IV Oral Presentations

R3 203/Auditorium

10:15 am - 10:45 am

Break & Refreshments

R3 Atrium

10:45 am - 12:00 pm

**Session IV
Beta Cell Adaptation and Compensation**

R3 203/Auditorium

Session Moderator: Henry Dong

10:45 am - 11:00 am

Abstract # 9

"Posttranslational modification of the factor eIF5A is Required for the Adaptive Response of the Islet Beta Cell During Insulin Resistance"

Esther Bolanis, Indiana University

11:00 am - 11:15 am

Abstract # 16

"Regulation of β -cell mass expansion by Prostaglandin E₂ signaling"

Bethany Carboneau, Vanderbilt University

11:15 am - 11:30 am

Abstract # 65

"The diabetes gene Clec16a promotes non-degradative ubiquitination of key substrates in the regulation of mitophagy and β -cell function"

Gemma Pearson, University of Michigan

11:30 am - 11:45 am

Abstract # 48

"OGT Loss Increases Pancreatic Beta-Cell Susceptibility to Metabolic Stress"

Amber Lockridge, University of Minnesota

11:45 am - 12:00 pm

Abstract # 57

"Intra-islet accumulation of macrophages and neutrophils precedes the development of overt diabetes in db/db-BLKS mice"

David Morris, Indiana University

12:00 pm - 1:30 pm

Lunch

MS Atrium

1:00 pm - 1:30 pm

Upload Session V Oral Presentations

R3 203/Auditorium

1:45 pm - 3:30 pm

Session V

Novel Regulators of Function

Session Moderator: Sushant Bhatnagar

R3 203/Auditorium

1:45 pm - 2:00 pm

Abstract # 23

"Uncoupling protein 2 regulates daily cycles of insulin secretion capacity and glucose tolerance in mice"

Christine Doucette, University of Manitoba

2:00 pm - 2:15 pm

Abstract # 56

"KLF2/microRNA-483 regulate pancreatic beta-cell function"

Ramkumar Mohan, Michigan Technological University

2:15 pm - 2:30 pm

Abstract # 21

"Identifying the genetic architecture of insulin secretion in pancreatic islets"

Rahul Das, University of Wisconsin-Madison

2:30 pm - 2:45 pm

Abstract # 86

"Evidence that pyruvate kinase M2 functions in the β cell metabolic amplifying pathway"

Halena VanDeusen, University of Wisconsin-Madison

2:45 pm - 3:00 pm

Abstract # 88

"Human MAFA protein stability is profoundly increased by a mutation identified in human insulinomatosis patients"

Emily Walker, Vanderbilt University

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| 3:00 pm - 3:20 pm | Upload Session VI & VII Oral Presentations | R3 203/Auditorium |
| 3:00 pm - 3:30 pm | Break & Refreshments | R3 Atrium |

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| 3:30 pm - 4:45 pm | Session VI T1D: Prevention and Reversal Session Moderator: Maureen Gannon | R3 203/Auditorium |
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3:30 pm - 3:45 pm

Abstract # 45

“Interleukin-6 Protects Pancreatic β -cells from Apoptosis through Stimulation of Autophagy”

Amelia Linnemann, University of Wisconsin-Madison

3:45 pm - 4:00 pm

Abstract # 44

“Pancreatic beta cell protection and reversal of hyperglycemia in diabetic animals by a small molecule through mitigating ER stress”

Yu Li, University of Oklahoma

4:00 pm - 4:15 pm

Abstract # 27

“Mitogen-inducible Gene 6 Accelerates the Progression to Diabetes by Inhibiting EGFR-Mediated Repair Mechanisms”

Kimberley Fong, Indiana University

4:15 pm - 4:30 pm

Abstract # 82

“Novel Small Molecule Inhibits Beta Cell TXNIP”

Lance Thielen, University of Alabama at Birmingham

4:30 pm - 4:45 pm

Abstract # 39

“Generation of Glucose-Responsive Pancreatic β -Cells from Type 1 Human Diabetic iPS Cells”

Eun-Mi Kim, University of Iowa

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| 4:45 pm - 5:00 pm | Break & Refreshments | R3 Atrium |
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| 5:00 pm - 6:00 pm | Session VII Lacy Award Lecture & Awards <i>“Our journey with the pancreatic islets”</i> Gordon Weir, M.D. and Susan Bonner-Weir, Ph.D. | R3 203/Auditorium |
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| 6:00 pm - 6:15 pm | Group Picture | MS Atrium |
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| 6:15 pm - 6:45 pm | Reception | MS Atrium |
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| 6:45 pm - 8:00 pm | Dinner | MS Atrium |
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8:00 pm - 8:30 pm

Abstract Award Presentations

MS Atrium

8:30 pm - 9:00 pm

Poster Removal

MS Atrium

Friday, May 20, 2016

Morning

Check out

Hotel