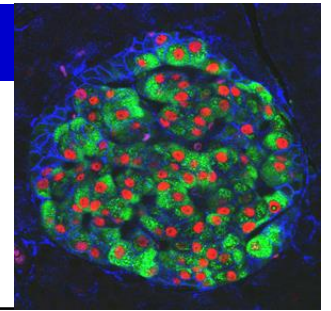


# SPRING 2015 ISLET CLUB

University of Vermont, College of Medicine - Davis Auditorium  
Burlington, VT

April 11, 2015

## A G E N D A



8:00 – Continental breakfast and registration

8:55 – Introduction

❖ **Morning Session: 9:00 – 12:20**

\* = PI

### I. Insulin Secretion Biology

9:00-9:20

**A mechanism by which lipids increase secretion at basal glucose**

*Nathanael Miller, Linsey Stiles, Marc Liesa, and Orian Shirihai\**

Boston University

9:20-9:40

**Lipid induced changes in the calcium sensitivity of insulin exocytosis**

*Karel Erion, Nathan Burritt, Lucia E. Rameh, Jude Deeney, and Barbara Corkey\**

Boston University

9:40-10:00

**Beta cell specific deletion of ABHD6 in mouse islets enhances insulin secretion by both fuel and non fuel stimuli**

*Shangang Zhao, Pegah Poursharifi, Yves Mugabo, Marie-line Peyot, Erik Joly, Murthy Madiraju, and Marc Prentki\**

University of Montreal

10:00-10:20

**Pgc-1 coactivators are required for fatty-acid-potentiated insulin secretion and appropriate lipid storage in mature  $\beta$ -cells**

*Nathalie Jovet, Oropeza D, Bouyakdan K, Perron G, Ringuette L-J, Philipson LH, Kiss RS, Poitout V, Alquier T, and Jennifer L. Estall\**

University of Montreal

10:20-10:40

**P21-activated kinases role in the potentiation of GSIS by fatty acids**

*Valérie Bergeron, Julien Ghislain, Stephanie M Yoder, Debbie C Thurmond, and Vincent Poitout*

University of Montreal

10:40-11:00 – Coffee Break

11:00-11:20

**Insulin secretory defect in a mouse model of chronic kidney disease**

*Laetitia Koppe, Elsa Nyam, Valentine Moullé, and Vincent Poitout*

University of Montreal

### II. Beta Cell Biochemistry and Signaling

11:20-11:40

**Metabolic function of Wnt signaling pathway**

*Tianru Jin\*, Wilfred Ip, and Weijuan Shao*

University of Toronto

11:40-12:00

**Dairy derived bioactive fatty acids mitigate  $\beta$ -cell glucolipotoxicity**

*Shae Rowlandson, Tom Jetton, Jay Gupta, and Jana Kraft\**

University of Vermont

12:00-12:20

**Integrated, step-wise, mass-isotopomeric flux analysis of the TCA**

*Tiago Alves, Rebecca L. Pongratz, Xiaojian Zhao, Orlando Yarborough, Sam Sereda, Orian Shirihai, Gary W. Cline, Graeme Mason, and Richard Kibbey\**

Yale University

12:20-1:00 – Lunch (Davis Lobby)

❖ **Afternoon Session: 1:00 – 5:15**

1:00-1:20

**Vitamin D3 signaling in INS1 cells under normal and glucotoxic stress**

*Sajani Sivakumar, Shae Rowlandson, and Jay Gupta\**

University of Vermont

1:20-1:40

**The role of novel TORC1-dependent signals in  $\beta$ -cell function and glucolipotoxicity**

*Lucia Rameh\*, Karel Erion, Ashley Mackey, Deborah Sarkes, Barbara Corkey, and Jude Deeney*

Boston University

### III. Beta Cell Growth, Development, and Survival

1:40-2:00

#### **Deciphering the regulation of beta-cell proliferation by nutrients**

*Valentine Moullé, Kevin Vivot, Julien Ghislain, and Vincent Poitout\**  
University of Montreal

2:00-2:20

#### **Inflammatory cytokine-induced pancreatic cell differentiation**

*Ivan A. Valdez, Adrian Teo, Ercument Dirice, and Rohit Kulkarni\**  
Harvard University

2:20-2:40

#### **The formation of 3-D cultures induces integrin glycosylation in beta cells**

*Eitan M. Akirav\*, Michael Spelios, Lauren Kenna, and John Olsen*  
Winthrop University Hospital

2:40-3:00

#### **Endogenous protein CCN5/WISP2 promotes cell proliferation and survival in pancreatic islets**

*Jun-Li Liu\**  
McGill University

3:00-3:20 – Coffee Break

### IV. Metabolism and Integrated Physiology

3:20-3:40

#### **$\beta$ -cell specific ATGL deficient mice are protected from diet-induced obesity, hyperinsulinemia and hyperglycemia**

*Camille Attané, Peyot ML, Wang S, Mitchell GA, Lussier R, Zhao S, Pineda M, Madiraju M, Joly E et Marc Prentki\**  
Université de Montréal

3:40-4:00

#### **CHOP null or heterozygote mice are not protected against high fat diet induced metabolic stress**

*Dhananjay Gupta, Basanthi Satish, Tom Jetton, and Jack Leahy\**  
University of Vermont

4:00-4:20

#### **Metabolic reprogramming in male offspring in a non-dietary model of liver insulin resistance**

*Dario F De Jesus, Ercument Dirice, Abdelfattah El Ouaamari, and Rohit Kulkarni\**  
Harvard University

4:20-4:40

#### **Role for an adipose-immune pathway that may guard against beta cell failure**

*James Lo, Molly Kelly, Bruce Spiegelman\**  
Harvard University

4:40-5:15

#### **Open Discussion: “Which Cre-deleter strain is suitable for beta-cell specific gene deletion?”**

*Jennifer L. Estall, Discussion Leader*

5:15 – Business Meeting

6:00 – Reception and Dinner

*The Ice House Restaurant, Burlington Waterfront*

### *With thanks to our sponsors*

This meeting is supported by generous donations from:



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### *About BIIC*

The Boston-Ithaca Islet Club was founded in 1992 to foster closer interaction and collaboration between islet researchers in Boston and Ithaca—at that time, the laboratories of Susan Bonner-Weir and of Gordon Weir (Harvard), Chris Boyd (Tufts), Barbara Corkey (Boston University), and Geoffrey Sharp (Cornell). The first meeting was held in April, 1993, with over 70 participants, and meetings have continued each spring and fall. Participation has grown to include groups from Buffalo, NY; Montreal, Toronto, and Quebec (Canada); New Haven, CT; Syracuse, NY; Washington, DC; New York, NY; Worcester, MA; Philadelphia, PA; Richmond, VA; and other East-coast laboratories.

BIIC goals have been constant from the outset: *Informal presentation of research, free sharing of ideas and current data, the development of research collaborations, and general good fellowship.* The meeting is structured around 20-minute sessions of which 5-10 minutes are reserved for questions and discussion. Work is presented by trainees and by established investigators—offering an excellent forum for students to present new and unpublished data to a critical yet friendly and supportive audience, obtain valuable feedback, and network with peers and leaders in the field.