



**Montreal Diabetes
Research Center**

Understand to Prevent and Cure

SPRING 2016 BOSTON-ITHACA ISLET CLUB

Saturday April 23, 2016

CRCHUM

Montréal

FINAL PROGRAM

This meeting was supported by generous contributions from:



**The conference will be held at the Centre de Recherche du CHUM
900, St-Denis Street
Montreal, QC
H2X 0A9
Auditorium I & II (5th floor)**

Parking spaces:

No parking space is available at the CRCHUM. However, there are 2 private parking lots nearby. These are:

- 1- Vieux-Montreal, 330 Champs-de-Mars Street (between Gosford Street and Bonsecours Street);
- 2- Metropolitan at the “Palais des congrès” 149 Viger E Street (between St-Dominique Street and de Bullion Street)

Metro station:

The nearest metro station is “Champs-de-Mars” on the orange line. **Important Notice:** During weekends, the métro entrance of the research center via the metro “Champs de Mars” is closed. Attendees have to go out of the subway station and used the main entrance on St-Denis Street.

Cloakroom:

A cloakroom is available free-of-charge on the 5th floor close to the Auditorium.

Schedule

- | | |
|------------------|---------------------------------|
| 8 : 30 am | Registration and coffee |
| 9 : 00 | Welcome and Introduction |

Beta-cell birth and replication: Learning from the Source

Chair: Jennifer Estall

- 9 : 10** **Jun Shirakawa**, Rohit N Kulkarni
Joslin Diabetes Center
Insulin regulates CENP-A expression and deposition to centromere in beta cell proliferation.
- 9 :30** **Kevin Vivot**, Valentine Moullé, Bader Zarrouki, Hasna Maachi, Julien Ghislain, Vincent Poitout
MDRC-CRCHUM
RGS16 controls insulin secretion and beta-cell proliferation in islets.
- 9 : 50** **Henry Nchienzia**, Xin-Ping Zhao, Chao-Sheng Lo, Shuiling Zhao, Isabelle Chenier, Vincent Poitout, Jean-Louis Chiasson, Julie R. Ingelfinger, John Chan, Shao-Ling Zhang
MDRC-CRCHUM
The functional interaction of hedgehog interaction protein (Hhip) and nuclear factory erythroid 2-like 2 (Nrf2) in pancreatic β -cell.
- 10 : 10** **Hasna Maachi**, Moullé VS, Ghislain J, Poitout V
MDRC-CRCHUM
Implication of HB-EGF-EGFR-mTOR signaling pathway in pancreatic beta cell proliferation in response to nutrient excess.
- 10 : 30** **Coffee break**

Energy metabolism and beta-cell Function : Move over glucose...

Chair: Julien Ghislain

- 11 : 00** **Rebecca Cardone**, Tiago Alves, Richard Kibbey
Yale University
Human islet function, dysfunction and recovery are metabolically linked to anaplerosis.
- 11 : 20** **Camille Attané**, Peyot ML, Wang S, Mitchell G.A, Poursharifi P, Zhao S, Madiraju S.R. M, Joly E et Prentki M.
MDRC-CRCHUM
Beta-cell ATGL regulates insulin secretion and the response to diet-induced obesity.

- 11 : 40** **Tiago Cardoso Alves**, Rebecca Cardone, Xiaojian Zhao, Gary Cline, Graeme Mason, Richard Kibbey
Yale University
Can the PEPCCK/ME ratio control insulin secretion?
- 12 : 00** **Yves Mugabo**, S.Zhao, S.Gezzar, A.Al-Mass, D.Zhang, J.Lamontagne, C.Attané, P.Poursharifi, E.Joly, ML.Peyot, M.Madiraju, M.Prentki
MDRC-CRCHUM
Mammalian Glycerol 3-Phosphate Phosphatase: a Novel Enzyme Controlling Metabolism in Pancreatic β -Cells and Hepatocytes
- 12 : 20** **Lunch in the Agora on the 5th floor.**

External influences in a beta-cell world

Chair : Mathieu Ferron

- 1 : 50 pm** **Michael McLane**, Jana Kraft, Thomas Jetton
University of Vermont
Bioactive plant lipids affect pancreatic beta cell physiology.
- 2 : 10** **Elsa Nyam**, Koppe L, Fox J.E.M, Dai X.-Q., Attané C, Moullé VS, MacDonald P.E., Ghislain J, Poitout V
MDRC-CRCHUM
Urea impairs β -cells glycolysis and insulin secretion in chronic kidney disease.
- 2 : 30** **Dario F De Jesus**, Ercument Dirice, Abdelfattah El Ouaamari, Rohit N Kulkarni
Joslin Diabetes Center
Altered Metabolic reprogramming in male Offspring in a Non-Dietary Model of Insulin Resistance.
- 2 : 50** **Omar Al Rifai**, Julien C, Chow J, Lacombe J, Germain A, Faubert D, Susan-Resiga D, Seidah N, Ferron M
MDRC-IRCM
Furin in osteoblasts is essential for pro-osteocalcin processing and for glucose homeostasis.
- 3 : 10** **Coffee break**

Emerging technologies to Advance beta-cell Research

Chair : Erik Joly

- 3 : 40** **Parker Lyng Andersen**, Patrick Vermette
Sherbrooke University
Intracellular insulin quantification by cell-ELISA.
- 4 : 00** **Stéphanie Fernandez**, Marc-André Dussault, André Bégin-Drolet, Jean Ruel,
Richard L Leask, Corinne Hoesli
MDRC, McGill University
Engineering a vascularised bioartificial pancreas using 3D printing
- 4 : 20** **Round table : Importance of genetic background in metabolic studies**
Presentation by Camille Attané (MDRC-CRCHUM) and discussion with all Islet Club Investigators
- 5 : 00** **Islet Club Awards**
- 5 : 15** **Business meeting**
- 7 : 00** **Cocktail and dinner in the Agora on the 5th floor.**