

## Sunday | January 5, 2020

### 8:30 Gathering and Coffee

#### Session 1 | Beta cell function and Type-1 Diabetes

Chair: Yehiel Zick

9:00 Shalev Itzkovitz | Weizmann Institute of Science  
*Transcriptional heterogeneity of beta cells in the Intact pancreas*

9:30 Jun-Li Liu | McGill University  
*Controversial roles of short-chain fatty acids on pancreatic  $\beta$ -cell growth and insulin secretion*

### 10:00 Coffee Break

10:30 Michael Walker | Weizmann Institute of Science  
*Modulation of insulin secretion by GPR40/41*

11:00 Constantin Polychronakos | McGill University  
*Precision diagnostics in childhood diabetes; therapeutic implications*

#### Session 2 | Mechanisms of Bone Remodeling

Chair: Simon Wing

11:30 Yaron Vinik | Weizmann Institute of Science  
*Role of animal Lectins in bone remodeling*

12:00 Svetlana Komarova | McGill University  
*Extracellular ATP in bone adaptation to mechanical environment*

### 12:30 Lunch

14:00 Ari Elson | Weizmann Institute of Science  
*Protein tyrosine phosphatases as regulators of bone-resorbing osteoclasts*

14:30 Richard Kremer | McGill University  
*Parathyroid hormone related protein (PTHrP): an emerging target in cancer progression and metastasis*

#### Session 3 | Extracellular Matrix Proteins

Chair: Rony Seger

15:00 Irit Sagi | Weizmann Institute of Science  
*Novel approaches for extracellular matrix targeting in disease treatment*

15:30 Marc D. McKee | McGill University  
*Beyond systemic renal phosphate wasting: local extracellular matrix regulation of mineralization in osteomalacic bone diseases*

### 16:00 Coffee Break

#### Special Session-Short Talks by McGill Students

Chair: Yaron Vinik

16:30 Dan Buss | McGill University  
*Nanoscale 3D structure of the mineralization front in bone and in the achilles tendon fibrocartilage enthesis in normal and Hyp mice, a model of X-linked hypophosphatemia*

16:45 Josephine Tauer | McGill University  
*Metabolic changes in a mouse model of severe osteogenesis imperfecta due to mutation in collagen type I*

17:00 Kim Gauthier | McGill University  
*Regulation of EGFR signaling in C. elegans by the LIN-2/7/10 complex*

17:15 Lexy H. Zhong | McGill University  
*High glucose induces GAPDH nuclear translocation in mesangial cells and requires thioredoxin-interacting protein (TXNIP): novel signaling pathway in diabetic nephropathy*

17:30-22:00

Tel Aviv /Jaffa TOUR and DINNER for the Guests and their hosts

## Monday | January 6, 2020

### 08:30 Gathering and Coffee

#### Session 4 | Cell Signaling and Trafficking

Chair: Michael Walker

9:00 Sima Lev | Weizmann Institute of Science  
*Synthetic lethal combination therapy for TNBC uncovered a unique metabolic state*

9:30 George Fantus | McGill University  
*Targeting novel signaling pathways to prevent and treat diabetic kidney disease (DKD)*

### 10:00 Coffee Break

10:30 **Rony Seger** | Weizmann Institute of Science  
*Beta-like Importins mediate the nuclear translocation of MAPKs*

11:00 **Christian Rocheleau** | McGill University  
*Endosomal regulation of DAF-16 FOXO and insulin/IGF signaling*

11:30 **Valery Krizhanovsky** | Weizmann Institute of Science  
*Novel signaling pathways regulating senescent cell viability*

12:00 Lunch

#### Session 5 | Protein Ubiquitination and Degradation

Chair: Ami Navon

13:30 **Michal Sharon** | Weizmann Institute of Science  
*Regulator of cullin-RING-ubiquitin ligases*

14:00 **Simon Wing** | McGill University  
*Non-enzymatic functions of a deubiquitinating enzyme in metabolism*

14:30 **Yifat Merbl** | Weizmann Institute of Science  
*Global views of proteasome-mediated degradation by mass spectrometry*

15:00 **Yehiel Zick** | Weizmann Institute of Science  
*Concluding remarks and farewell*

## Organizing Committee

Simon Wing

Yehiel Zick

Rony Seger

Michael Walker

Yaron Vinik

## Coordinator

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## Sponsors

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4<sup>th</sup> Zavalkoff Symposium

# Players and Pathways Regulating Metabolism in Health and Disease

5-6  
January  
2020

The David Lopatie Conference Centre  
Weizmann Institute of Science

# Program

