Research in Metabolism Symposium
Duke-NUS Medical School
Singapore
20 & 21 April 2016, (Wed & Thurs)

Day 1 - Program - 20 April 2016, Wednesday

07:30-07:50 Arrival and Registration

07:50-08:00 Welcome Address
Professor Stuart Cook – Programme Director, Programme of Cardiovascular and Metabolic Disorders, Duke-NUS Medical School Singapore

08:00-08:10 Opening Remarks
Professor Paul M. Yen - Programme of Cardiovascular and Metabolic Disorders, Duke-NUS Medical School Singapore

Opening Lecture
8:10-8:40 Acyl-CoA thioesterase-mediated control of thermogenesis
Professor David Cohen - Harvard Medical School

Session 1 of 4: Novel signaling pathways in cardiovascular and metabolic diseases
Chairman: Professor Yan Chen

08:40-09:00 Golgi apparatus in metabolic control and cancer development
Professor Yan Chen – Laboratory of Signal Transduction and Nutrition-related Diseases, Shanghai Institute of Nutritional Sciences

09:00-09:20 The vagus in gut-brain mediated appetite regulation
Professor Amanda Page - Group Leader: University of Adelaide Gastrointestinal Vagal Afferent Research Group, South Australian Health and Medical Research Institute (SAHMRI)

09:20-09:40 Prostaglandin D2 and healing after myocardial infarction
Professor Ying Yu - Laboratory of membrane phospholipid metabolism and cardiovascular diseases, Shanghai Institute of Nutritional Sciences

09:40-10:00 Systems genetics analysis of genome-wide association study reveals novel associations between key biological processes and coronary artery disease
Associate Professor Sujoy Ghosh - Programme of Cardiovascular and Metabolic Disorders, Duke-NUS Medical School Singapore

10:00-10:20 Q &A on Session 1

1 of 5
10:20-10:40  
**Coffee Break**

**Session 2 of 4:  Cell signaling and insulin resistance**

Chairman: Professor Christopher Proud

10:40-11:00  
*Fibroblast growth factor 21 improves hepatic insulin sensitivity and controls glucose homeostasis*
Professor Yu Li - Laboratory of Signal Transduction and Metabolism, Shanghai Institute of Nutritional Sciences

11:00-11:20  
*Novel roles for the MNK kinases in metabolic disease*
Professor Christopher Proud - Nutrition and Metabolism Theme Leader, South Australian Health and Medical Research Institute (SAHMRI)

11:20-11:40  
*Aging and insulin resistance: the role of SIRT1 and amyloid-β*
Professor Qiwei Zhai - Laboratory of Nutrition & Chronic Metabolic Diseases, Shanghai Institute of Nutritional Sciences

11:40-12:00  
**Q &A on Session 2**

12:00-13:30  
**Lunch Break (Level 2, Duke-NUS - Atrium)**

**Session 3 of 4:  NAFLD and lipid metabolism**

Chairman: Professor Paul M. Yen

13:30-13:50  
*LXR as a potential target for lipotoxicity and NASH*
Assistant Professor Rohit Sinha - Programme of Cardiovascular and Metabolic Disorders, Duke-NUS Medical School Singapore

13:50-14:10  
*A role of non-essential amino acid, lipid metabolism*
Professor Feifan Guo - Laboratory of genetic and nutritional regulation of metabolic Diseases, Shanghai Institute of Nutritional Sciences

14:10-14:30  
*An MR/ER/HGF/MET axis conveys signaling from macrophages to hepatocytes in hepatic steatosis and insulin resistance*
Professor Shengzhong Duan - Laboratory of Nuclear Receptors in Metabolism and Diseases, Shanghai Institute of Nutritional Sciences

14:30-14:50  
*Endocrine and nutritional regulation of autophagy as a potential therapy for NAFLD*
14:50-15:10  Q &A on Session 3
15:10-15:40  Coffee Break

**Session 4 of 4:**  Adipose tissue and metabolism

Chairman: Professor David Silver

15:40-16:00  Translational metabolic imaging
Associate Professor Velan Sambasivam Sendhil - Head of Magnetic Resonance Spectroscopy and Metabolic Imaging group, Singapore Bioimaging Consortium (SBIC)

16:00-16:20  Mitochondrial signalling in adipocytes
Assistant Professor Jean Paul Kovalik - Programme of Cardiovascular and Metabolic Disorders, Duke-NUS Medical School Singapore

16:20-16:40  Role lincRNAs in fat browning
Assistant Professor Sun Lei - Programme of Cardiovascular and Metabolic Disorders, Duke-NUS Medical School Singapore

16:40-17:00  Molecular signatures of adipose-derived stem cells: potential for metabolic reprogramming
Assistant Professor Shigeki Sugii - Group Leader, Fat Metabolism and Stem Cell Group Singapore Bioimaging Consortium (SBIC)

17:00-17:20  Q &A on Session 4
17:20-18:30  Wine and Cheese Session for Participants and Guests

18:30-21:30  Dinner for invited Guests
Day 2 - Program – 21 April 2016, Thursday

Session 1 of 2: Diabetes prevalence and risk

Chairman: A/Professor Tai E Shyong

08:30-08:50  
Minimally invasive methods to measure and monitor metabolic health  
Dr Nathan O’Callaghan - Group Leader: Diet, Lifestyle & Health Substantiation – CSIRO, Nutrition & Health

08:50-09:10  
Insulin resistance in Asian ethnic groups  
Associate Professor Tai E Shyong - Head & Senior Consultant, Division of Endocrinology, National University Hospital (NUHS)

09:10-09:30  
Obesity and the role of testosterone in type 2 diabetes in men – The T4DM study  
Professor Gary Wittert – Head, University of Adelaide Centre for Nutrition and Gastrointestinal Diseases, South Australian Health and Medical Research Institute (SAHMRI)

09:30-09:40  
Q &A on Session 1

09:40-10:10  
Coffee Break

Session 2 of 2: Nutritional and therapeutic approaches to obesity and diabetes

Chairman Professor Manny Noakes

10:10-10:30  
Novel approaches to improve metabolic health outcomes in obesity  
Associate Professor Leonie Heilbronn - Group Leader: University of Adelaide Obesity and Molecular Metabolism Group, South Australian Health and Medical Research Institute (SAHMRI)

10:30-10:50  
Biobank and registry for stratification and targeted interventions in spectrum of Type 2 diabetes (Brite-SPOT)  
Assistant Professor Sue-Anne Toh Ee Shiow - Senior Consultant, Division of Endocrinology, National University Hospital (NUHS)

10:50-11:10  
Higher protein diets for metabolic health  
Professor Manny Noakes - Research Director, CSIRO Food and Nutrition Flagship

11:10-11:30  
The role of very low carbohydrate diet for type 2 diabetes management: a long-term randomised trial  
Associate Professor Grant Brinkworth – Principal Research Scientist, CSIRO
Nutrition & Health

11:30-11:50  Q &A on Session 2
11:50-12:10  Closing Remarks-Chan Yan, Christopher Proud, Paul M. Yen
12:30-13:30  Lunch
13:30-15:00  Poster Presentations