DUKE NUS GRADUATE MEDICAL SCHOOL SINGAPORE

Signature Seminar Series

Nutrient sensing and the Gut-Brain axis

ABOUT THE LECTURE

My laboratory has been working on the mechanisms underlying the regulation of glucose, lipid and energy homeostasis and their roles in diabetes and obesity. Our main focus has been to elucidate nutrient and hormone sensing mechanisms in the gut and the brain that regulate hepatic glucose production, hepatic VLDL-TG secretion and food intake to maintain glucose, lipid and energy homeostasis. We have discovered that nutrient sensing in the small intestine triggers hormonal signaling and a gut-brain-liver neuronal pathway to lower hepatic glucose production and plasma glucose levels, and is necessary for the anti-diabetic effect of bariatric surgery and metformin therapy. The Canadian Institutes of Health Research (CIHR) has named our discoveries as a Milestone in Canadian Health Research. In parallel, we have unveiled insulin, glucagon and nutrient signaling pathways in the brain that regulate hepatic glucose production, VLDL-TG secretion and food intake. In summary, our discoveries reveal molecular targets in the gut and the brain that may carry therapeutic potential to lower blood glucose and lipid levels and body weight in diabetes and obesity.

Speaker: ***Prof Tony Lam***
Professor & McIvor Endowed Chair in Diabetes Research
Canada Research Chair in Obesity
University of Toronto

Host: ***Prof Paul Yen***
Professor
Cardiovascular & Metabolic Disorders Programme
Duke-NUS Medical School

Date: Tuesday, 1 March 2016

Time: 12.00 PM— 1.00 PM
(Refreshments will be served at 11.30 AM)

Venue: Duke-NUS Medical School
Amphitheatre, Level 2

Contact Person: Ms Cynthia Lim, Duke-NUS Research Affairs Department
Email: cynthia.lim@duke-nus.edu.sg

ABOUT THE SPEAKER

Dr. Tony Lam is the John Kitson McIvor Endowed Chair in Diabetes Research, Canada Research Chair in Obesity, and Full Professor of Physiology and Medicine at the University of Toronto. He is a Senior Scientist at Toronto General Hospital Research Institute and the Associate Director of Research at the Banting and Best Diabetes Centre. Dr. Lam earned his PhD in Physiology at the University of Toronto and completed his post-doctoral training at the Albert Einstein College of Medicine in NYC.



** Please be informed that photography and videography may be taken during the event for publicity purposes.*