



Fat and Muscle-derived Hormones in Metabolic Control

by

Dr G. William Wong

Associate Professor

*Center for Metabolism and Obesity Research, Department of Physiology
School of Medicine*

The Johns Hopkins University, United States

Date : 31 October 2017 (Tuesday)

Time : 3:30 p.m. – 4:30 p.m.

**Venue : Seminar Room 7, LG/F, Laboratory Block, 21 Sassoon Road,
Pokfulam, Hong Kong**

Abstract:

My laboratory aims to understand how organs and tissues in the body coordinate the complex metabolic networks and circuitry to maintain proper energy balance, failure of which results in metabolic disorders such as obesity and type 2 diabetes. Specifically, we focus on elucidating the role of a novel family of adipose and muscle derived hormones (CTRPs) in controlling sugar and fat metabolism. The function of two such hormones will be presented in this seminar to illustrate complex tissue crosstalk underlying the integrated control of energy metabolism.

Bio-sketch:

Dr Will Wong is currently an Associate Professor in the Department of Physiology and Center for Metabolism and Obesity Research at The Johns Hopkins University School of Medicine. Dr Wong received his Ph.D. degree from Harvard University, working on innate immunity, followed by post-doctoral training at the Whitehead Institute at M.I.T. In 2008, he joined the faculty at Johns Hopkins University. His research efforts in the past decade focuses on understanding hormonal control of tissue crosstalk and energy metabolism, specifically the physiological functions and mechanisms of action of a novel family of secreted hormones (termed CTRP1-15) he originally described in 2004. Dr Wong has continued to lead the study of CTRP hormones using a combination of molecular, cellular, and genetic (transgenic and knockout) approaches to address their roles in tissue crosstalk and energy homeostasis. The foundation he laid, and the new angle he provided to understand hormonal control of metabolism, have catalyzed multiple independent lines of inquiry into CTRP biology.