

## The 8<sup>th</sup> Leading Seminar

# Adipokines - from discovery to therapeutic development

## Lecturer: Dr. Yu Wang

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## Abstract

Over a quarter of the world's population is overweight and obese, which directly cause the high prevalence of chronic diseases such as type 2 diabetes, cardiovascular dysfunction and life style-related cancers. Abnormalities in adipose tissue and the aberrant production of adipokines from adipocytes are the major culprits for obesity-related medical complications. Our laboratory has applied a highly integrated approach to identify novel adipokines and investigate their roles in various pathophysiological conditions. Here, the beneficial and harmful functions of two adipokines [adiponectin and lipocalin-2] in the development of obesity-related cardiometabolic syndrome will be presented and discussed.

## Time Schedule:

15:00 - 16:30 Lecture at Lecture Hall

16:45 - 17:45 Discussion at Conference Room

Organizer: Mohamed Elfeky. Laboratory of Biochemistry, D2. E-Mail: elfeky5@vetmed.hokudai.ac.jp

## <u>Biography</u>

## Name: Yu Wang

Associate Professor Department of Pharmacology and Pharmacy LKS Faculty of Medicine The University of Hong Kong (HKU)



### ACADEMIC DEGREES:

MBChB	1992	Anhui Medical University (Medicine)
M.Sc.	1999	University of Auckland (Biochemistry and Proteomics)
Ph.D.	2003	University of Auckland (Biomedical Sciences and Proteomics)

### **PROFESSIONAL APPOINTMENTS:**

2013 -	As <mark>sociated Professor, Department of Pharmacolog</mark> y and Pharmacy, HKU
2008 - 2013	Assistant Professor, Department of Pharmacology and Pharmacy and Institute of
	Molecular Technology for Drug Discovery and Synthesis, HKU
20 <mark>04 - 200</mark> 8	Research Assistant Professor, Genome Research Center & Department of
	Biochemistry, HKU
2003 <mark>– 2004</mark>	Research Fellow, Maurice Wilkins Centre for Molecular Biodiscovery, University
	of Auckland, New Zealand

#### **RESEARCH INTERESTS:**

My research is focusing on obesity- and ageing-related cardiometabolic diseases. During the past 10 years, a discovery pipeline using "Omics" approaches has been successfully established in our laboratory for identification and characterization of a number of adipokines, including adiponectin and lipocalin-2. Using genetically modified animal models and samples from clinical patients, the therapeutic values of these adipokines have been thoroughly studied and validated, including the hepatoprotective functions of adiponectin and the anti-hypertensive potentials of lipocalin-2 inhibitors. In addition, we have established various research platforms for SIRT1, a longevity regulator, and elucidated its therapeutic potential in ageing-related cardiovascular diseases. For more details, please visit http://www.pharma.hku.hk/pharma/staffweb/DrYuWang/index.php