

## The Singapore Bioimaging Consortium (SBIC) presents a seminar

on

## "Cracking the O-GlcNAc Code in Metabolism"

Speaker: Dr Yang Xiaoyong

**Comparative Medicine and Cellular & Molecular Physiology** 

**Yale University School of Medicine** 

Date: Thursday, 8 November 2012

Time : 11.00am - 12.00pm Venue : SBIC Seminar Room

11 Biopolis Way

Level 2, Helios Building Singapore 138667

(Please use Level 1 entrance)

## **Abstract**

O-GlcNAc is a highly dynamic and reversible protein modification that senses diverse nutritional and hormonal cues and regulates fundamental cellular processes such as signal transduction, transcription, and proteasomal degradation. This modification, consisting of a single sugar residue covalently attached to serine or threonine residues within nuclear and cytoplasmic proteins, is catalyzed by O-GlcNAc transferase (OGT), while the removal of this moiety is mediated by O-GlcNAcase (OGA). Aberrant O-GlcNAc modification has been implicated in a plethora of human diseases. I will present our recent discoveries on the critical roles of O-GlcNAc in transcriptional and post-translational regulation of glucose metabolism and its relevance to diabetes, cancer, and circadian rhythm.

## **About the Speaker**

Dr Yang Xiaoyong is an Assistant Professor of Comparative Medicine and of Cellular & Molecular Physiology at Yale University School of Medicine. He received B.S. from Nankai University, M.S. from Peking University, and Ph.D. from University of Alabama at Birmingham with Dr Jeffrey Kudlow. He completed his postdoctoral training with Dr. Ronald Evans at The Salk Institute. Dr Yang has published in Cell, Nature, Genes & Development, Cell Metabolism, Proceedings of the National Academy of Science, etc., and been invited to speak at national and international conferences and academic institutions. Research in his laboratory is supported by National Institutes of Health, American Diabetes Association Junior Faculty Award, and Ellison Medical Foundation New Scholar Award.