

Title	From WW domain to the molecular and physiological understanding of the Golabi-Ito-Hall syndrome and Hippo tumor suppressor pathway
Speaker	Marius Sudol, PhD <i>Visiting Associate Professor Mechanobiology Institute, NUS Adjunct Associate Professor Mt. Sinai School of Medicine, Department of Medicine, New York, USA</i>
Date	Wednesday, 11 September 2013
Time	12.00 nn - 1.00 pm
Venue	MD9 (Level 1, Workshop Room)



Abstract

WW domain is a small protein module that mediates well-defined protein-protein interactions. Missense mutations that map within the domain or its ligand were implicated in several human diseases, including Golabi-Ito-Hall (GIH) and Liddle syndromes. In addition, a newly described Hippo tumor suppressor pathway uses many WW domain-containing proteins to regulate the balance between proliferation and apoptosis. My seminar will review recent data on the molecular mechanism of the Golabi-Ito-Hall syndrome and on the Hippo tumor suppressor pathway. Both scenarios will be discussed from the molecular perspective of the WW domain and the physiological perspectives of animal models that have been generated for the Hippo pathway and GIH syndrome. The ultimate goal of the discussed research is to predict and design molecular tools for interventions in WW domain-mediated pathways to correct pathological states.

Dr Marius Sudol is a Visiting Associate Professor at the Mechanobiology Institute at the NUS. He has been a Staff Scientist at the Weis Center for Research in Pennsylvania and is an Adjunct Faculty at the Department of Medicine of Mt. Sinai School of Medicine in New York City, USA. Dr. Sudol was instrumental in the delineation and characterization of one of the smallest protein-protein interaction modules, the WW domain. His work also implicated the WW domain in signaling pathways underlying several human diseases, including Liddle syndrome, Golabi-Ito-Hall (GIH) syndrome and cancer. He earned a Ph.D. at The Rockefeller University in New York in 1983 and stayed at his Alma Mater as a postdoctoral fellow and faculty member in the Hanafusa Laboratory until his move to Mt. Sinai in 1995. Dr. Sudol has published over 130 research articles. His current work is focused on the details of signaling mechanisms that use WW domain complexes and underlie human diseases. In particular, his laboratory studies the Hippo cancer pathway, which is regulated by a network of multiple WW domain complexes. His lab is also interested in the understanding of the GIH syndrome of intellectual disability at the molecular and physiological level. The Sudol lab has generated animal models of the Hippo network and GIH syndrome to study them at the physiological level. More detailed biography and other links are at: en.wikipedia.org/wiki/Marius_Sudol

Convener: Dr Tran Thai

All Are Welcome