IMCB Invited Speaker

Speaker : **Prof. Walter Wahli**
Professor, Center for Integrative Genomics,
University of Lausanne, Switzerland

Date : 6 August 2013 (Tuesday)

Time : 11:00AM - 12:00PM

Venue : IMCB Seminar Room 3-46, Level 3, Proteos, Biopolis

Host : Dr. Philipp Kaldis

Seminar :

PPARs : lipid sensors at the crossroads of metabolism, tissue repair and cancer

Peroxisome proliferator-activated receptors (PPARs) are ligand-inducible transcriptionfactors of the nuclear hormone receptor family. Distinct genes produce three PPAR isotypes, PPARα (NR1C1), PPARβ/δ (NR1C2), and PPARγ (NR1C3). PPARs are activated by a large spectrum of endogenous fatty acids and eicosanoids involved in metabolic and inflammatory pathways. While PPARs are best known as regulators of energy homeostasis, evidence also has accumulated recently for their involvement in basic cellular functions. We will discuss regulatory functions associated with metabolic pathways based on results from studies of PPAR α in the liver, in the context of the circadian rhythm and ligand-producing enzyme activity. We will also review our work on the roles of PPARβ/δ in the skin, especially during wound healing and cancer. Not surprisingly, all of these processes require a strict control of energy availability, in which PPARs as lipid sensors are main regulators.

About the Speaker :

Walter Wahli is Professor at the Center for Integrative Genomics of the University of Lausanne and Visiting Professor at the Lee Kong Chian School of Medicine, NTU, Singapore. Walter Wahli studied biology at the University ofBern. He worked as a post-doc researcher at the Carnegie Institution of Washington in Baltimore (1977-1978), and was visiting associate at NIH in Bethesda (1978-1980). He became Professor and Director of the Institute of Animal biology of the University of Lausanne in 1980 and was Research Vice-rector from 1999 to 2003. He founded the Center for Integrative Genomics, which he directed from 2002 to 2005. Walter Wahli has been a member of the Swiss National Science Foundation's research council from 1987 to 2006, andpresided over the Biology and Medicine Division from 2004 to 2006. His research concentrates on the functions of the nuclear receptors PPARs in the genetic control of energy metabolism and tissue repair.

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