

Lee Wee Nam Public Lecture

Prof. Peter Schiller

Tuesday, 24 Sep 2013, 4pm , Classroom 2
Hosted by Professor Peter Preiser

ABSTRACT

Novel Peptide Therapies Targeting the Inner Mitochondrial Membrane



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The lecture will present the discovery, preclinical development, and clinical development of a new class of tetrapeptides (SS-peptides) that selectively target the inner mitochondrial membrane and protect mitochondrial function. SS-peptides promote mitochondrial respiration and ATP synthesis, reduce the generation of reactive oxygen species (ROS), and inhibit mitochondrial swelling. Some of them can also directly scavenge mitochondrial ROS. Preclinical studies showed that they have remarkable efficacy in a number of animal models of diseases associated with mitochondrial dysfunction. SS-peptides have excellent drug-like properties and a phase 2 clinical trial with a lead compound, Bendavia™, for the indication of acute myocardial infarction (ischemia-reperfusion injury) is underway.

SPEAKER'S BIOGRAPHY

Prof. Peter W. Schiller holds a PhD in medicinal chemistry and molecular pharmacology from the ETH-Zurich in Switzerland. He is a Full IRCM Research Professor and Director of the Chemical Biology and Peptide Research laboratory. He is also full professor-researcher in the Department of Pharmacology at the Université de Montréal and adjunct professor at the Center for Drug Discovery, Bouvé College of Health Sciences, Northeastern University, Boston. Prof. Schiller holds the Canadian Pacific Chair on pain and is pursuing interdisciplinary research in the areas of the medicinal chemistry and molecular pharmacology of peptide hormones and neurotransmitters. Major peptides studied in recent years include opioid and antioxidant peptides