



Institute of
Molecular and
Cell Biology

SEMINAR ANNOUNCEMENT

We would like to invite you to attend this seminar hosted by Prof. Wanjin Hong:

Date: 24 November 2014, Monday

Time: 11:00AM – 12:00PM

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

Speaker: Prof. Paul Gleeson, Professor and Chairman, Department of Biochemistry and Molecular Biology, University of Melbourne, Australia

Title: Intracellular membrane trafficking: Relevance to neurological disease.

The last decade has witnessed major advances in understanding the relevance of endosomes in the sorting of membrane cargo and recycling of proteins to the plasma membrane. Endosomal recycling involve intracellular trafficking pathways that intersect both the biosynthetic and degradative pathways. These pathways are critical for normal development and function, and defects in these pathways lead to disease. The Gleeson lab is defining the intracellular trafficking and recycling of membrane components relevant for the development Alzheimer's disease. β -secretase (BACE1) cleavage of amyloid precursor protein (APP) represents the initial, rate-limiting, step in the formation of the amyloidogenic A β peptide, and is a prime target for therapeutic intervention. Defining the intracellular trafficking pathways of BACE1 is important to understand the cell biology of A β production and to maximise opportunities for targeted inhibitors to BACE1.

Biography:

Professor Paul Gleeson is Head of the Department of Biochemistry and Molecular Biology at the University of Melbourne, located at Bio21 Institute. His research interests include the molecular mechanisms of intracellular membrane transport and the molecular basis of organ-specific autoimmune diseases. Paul Gleeson obtained his PhD in 1980 from the University of Melbourne and did post-doctoral research in the biosynthesis and function of glycoproteins at the Hospital for Sick Children, Toronto, National Institute for Medical research, Mill Hill London and Department of Biochemistry, La Trobe University, Melbourne. He established an independent laboratory at Monash University in 1986 where he defined the targeting signals of Golgi glycosyltransferases, identified golgins of the trans-Golgi network and developed one of the best defined mouse model of organ-specific autoimmune disease, namely autoimmune gastritis. His current research applies a range of cell biological approaches to discover the molecular machines that regulate protein sorting in the secretory and endocytic pathways in a variety of physiological processes including primary cells and whole organisms. In 2001 he moved to the University of Melbourne and has been Head of the Department since 2006. He has a number of international research collaborations and has been a visiting scientist at the EMBL, Heidelberg, and the Institut Curie, Paris.

ALL ARE WELCOME (No registration required)