

SEMINAR ANNOUNCEMENT

We would like to invite you to attend this seminar hosted by Dr. Edward Manser:

Date: 14 August 2014, Thursday Time: 11:00AM – 12:00PM

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

Speaker: Dr. Michael Ricos, Epilepsy Research Group, Sansom Institute for Health Sciences, University

of South Australia, Adelaide

Title: Epilepsy: New Genes and Old Pathways to a complex disorder

Epilepsy is the most common serious neurological disorder affecting 2% of the world population. More than 30 different epilepsy syndromes have been defined based on various clinical criteria. Around 25% of cases are symptomatic due to brain insultsie, a stroke, tumour or brain injury but 70% of all Epilepsies have a direct genetic cause making them ideal for molecular genetic analysis. Over the past 15 years our group has collected more than 10,000 epilepsy cases from around the world with linked clinical information into a bio-bank. We have been analyzing this cohort with evolving genomic technologies and have identified a number of genes as the cause of these epilepsies. We have found mutations in a number of ion channels such as the Nicotinic Acetylcholine Receptors (e.g. CHRNA4), and Sodium Gated Potassium Channels (e.g. KCNT1), as well as genes involved in the secretory pathways (e.g. PRRT2. GOSR2, SCARB2). Interestingly we have also identified structural proteins (e.g. PCDH19) and for the first time signal transduction molecules (e.g. DEPDC5 in mTOR signalling).

Biography:

Dr Michael Ricos trained as a bacterial and fly molecular geneticist obtaining his PhD in Molecular Embryology in the laboratory of renowned Developmental Neurobiologist Professor Bill Chia at IMCB in Singapore. After a brief stint at the National Cancer Centre at Singapore General Hospital he ran a Neuropeptide Lab in the Department of Anaesthesia at the National University Hospital of Singapore where he developed his interest in drug development and biotech start-ups. He has held executive posts in a number of Biotechnology ventures in South East Asia including as a CSO for the 'Synamatix' bioinformatics company and its subsidiary the 'Malaysian Genomics Research Centre' and business development manager for the M+W Group specialising in Life Sciences and High Tech Sectors. He managed a sabbatical in the humanitarian sector in Indonesia during the 2004 Great Sumatran Earthquake and Tsunami. After 20 years abroad he recently returned to his hometown of Adelaide to take up a Senior Research post in the Epilepsy Research Program headed by Associate Professor Leanne Dibbens at the Sansom Institute for Health Research at the University of South Australia where he employs the latest in genomics technologies and functional genetics to uncover the causes of Epilepsy with the hope of unlocking potential new treatments.