The Singapore Bioimaging Consortium (SBIC)
presents a seminar

on

"Renal Albumin Handling : Seeing is Believing"

Speaker: **Dr Philip Poronnik**
Head of Pharmaceutical Sciences
RMIT University
Date : **Tuesday, 22 May 2012**
Time : **2.00pm – 3.00pm**
Venue : **SBIC Seminar Room**
11 Biopolis Way
Level 2, Helios Building
Singapore 138667
(Please use Level 1 entrance)

Abstract

The kidney filters small solutes from the blood but retains albumin in the circulation. Increased albumin in the urine is associated with cardiovascular mortality and proteinuria is the strongest predictor of chronic kidney disease. Under normal conditions, small amounts of albumin cross the glomerular barrier and enter the tubules where it is reabsorbed by a receptor-mediated process. In disease, this barrier breaks down and the tubular component becomes saturated leading to proteinuria. Recent reports have challenged this model and suggest a higher glomerular permeability to albumin and a more robust tubular uptake mechanism. This talk will discuss these controversial studies and present data using confocal and 2-photon microscopy and novel albumin probes to visualise albumin handling in the normal and diabetic kidney.

About the Speaker

Philip Poronnik is a graduate in Physiology from Sydney University and a molecular cellular physiologist. After his PhD he worked as a post-doctoral fellow and managed the Renal Research Laboratory at the Royal North Shore Hospital. In 2003, he took up a position as Senior Lecturer in the School of Biomedical Sciences at the University of Queensland where he established his own research laboratory and was promoted to Professor in 2006. In 2009, he took up his current position as Head of Pharmaceutical Sciences at RMIT University where he is also a core member of the Health Innovations Research Institute. His main research interests are in renal tubular function and changes in diabetic nephropathy and the regulation of cell transport and signalling by ubiquitin ligases and scaffold proteins. His research is funded by the NHMRC and ARC and he has published over 90 papers in these areas.

--- Admission is free and all are welcome ---