

## SEMINAR ANNOUNCEMENT

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

Date: 30 June 2014, Monday

Time: 11:00AM – 12:00PM

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

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**Speaker:** A/Prof. Kieran Harvey, Group Leader in Cell Growth and Proliferation Laboratory, Peter MacCallum Cancer Centre, Melbourne, Australia

**Title:** Control of Organ Size by the Hippo Pathway

The Hippo tumour suppressor pathway is a complex signalling network that controls developmental tissue growth and is frequently deregulated in different human cancers. Discovered in 2002, the Hippo pathway is now the subject of intense investigation, but despite this the mechanism of signal transduction within this pathway is incompletely understood. We have used large-scale genetic and proteomic screens to address these knowledge deficiencies. We identified Tao-1 as a kinase that regulates activity of the Hippo kinase, and Hipk as a kinase that promotes Yorkie activity. In further studies we found that the human homologues of both Tao-1 (TAOK1) and Hipk (HIPK2) are functionally conserved in mammalian cells. More recently, we identified a new branch of the Hippo pathway, from transmembrane receptor to the nucleus, which controls organ size downstream of the Dachshund cadherin, and also discovered GTPase regulatory proteins that control Hippo pathway activity. These studies have provided important insights into how the Hippo pathway controls tissue growth and cell transformation.

### Biography:

A/Prof. Kieran Harvey studies organ size control during development using *Drosophila*, and how signalling pathways that control organ size are deregulated in human cancer. In particular his group focuses on the newly described Hippo tumour suppressor pathway, which he helped to discover in 2002. A/Prof. Harvey performed Doctoral studies with Prof. Sharad Kumar (Hanson Institute, Australia), and postdoctoral studies with Prof. Iswar Hariharan at Massachusetts General Hospital and University of California, Berkeley (USA). In 2006, A/Prof. Harvey established his independent laboratory at the Peter MacCallum Cancer Centre (Australia). He is a fellow of the Sir Peter MacCallum Department of Oncology at the University of Melbourne, and a Sylvia and Charles Viertel Senior Medical Research Fellow.

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**ALL ARE WELCOME** (No registration required)