SIgN Immunology Seminar

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Regulation of inflammatory signal transduction; novel player and mechanisms

Host
Dr Wong Siew Cheng
Singapore Immunology Network, A*Star

Date
Monday
10 November
2014

Time
2pm – 3pm

Venue
SIgN Seminar Room
Immunos Building
Level 4
Biopolis

Inflammation is an evolutionarily ancient process that is central for the fight of the immune system against pathogens and for promoting wound healing. Dysregulation of inflammatory responses in men underpins the development of most common chronic diseases. Thus, a better understanding of the molecular control of inflammation contributes not only to advancement of academic knowledge but also holds the promise to identify novel targets for future therapeutic interventions in chronic inflammatory disease.

A variety of approaches have been used in the past to identify intracellular mediators of inflammatory signals and to characterise the molecular regulatory mechanisms that control this process. Our group have developed and executed mammalian cell-based, holistic screens to complement efforts and approaches of others and have uncovered a large number of novel regulators of inflammation. In addition, we have undertaken studies to characterise the molecular mechanisms of action for some of the novel genes identified in these screens, including the tribbles family of pseudokinases.

This talk will discuss the main findings and lessons from our holistic screens as well as summarising how scientific understanding of tribbles biology has developed in the last decade, in the control of development, homeostasis and pathology of human disease.