



Garvan Institute of Medical Research

Leaders in Science



A/Professor Cecile King

Immunology Division, The Garvan Institute of Medical Research

“The immunobiology of Interleukin-21 in immunity and autoimmunity”

Monday 21st October, 2013 | 12PM, NAB AUDITORIUM

Host: A/Professor Robert Brink

Cecile King's research focus over the past 15 years has been in the field of autoimmune disease and T cell immunobiology. CK completed her PhD in Immunology at the Telethon Institute for Child Health/University of Western Australia in 1999. At completion of the PhD, CK was appointed as a Research Associate at the Department of Immunology, Scripps Research Institute in the Laboratory of Nora Sarvetnick. CK returned to Australia in 2005 and has since established her own independent research group at the Garvan Institute. Cecile King's lab is interested mucosal autoimmunity.

In type 1 diabetes (T1D), the insulin-producing beta cells of the pancreas are destroyed by self-tissue- destructive T cells. These cells express markers that help us to determine, for example, their dependence upon growth factors and where they have been in the body. We are particularly interested in the relationship between the cells that cause autoimmune diseases that develop at the mucosal interface between our bodies and the environment. Broad-based suppression is commonly used to treat autoimmune diseases and transplant recipients but it has an obvious drawback since we need a functioning immune system in order to thrive. The overall goal of our work is to analyse pathways that can be modulated to improve immunity in individuals during vaccination, and limit the immune responses that cause damage to both endogenous tissues and transplanted tissues in autoimmune diseases.