



Garvan Institute of Medical Research

Leaders in Science & Society



Prof Jamie Rossjohn

FAA FAHMS FLSW FMedSci

Head of the Infection and Immunity Program
Biomedicine Discovery Institute

“Immune sensing of Vitamin B metabolites”

Monday 13 August 2018 12PM, AUDITORIUM

Host: Prof Stuart Tangye

Professor Jamie Rossjohn’s research is centered on an understanding immunity. He is currently an ARC Australian Laureate Fellow (2017-2021) and previously a NHMRC Australia Fellow (2011-2016) and ARC Federation Fellow (2007-11). He is the Head of the Infection and Immunity Program of the Biomedicine Discovery Institute.

Prof. Rossjohn is known for his contributions to the understanding the molecular basis underpinning immunity. He has used structural biology to explain pre-T- cell receptor (TCR) self-association in T-cell development, and how the TCR specifically recognises polymorphic Human Leukocyte Antigen (HLA) molecules in the context of viral immunity and aberrant T- cell reactivity.

He has unearthed structural mechanisms of HLA polymorphism impacting on drug and food hypersensitivities, as well as Natural Killer cell receptor recognition. He has pioneered our molecular understanding of lipid-based immunity by T cells, revealing that it can differ fundamentally from peptide-mediated adaptive immunity.

Recently he has provided a structural basis of how vitamin B metabolites can be presented and recognised by the immune system, revealing a new class of antigen. Collectively, he has published > 360 papers and mentored numerous researchers towards obtaining higher degrees and nationally competitive fellowships.

Photographer: John O’Flaherty