



Infectious
Diseases Labs

A*STAR IDL



Prof Adam Cunningham

Professor of Functional Immunity,
University of Birmingham
Co-Director, BactiVac Network



Tuesday 18th March 2025

3:00 PM to 4:00 PM (SGT)

Venue: Codon A & B, Matrix Level 5

How antibody responses bind and function against Gram-negative bacteria

In this talk I will share our research examining B cells and antibody responses to Gram-negative bacteria, using *Salmonella* and its constituent antigens as a clinically relevant model of vaccination and infection. I will discuss our work on what makes a protective epitope and antibody response, how individual bacterial antigens interact to limit antibody access and the immunological mechanisms underpinning how antibodies function in vivo and in vitro.

Professor Adam Cunningham gained his PhD from University of Southampton for studies on antibody responses to *Chlamydia pneumoniae*. After a short-term position in The Gambia, funded by the WHO, he had his first post-doctoral position in Birmingham studying the cell wall of *Mycobacterium tuberculosis*. From here, he started work in Prof. Ian MacLennan's group examining how antibody responses develop and are regulated. During this time, he incorporated the use of *Salmonella* and its component antigens into this work, leading to an independent position as a RCUK Roberts Academic Fellow, studying how immune responses develop to pathogens and vaccines. He was made Professor of Functional Immunity in August 2011 and his research is focused on how adaptive immunity to pathogens and their component antigens are induced, maintained and function. These studies help us understand why some responses are protective, whilst others are not or can even be harmful. Adam has been Co-Director of the BactiVac Network since it was established in August 2017.

Hosted by: Prof Stephen Baker

Seminar is open to all. No registration required.

Questions? Contact us at seminars@idlabs.a-star.edu.sg

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