

**School of Biomedical Sciences
Department of Microbiology and Immunology
PhD Completion Seminar**

**“Antigenic evolution of the influenza B virus
neuraminidase over the last 80 years”**



Thu Do

Kent/Viral Vax Labs

Influenza B viruses (IBV) cause significant health burden annually. Given the limitations faced by current HA-based influenza vaccines, the inclusion of the neuraminidase (NA) could provide broader protection against different strains. We applied serological and bioinformatic analysis to demonstrate a discordant antigenic evolution between IBV HA and NA. We identify mutations underpinning antigenic drift of IBV NA over the last 80 years and highly conserved regions. This study suggests that addition of NA in influenza vaccines will require NA antigenic surveillance and potential vaccine updates. Alternatively, the highly conserved epitopes identified here could be potentially targeted by universal NA antigens.

Wednesday 20th August 2025 at 1:00pm

*In-person attendance: Auditorium, Doherty Institute
or join us via Zoom Webinar: 869 6223 1391 Password: 230162*

Followed by a Q&A at the end of presentation. Celebrations will be in the Tearoom, Level 5 at 4:30pm



twitter.com/thedohertyinst



facebook.com/DohertyInstitute

doherty.edu.au