

Seminar Series - 2017

When: Monday 19th JUNE @ 12:00 pm

Where: Rand Theatre, Level 8, Medical Building



"Designing vaccines and antimicrobial peptides to control bacterial infections"

A/Prof Neil O'Brien-Simpson

Melbourne Dental School, Oral Health CRC

The University of Melbourne

Associate Professor Neil O'Brien-Simpson is currently a Principal Research Fellow in the Melbourne Dental School (MDS) and Bio21 Institute at the University of Melbourne and a project manager for the Oral Health Cooperative Research Centre (CRC). After completing his undergraduate studies at Edinburgh Napier University and working for I.C.I Chemicals and Polymers, he came to Australia in 1994 as one of the first PhD scholars of the CRC for Vaccine Technology (Department of Microbiology and Immunology, University of Melbourne) to work on developing peptide-polymer based vaccines. He joined MDS in 1997 to develop a vaccine and a point-of-care diagnostic for the oral disease chronic periodontitis, which are undergoing clinical trials and been awarded the IADR-Australian and New Zealand (ANZ) Oral Biology Award, The International Hatton Award and the Colgate Prize for Dental Research.

He leads a vibrant research team investigating the (i) development of novel and generic strategies for the assembly of peptide/sub-unit-based vaccines and understanding their ability to induce immune responses, (ii) the mucosal and systemic immune response to mixed bacterial infection and outer membrane vesicles, (iii) design and development of antimicrobial peptides and materials, (iv) nanoparticle based vaccines for inducing CTL responses. He currently supervises 5 PhD students and has graduated 11 PhD scholars. He is currently the president of the Peptide Users Group.