

Beyond Insulin:

Innovative research in T1D prevention and cure



Speaker's name: Dr Kriti Joshi, Diamantina Institute University of Queensland, Queensland Children's Hospital

Seminar date: Thursday, 24th November 2022, 1-2pm AEST

Seminar title: Recreating islet autoimmunity in vitro using stem cell technology



About the speaker: Dr Kriti Joshi is a Pediatric Endocrinologist and works at the Queensland Childrens Hospital. Kriti completed her initial medical and pediatrics training in India and then went on to complete an endocrine fellowship at RCH Melbourne. Kriti recently completed her PhD on "Investigating the immunopathogenesis of T1DM in-vitro using stem cell technology" working with Prof Ed Stanley and Prof Fergus Cameron at MCRI Melbourne, for which she received the Australasian Paediatric Endocrine Group young investigator award.

Zoom connection details: <https://us02web.zoom.us/j/5056623028>

Brief outline of seminar content: Our understanding of human T1D remains imperfect as we have limited ways of studying disease in humans. Pluripotent stem cells offer the possibility of recreating the disease process in-vitro and also for designing potential treatment strategies. We derived iPSCs from an individuals with T1D and investigated the generation of iPSC derived antigen presenting cells from these iPSCs to model immune interactions in T1D. We were able to demonstrate that these antigen presenting cells had mature functionality and were able to process and present islet lysate and purified synthetic C-peptide to autologous islet infiltrating CD4+ T-cells

For more information about the seminar series, please contact Michelle So mso@svi.edu.au