## **Beyond Insulin:** Innovative research in T1D prevention and cure



Speaker's name: Dr Ki Wook Kim

Seminar date: Friday, 28th April 2023, 1-2pm AEST

Seminar title: Viral aetiology of type 1 diabetes: Strong rationale for antiviral vaccines

About the speaker: Dr Ki Wook Kim is a JDRF Career Development Fellow in within the Faculty of

Medicine and Health at the University of New South Wales. Dr Kim completed his undergraduate degree, Honours and PhD in Molecular Biology and Genetics at the University of Sydney, for which he investigated the roles and interactions of various microRNAs and RNA silencing component proteins in the model plant, *Arabidopsis thaliana*. Since 2015, Dr Kim has transitioned to medical research, focusing on the viral aetiology of type 1 diabetes and human viromics (characterising all viruses infecting humans). He leads the **Viruses and Diabetes** and the **Human Viromics** research groups within the UNSW-affiliated Virology Research Laboratory (Prince of Wales Hospital) and co-leads the Virology theme within the Environmental Determinants of Islet Autoimmunity (ENDIA) Study, following 1,473 mother-infant pairs with a

first-degree relative with type 1 diabetes across Australia (https://endia.org.au).

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

**Brief outline of seminar content:** Environmental Determinants of Islet Autoimmunity (ENDIA) is a nationwide prospective cohort study of 1,473 children with a first-degree relative with T1D approx. Within ENDIA, Dr Kim's team are investigating the potential contribution of viral infections by characterising the longitudinal gut, respiratory and blood virome dynamics during pregnancy and early childhood, preceding the development of islet autoimmunity in the Australian ENDIA study. This is a nested case-control study including the first 54 cases with persistent islet autoimmunity (13 progressed to T1D) and 161 matched controls (age and sex) within the ENDIA study, involving comprehensive virome analysis of longitudinal stool (n= 1,349), throat swab (n=1455) and plasma samples (n=520) collected from mothers during pregnancy and children preceding the development of islet autoimmunity.

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

C/- St Vincent's Institute of Medical Research 9 Princes Street, Fitzroy, Vic 3065 Australia