

# Beyond Insulin:

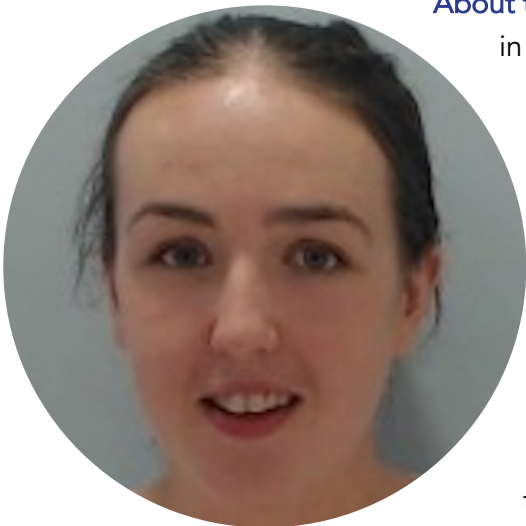
Innovative research in T1D prevention and cure



**Speaker's name:** Dr Jacqui Schiesser, Immune Development Laboratory, Murdoch Children's Research Institute (MCRI)

**Seminar date:** Friday, 28<sup>th</sup> October 2022, 1-2pm AEST

**Seminar title:** Benchmarking cells for beta cell replacement therapies



**About the speaker:** Dr. Jacqueline Schiesser completed her PhD in 2012 at Monash University studying human embryonic stem cell differentiation and pancreatic development. Following her PhD, she undertook postdoctoral studies in the laboratory of James Wells at Cincinnati Childrens Hospital Medical Center where she studied regional identity in intestinal stem cells using an organoid model system.

In 2017, she returned to Australia and joined the Immune Development Laboratory at the Murdoch Children's Research Institute where she is utilizing transcriptomics to identify novel cell-surface markers of specific pancreatic endocrine cell types.

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

**Brief outline of seminar content:** T1D is an autoimmune disease that leads to the destruction of the insulin-producing beta cells, resulting in a lack of blood glucose control. The current gold standard treatment for T1D is islet transplantation, with islets sourced from deceased organ donors. Although often efficacious, this process is confounded by the lack of time-efficient techniques to characterise that quality and composition of islets prior to transplantation. We have developed a series of antibody reagents that can be combined in a single simple assay to identify and quantify the individual cell populations present in islet preparations destined for transplantation, producing a scorecard that will serve as a benchmark for assessing islet composition and quality, and provide a facile means to correlate transplant outcomes with the characteristics of transplanted material.

For more information about the seminar series, please contact Michelle So [mso@svi.edu.au](mailto:mso@svi.edu.au)