Colloquium Series

School of Mathematical and Physical Sciences

15 May 2023

Date: Monday, 15 May 2023

Time: 2:00pm - 3:00pm

Speaker: Distinguished Professor Kerrie Mengersen (Queensland University of

Technology)

Venue: Hybrid – In-person at Macquarie University and Zoom

Title: Dealing with Sensitive Data

Abstract: Many datasets of interest to statisticians are subject to privacy conditions. This can constrain access, analysis, sharing and release of results. In this presentation, we will consider two ways in which this issue might be addressed. The first is through federated learning, in which the analysis is undertaken in such a way that the data remain in situ and private. The second is synthetic generation of the data, such that the simulated data retains salient characteristics but retains the required privacy. The exposition of these ideas will focus on a practical issue of creating an Australian Cancer Atlas.

This research is in collaboration with QUT colleagues Conor Hassan and Dr Robert Salomone.