



# SoMS, BaBS, GSBmE Seminar Series

**Who:** Associate Professor Joseph Powell, Lab Head - Single Cell and Computational Genomics; Head of Garvan-Weizmann Centre for Cellular Genomics

**Research focus:** Use of large-scale genomic data to investigate how DNA sequence variants contribute to human disease

**When:** Wednesday 21<sup>st</sup> November 2018

**Time:** 4pm, followed by drinks and nibbles at 5pm

**Where:** Level 6 Kirby Seminar Room, Wallace Wurth Building

## ‘Using single cell sequencing to diagnose and tailor personalized treatment for interstitial lung disease.’

A/Prof Joseph Powell is the Head of the Garvan-Weizmann Centre for Cellular Genomics, a Principal Research Fellow at Garvan Institute for Medical Research, and Principal Research Fellow in the Faculty of Medicine, University of New South Wales. He currently holds a NHMRC Career Development Fellow, with the highest ranked application in his round; awarded an NHMRC Research Excellence Award (2015), and the prestigious 2016 Commonwealth Health Minister’s Medal for Excellence in Medical Research.



His research is focused on understanding the functional mechanisms by which genetic variants contribute to disease susceptibility at a cellular level, and ultimately achieve therapeutic and diagnostic outcomes. A/Prof Powell’s research program makes use of stem cells as a way, to model the genetic mechanisms underlying human disease, and functionally validate the findings.

A/Prof Powell obtained his Ph.D. from the University of Edinburgh, in 2010. Following his Ph.D. he accepted a position in Prof Peter Visscher’s (FRS, FAA) group and in January 2014, promoted to Team Leader in Centre for Neurogenetics and Statistical Genomics, at the University of Queensland (UQ). In 2015, he was recruited as an independent group leader by the Institute for Molecular Bioscience, where he pioneered single cell sequencing; building a team consisting of a comprehensive single cell sequencing lab, bioinformatics support for multiple single cell platforms, and new software for analysis of large-scale single cell RNA data cohorts. He is a founding director of SeqBio, a company developing new diagnostic technology for lung diseases using liquid biopsies and single cell sequencing