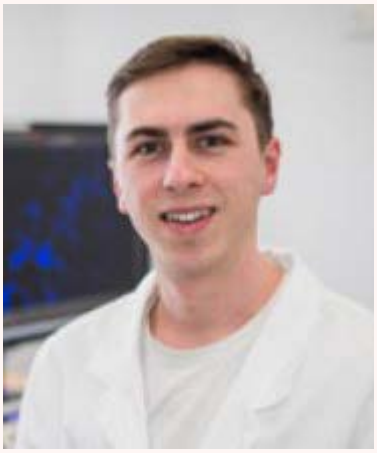
Science in 3D

The mammary gland in 3D: Revealing tissue structure and stromal interactions by 3D imaging



Speaker:
Caleb Dawson
WEHI, Australia

Date:
17th July 2019, Wed

Time:
10:30am to 11:30am

Venue:
Duke-NUS, Room 7C
Level 7, 8 College Rd, 169857

Host:
Asst. Prof. Naiyang FU
CSCB, Duke-NUS

Registration
All are welcome!

Caleb Dawson is from Walter and Eliza Hall Institute (WEHI) in Melbourne, Australia. He is using large-scale 3D confocal and intravital imaging to investigate mammary stem cell dynamics and the function of mammary-resident immune populations. Caleb will present the use of tissue clearing and 3D fluorescence imaging as a valuable tool for revealing tissue architecture and cellular interactions. Using this approach, Caleb has identified a unique population of mammary gland tissue-resident macrophages that are intimately associated with the mammary epithelium and have a crucial role in remodelling. To overcome the difficulty of accurately displaying 3D imaging data, Caleb has developed cyan/red stereo 3D for microscopy.

Attendees will be provided cyan/red 3D glasses and will travel inside the brain and the mammary gland in a new experience of cutting-edge microscopy.