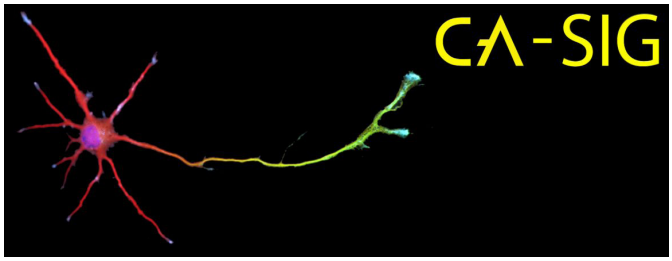
Cell Architecture: an ASBMB Special Interest Group



Established in 2018, the Cell Architecture Special Interest Group (CA-SIG) aims to foster networking among researchers focused on investigating the cytoskeletal regulation of cellular function across various cell types and tissues. One of its key initiatives is organising the Cell Architecture in Development and Disease (CADD) meeting, an annual scientific gathering held at different locations each year. This conference serves as a vital platform for higher degree research students and early- to mid-career researchers to present and discuss their work in cell architecture research. CADD meetings feature presentations spanning diverse disciplines such as cancer research, neuroscience, and mechanobiology, as well as discussions on novel methodologies and cutting-edge technologies in the field.

After a break in 2020–2021, the CA-SIG resumed the CADD meeting series in 2022. The 9th CADD meeting was held on 2 December 2022 as a half-day hybrid meeting that was attended in person at the Macquarie University campus and online via Zoom. The two sessions of the meeting had a major focus on research investigating changes in the cytoskeleton and cell architecture in diseases of the central nervous system, including Alzheimer's disease, amyotrophic lateral sclerosis and Parkinson's disease. Session 1 in the program featured presentations on cytoskeleton-related pathomechanisms of Alzheimer's disease by Professor Lars Ittner (Macquarie University), Dr Ryan Keable (UNSW), Dr Emmanuel Prikas (Flinders University) and Dr Magda Przybyla (Macquarie University). Session 2 opened with a presentation by Dr Ramon Martinez-Marmol (University of Queensland) on exciting new findings on virus-induced cell fusion from his laboratory, followed by talks on actin dysregulation in amyotrophic lateral sclerosis by Dr Cyril Jones Jagaraj (Macquarie University) and protein trafficking dysfunction in Parkinson's disease by Associate Professor Rohan Teasdale (University of Queensland). Dr John Lock (UNSW) complemented the disease-focused talks in session 2 with a discussion of his work on an advanced imaging and deep learning-based quantitative single cell phenotyping.

The CADD series continued with its 10th CADD meeting at the Queensland Brain Institute, University of Queensland on 6 November 2023. In response to the positive feedback regarding the hybrid model of the previous CADD meeting, we continued the series with a hybrid in-person and Zoom meeting. The meeting, supported by the Wiley journal *Cytoskeleton*, went back to a full day meeting format with four sessions and a keynote lecture by Dr Christophe Leterrier (NeuroCyto laboratory, Neuropathophysiology Institute France). Dr Leterrier presented his work on the nano-architecture of the axonal actin cytoskeleton in neurons. The four sessions of the meeting included talks by researchers from across Australia and a presentation by Dr Subashchandrabose Chinnathambi (National Institute of Mental Health and Neurosciences, India). A detailed report of the 10th CADD meeting was published in *Cytoskeleton*.

The 10th CADD meeting was held at the Queensland Brain Institute, University of Queensland.

Keynote speaker at the 10th CADD meeting, Dr Christophe Leterrier.

The CADD series will continue in 2024 as a hybrid meeting, details will be announced on our website soon. We also call for expressions of interest for the vacant CA-SIG positions of Communications Officer, ECR/MCR Representative and PhD Representative, previously held by Nicole Bryce, Catherine Blizzard and Christopher Small, respectively. Please direct your expression of interest to Thomas Fath at thomas.fath@mq.edu.au. We would like to thank Nicole, Catherine and Christopher for their contributions to CA-SIG.

Thomas Fath, Macquarie University
Chair, CA-SIG
Vladimir Sytnyk, UNSW Sydney
Secretary/Treasurer, CA-SIG
https://casig214033823.wordpress.com