

Te Kura Kairūri School of Surveying Lunchtime Seminar Series



Antarctica
New Zealand



Te Puna Pātiotio
Antarctic
Research Centre

A person in a dark and orange winter jacket stands in a snowy, flat landscape. To their left is a tall pole with a red flag. To their right is a blue cylindrical device with a red spiral around it. The background shows a clear blue sky and distant snow-covered hills.

Sea Ice, Microalgae, and Fatty Acids: A chain reaction in a rapidly changing ecosystem

Jacqui Stuart

Antarctic Research Centre,
Victoria University of Wellington

In 2022, powerful storms in McMurdo Sound pushed back sea ice formation by five months, offering a unique glimpse into how shifting ice conditions reshape Antarctic microalgal communities. Field observations showed that later-forming ice hosted simpler, less diverse communities dominated by pennate diatoms. Lab experiments revealed that changing light levels influence fatty acid production in key microalgal species—potentially altering the abundance and availability of essential nutrients through the Antarctic marine food web. As sea ice patterns continue to change, understanding these shifts is crucial for predicting their ripple effects across the ecosystem.

Thursday 27th March 2025 (12pm – 1pm)

L1 Lecture Theatre | School of Surveying, 310 Castle Street

OR Join remotely: <https://otago.zoom.us/> (ID: 979 1434 6880, P/W: 310310)