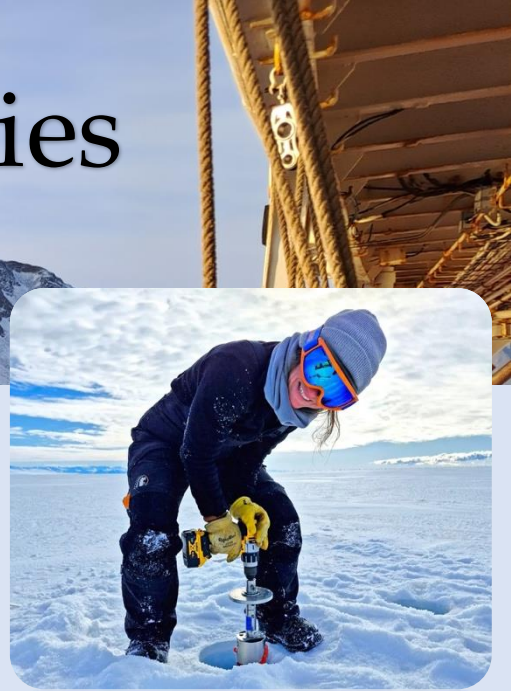




University  
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# Seminar Series



## Food for thought: Potential impacts of thinning sea ice on microalgal fatty acid production in McMurdo Sound, Antarctica

Dr. Jacqui Stuart, Research Fellow in Marine Ecology  
Antarctic Research Centre, Victoria University of Wellington, NZ

In 2022 and 2024 delays in sea ice formation in McMurdo Sound, Antarctica, created a natural experiment to explore how changing ice dynamics reshape microscopic life at the base of the food web. We observed that late-forming sea ice supported simpler, diatom-dominated communities, while laboratory studies revealed that key microalgal species altered their fatty acid production in response to shifting light conditions. Together, these findings show how the timing and nature of sea ice formation may influence Antarctic ecosystems, with potential changes to both microalgal diversity and the nutritional foundation for higher trophic levels.



Thursday, July 9<sup>th</sup>, 2026 @ 2:30 PM

CEOS Theatre (Klaus Hochheim Memorial Theatre, 545  
Wallace Building)