

Discover Lecture Series

Presented by the Faculty of Science and Engineering



MACQUARIE
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Humpback Highway: Diving into the mysterious world of whales

Abstract

Each winter, Australia's coastal waters transform into a busy blue playground with the arrival of the humpback whales. This annual migration sees the west and east coasts blubber to blubber as humpback whales travel from their Antarctic feeding waters to warmer waters to breed. These migratory routes are known as the humpback highway.

But while we might see whales annually, what do they really get up to when we are not watching them? Where do they go when they are in the Southern Ocean? Is whale poo really important for the ocean? What's the deal with whale snot? These are just a few questions whale scientist Dr Vanessa Pirotta will explore in her exciting National Science Week public lecture.

Dr Pirotta caters for all ages with her engaging and enthusiastic lecture, which celebrates whales and the publication of her first book for big kids (adults); *The Humpback Highway*. Hear the sounds whales make, learn what behaviours you might see on the humpback whale and understand why whales and are important for us all.

Biography



Dr Vanessa Pirotta is a wildlife scientist, woman in STEMM/STEAM, science communicator, author and vessel operator.

Vanessa's research uses innovative technologies for wildlife conservation. Vanessa works collaboratively across both marine and terrestrial environments merging cutting edge tech to access animals in unique ways. Most notable works include drones to collect whale snot and the use of computer algorithms and AI for the detection of illegal wildlife trafficking.

Vanessa is a passionate and experienced science communicator who plays an important role in society by making science accessible. She's represented Australia internationally as the international runner up of the world-renowned science communication competition FameLab, spoken on the TEDx platform, been recognized by the Australian Financial Review as one of the top 100 Women of Influence and listed as one of Science & Technology Australia's Superstars of STEM.

Vanessa is the lead scientist of the scientific and citizen science program *Wild Sydney Harbour*, which is learning more about marine life in Sydney Harbour, Australia. As part of this, Vanessa is leading scientific research with local First Nations rangers, the *Gamay Rangers*. Together, they are combining First Nation Knowledge and scientific research to learn more about marine mammals such as whales, dolphins and fur seals.

Vanessa is also a proud children's book author, with her book *The Voyage of Whale and Calf*, serving as an annual reminder of humpback whale biology and ecology in Australian waters. Recently, Vanessa added two more books to her author list; *The Humpback Highway: Diving into the mysterious world of whales* and a second children's book, *Oceans At Night*.

Vanessa is a highly experienced presenter and was the invited MC for the prestigious Prime Minister's Prizes for Science at Parliament House, Canberra in 2023 and recently made her debut on the children's television show *Play School*.

