

Alana Alexander

Ngāpuhi, Pākehā

“I love that you get to find things that are new to science, adding to our knowledge.”

Marine evolutionary biologist
Studies how sea creatures evolve and change



NZASE
New Zealand Association of Science Educators

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What Alana studies

The impacts of the fishing industry and the infection toxoplasmosis on dolphins

How dolphin populations have been affected by overfishing, and how populations are recovering after fishing was banned from some areas.

Alana is also studying whether dolphin genetics make some dolphins more likely to get toxoplasmosis, which is dangerous and often fatal.

Creating ‘science pūrākau’ using genomic information

Alana is working with tohunga (experts) and kaumātua (elders) about their knowledge of whales and dolphins, and discussing new knowledge from analysis of their genomes. Together they will create science pūrākau (stories) to support people who have kaitiakitanga (guardianship) responsibilities over treasured species.

Tracking parāoa (sperm whale) groups

Alana is in a team studying the genes of parāoa in three different parts of Aotearoa, from samples of skin that whales shed as they swim. The team aims to find out where the whales come from and where their whanaunga (relatives) are in the Pacific Ocean.

Alana also describes herself as a bioinformatician, using software to analyse complex genetic data. Scroll down to see her complete profile from September 2023 -

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