

WHERE CAN SCIENCE TAKE YOU?



EVOLUTION PUZZLE SOLVER

NAME: Professor Peter Dearden

ROLE: Professor, Department of Biochemistry,
University of Otago

FROM: Dunedin, where he lives with his family and dog/bear Barkerly.

STUDIES: BSc (Hons), Victoria University of Wellington; PhD in
nervous system development, Imperial College London.

FOLLOW: His research papers are available on Google Scholar.

Why did Peter choose SCIENCE?

For Peter, science is a way to make sense of the living world and discover how it became so diverse. His curiosity began during childhood summers tramping through Nelson Lakes and Mount Aspiring, and continued at home, where his microbiologist and botanist mother introduced him to tiny organisms and plants, while his classics professor father encouraged him to think about history and ideas. At high school, Peter was told he was “too clever” to pursue his love of biology but his path changed at university, when an inspiring genetics lecturer opened the door to the complex worlds of genes, evolution and microscopic life. Today, Peter explores how genes, genomes and embryos evolve to help us understand life.

What's the COOLEST PART of his job?

Some of the best moments in Peter's work come when something suddenly makes sense—and, briefly, he may be the only person who knows it. “When you're looking down the microscope, and you see something, and suddenly you understand what's going on and you think to yourself, actually, I'm the only person who knows this, and now I have to write this up and tell everyone else. That's the thing, that's that moment where you go, okay, I understand this, it makes sense.”



ABOVE: Peter with an extremely rare *Powelliphanta augusta* (Mount Augustus) land snail as part of his work sequencing the genomes of these unique giant carnivorous snails. Images: The University of Otago.

BIRD-SAVING GENETICS

Peter uses genetics to help protect one of the world's rarest parrots—the kākāpō. He studies their DNA and helps the Kākāpō Recovery team choose which birds should have chicks together. Pairing birds that are not too closely related helps produce healthier chicks and keeps a wider mix of genes in the small kākāpō population.



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