

Health
Sciences
Postdoctoral
Fellowship

profile

DR JOSHUA RAMSAY



Otago graduate **Dr Joshua Ramsay** is a lecturer and researcher in molecular microbiology at Curtin University in Western Australia.

Junior scientist tendency

"My mother told me that she dreaded the word 'why' when I was a child, as it was every second word that came out of my mouth," Josh says.

Genetic analysis wins Josh over

As an undergraduate at Otago Josh took papers from across the sciences to help decide what area to pursue. "I did better in physics, maths, and chemistry than biology, but I found genetics and evolution most interesting, so in the following years I switched.

"At first I didn't think I did so well in biology, and I worried that I had made a terrible decision. I was very relieved when Otago genetics lecturers presented an incredibly refreshing and demystified view of genetic analysis from the perspective of the founding geneticists, microbiologists, and chemists. I pretty-much instantly decided this was what I wanted to do."

Fellowship fast-tracks opportunities

Near the end of a postdoctoral fellowship at the University of Cambridge Josh was considering whether to return to New Zealand, or move to Australia.

"The Health Sciences Postdoctoral Fellowship allowed me to come back to New Zealand and

develop many of the exciting discoveries made during my PhD, and gave me a chance to take on a more senior role.

"I chose Otago because I'd worked well with people in the Ronson laboratory and the Department of Microbiology and Immunology. Professor Ronson has always been very altruistic about students' career development, so I felt I could trust his mentorship. He has gone out of his way to help me progress my career – even when it has led to me leaving his lab!

"The Fellowship at Otago was definitely a good decision. It gave me an opportunity to quickly get more research published, and put me in a better position to apply for grants, and subsequently jobs."

Testing complex questions in nature

Josh researches the process of gene transfer between bacteria (bacterial sex), and how this aids pathogenesis, symbiosis and the transfer of antibiotic resistance. He has also started researching the transfer of antibiotic resistance between dangerous pathogenic superbugs like MRSA.

"I simply like problem solving and understanding living organisms. Evolution has always fascinated me because of clear patterns in nature that emerge from it. Once you understand the simple rules of evolution, you can very easily make predictions and then design experiments to directly test it in nature."

POSTGRADUATE



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