

Research Fellow

Latitudinal gradients in bacterial genome size

School of Biological Sciences,

The University of Auckland, New Zealand

- **18 months fixed term position**
- **full time**

The Opportunity

Applications are invited for a research fellow to join group of Dr. Gavin Lear in the School of Biological Sciences at the University of Auckland. The fellow will explore latitudinal gradients in bacterial community diversity and functional potential. From an ecological perspective we are interested in confirming "is genome size and complexity a fundamental driver of microbial latitudinal richness gradients?"

You will interrogate major national and international datasets to explore if bacterial taxon richness is correlated with gradients in genome size at a global scale and assess the role and consequences of genome streamlining for ecosystem functioning. You will interrogate metagenomics datasets to identify genes that are differently represented among high versus low latitude samples, providing new insights into latitudinal gradients in microbial functional potential.

Your research on bacterial community data will provide a valuable proof of concept, benefitting from the comparative genetic simplicity of prokaryotes to address the issue of what regulates latitudinal gradients of biodiversity, providing critical underpinning knowledge that can be applied in the wider biological world.

You should have a PhD in microbial ecology or a related field, background in the generation and analysis of amplicon and metagenomics datasets using next-generation DNA sequencing methods and be familiar with R. Evidence of high-quality publications is required. The successful candidate will have an interest in collaborative research and a passion for advancing understanding of microbial ecology.

How to apply

Applications for this position should include a curriculum vitae, a summary of recent research achievements and a one page research statement outlining how the research fellowship would complement the fellow's longer term research goals. Applications should also indicate the names and contact details of three referees.

Enquiries about the role should be directed to Dr. Gavin Lear, School of Biological Sciences, telephone +64 9 923 27573, email: g.lear@auckland.ac.nz

This is a full time, fixed term position for a duration of 18 months. Applications close on Thursday 15th March 2018.