

William Pearman

Curriculum vitae (summary)

Research summary

I am a broadly trained molecular and microbial ecologist specialising in population genomics and microbial ecology, developing eco-evolutionary simulations of host-microbe (holobiont) relationships tested against observational and experimental data.

Contact

📍 University of Auckland,
Auckland, New Zealand
✉ william.pearman@auckland.ac.nz
🆔 0000-0002-7265-8499
🌐 wpearman1996

Education

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| 2023 | PhD Marine Science , University of Otago, Dunedin, New Zealand |
| 2020 | MNatSci (Distinction) Genetics , Massey University, Auckland, New Zealand |
| 2018 | BNatSci Genetics , Massey University, Auckland, New Zealand |

Awards and honours

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| 2022 | Best PhD Presentation - New Zealand Molecular Ecology Conference |
| 2020 | Best PhD Presentation - New Zealand Molecular Ecology Conference |
| 2020 | New Zealand Marine Sciences Society Student Research Award (\$1,500) |
| 2020 | University of Otago Doctoral Scholarship (\$27,500) |
| 2019 | Massey University Masters Scholarship (\$15,000) |
| 2018 | Presentation Bursary - Oxford Nanopore Technologies |

Selected Publications

- Pearman, W.S.**, Freed, N.E. & Silander, O.K. (2020). Testing the advantages and disadvantages of short- and long-read eukaryotic metagenomics using simulated reads. *BMC Bioinformatics*, 21(1), 1-15. doi:10.1186/s12859-020-3528-4
- Pearman, W.S.**, Urban, L. & Alexander, A. (2022). Commonly used Hardy-Weinberg equilibrium filtering schemes impact population structure inferences using RADseq data. *Molecular Ecology Resources*, 22(7), 2599-2613. doi:10.1111/1755-0998.13646
- Fraser, C.I., Dutoit, L., Morrison, A.K., Pardo, L.M., Smith, S.D.A., **Pearman, W.S.**, Parvizi, E., Waters, J. & Macaya, E.C. (2022). Southern Hemisphere coasts are biologically connected by frequent, long-distance rafting events. *Current Biology*, 32(14), 3154-3160.e3. doi:10.1016/j.cub.2022.05.035
- Arranz, V., **Pearman, W.S.**, Aguirre, J.D. & Liggins, L. (2020). MARES, a replicable pipeline and curated reference database for marine eukaryote metabarcoding. *Scientific Data*, 7(1), 209. doi:10.1038/s41597-020-0549-9
- Pearman, W.S.**, Duffy, G.A., Liu, X.P., Gemmell, N.J., Morales, S.E. & Fraser, C.I. (2024). Macroalgal microbiome biogeography is shaped by environmental drivers rather than geographical distance. *Annals of Botany*, 133(1), 169-182. doi:10.1093/aob/mcad151
- Liu, X.P., Duffy, G.A., **Pearman, W.S.**, Perterra, L.R. & Fraser, C.I. (2022). Meta-analysis of Antarctic phylogeography reveals strong sampling bias and critical knowledge gaps. *Ecography*, 2022(12), e06312. doi:10.1111/ecog.06312