# Aisling Lilian Rayne

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**3** Google Scholar

R<sup>G</sup> ResearchGate

### Expertise

conservation genomics  $\bullet$  biocultural diversity  $\bullet$  data sovereignty  $\bullet$  bioinformatics  $\bullet$  freshwater ecology  $\bullet$  Kindness in Science

## Professional experience

CENTRE FOR SUSTAINABILITY, UNIVERSITY OF OTAGO

2022-present Research Fellow

Kindness in Science Project, Te Pūnaha Matatini

University of Canterbury

Research Associate (Conservation Genomics)

School of Biological Sciences

2017–2020 Lab Demonstrator

School of Biological Sciences

Teaching Assistant

School of Educational Studies and Leadership

#### Education

PHD in Biological Sciences, University of Canterbury (pending graduation in April 2022)

BSc(Hons, 1st Class) in Biological Sciences, University of Canterbury

BSc in Ecology, University of Canterbury

#### Services & affiliations

<sup>2021-present</sup> Technical Advisor, **Te Pātaka a Tahu (MABx)**, Te Rūnanga o Ngāi Tahu

2020-present Member, High Quality Genomes and Population Genomics, Genomics Aotearoa

<sup>2020</sup>-present Member, Technical Advisory Group on Regenerative Farming Practices, Ministry for Primary

Industries

2019-present Member, Te Pūnaha Matatini Whānau, Te Pūnaha Matatini

Executive Member, **Student Volunteer Army**, University of Canterbury

# Awards

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2020	Bioheritage COVID-19 Extension Scholarship
2020	Roper Doctoral Scholarship for top-ranked domestic applicant in Science at UC
2017	UC Annual Biology Conference Best BSc/BSc(Hons) Presentation
2017	Todd Foundation Award for Excellence
2016	University of Canterbury Senior Scholarship
2016	LIC Patrick Shannon Scholarship
2016	Canterbury Branch New Zealand Federation of Graduate Women Trust Award
2015	UC Pilgrim Prize
2014	UC Emerging Leaders Development Program
2014	UC Undergraduate Entrance Scholarship
2013	Orion Selwyn District Centenary Educational Trust Scholarship
2013	Darfield High School Parent Teacher Student Association Prize for Dux
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	Research grants (contributing researcher)
	Wision Materials Constitute For 1/Constant Ministers of Designation of London
2021-2023	Vision Mātauranga Capability Fund (Connect), Ministry of Business, Innovation and Employment
	(\$250K awarded to Te Rūnanga o Ngāi Tahu)
2021-2023	Māori Agribusiness Extension (MABx) Phase I, Ministry for Primary Industries (\$60K awarded to
	Te Rūnanga o Ngāi Tahu) Research Linkages Seeding Grant, College of Science, UC (\$20K awarded to TE Steeves)
2019-2020	Data Deficient Research Grant, Department of Conservation (\$3.8K awarded to TE Steeves)
2017	Data Deficient Research Grant, Department of Conservation (43.0K uwurucu to 12 steeves)
	Publications & talks
	Peer-reviewed articles
2020	Rayne A, Byrnes G, Collier-Robinson L, Hollows J, McIntosh A, Ramsden M, Rupene M, Tamati-
	Elliffe P, Thoms C, Steeves TE. Centring Indigenous knowledge systems to re-imagine conservation
	translocations. People and Nature. 2: 512–526. [DOI] [PDF]
2019	Collier-Robinson L, Rayne A, Rupene M, Thoms C, Steeves TE. Embedding indigenous principles in
	genomic research of culturally significant species: a conservation genomics case study. NZ Journal
	of Ecology. 43: 3389. [DOI] [PDF]
	Pre-prints $\mathring{\sigma}$ Papers in Preparation/Review/Revision
In Review	Rayne A, Blair S, Dale M, Flack B, Hollows J, Moraga R, Parata RN, Rupene M, Tamati-Elliffe P,
III Keview	Wehi PM, Wylie MJ, Steeves TE. Weaving place-based knowledge for culturally significant species
	in the age of genomics: Looking to the past to navigate the future. Evolutionary Applications.
In Revision	Collier-Robinson L, Rayne A, Hudson M, Stott MB, Steeves TE. Realising benefits for Indigenous
III Revision	Peoples in genomic research of culturally significant species. <i>Nature Genetics</i> .
2021 pre-print	Forsdick N, Adams CI, Alexander A, Clark AC, Collier-Robinson L, Cubrinovska I, Croll Dowgray
2021 pre princ	M, Dowle E, Duntsch L, Galla SJ, Howell L, Magid M, Rayne A, Verry AJF, Wold J, Steeves TE.
	Current applications and future promise of genetic/genomic data for conservation in an Aotearoa
	New Zealand context. <i>EcoEvoRxiv</i> . [por]
2021 pre-print	Parker KA, Ewen JG, Weiser EL, Rayne A, Steeves TE, Seddon PJ, Armstrong DP. Contempo-
1 1	rary conservation translocations are foundational to Predator-Free aspirations in Aotearoa New
	Zealand: a review. <i>EcoEvoRxiv</i> . [DOI]

#### OTHER FORMS OF DISSEMINATION

Interview for RNZ's Our Changing World podcast Collaborating to move freshwater species [html]
Invited article for Wiley Centring Indigenous ways of knowing to enhance resilience [html]
The Conversation When rehoming wildlife, Indigenous leadership delivers the best results [html]
Bioheritage student blog How can we best use genomics to enhance conservation translocations? [html]
Securing sustainable kai: a conservation genomics approach for UC annual Research Report [pdf]
Featured in UCMe campaign for the University of Canterbury [html]
Contributed to expert commentary on new biodiversity strategy Te Koiroa O Te Koiroa
Bioheritage blog Cutting-edge technology to help mahinga kai species [html]

#### SELECTED TALKS

- invited virtual talk on Applied Genomics & NZ Indigenous Engagement, AGTA. [watch online]
  invited virtual talk Enhancing biocultural resilience in a mahinga kai species-at-risk. IAGLR, Canada.
  Re-imagining conservation translocations through Two-Eyed Seeing. Hawai'i Conservation Alliance.
  Have your kēkēwai and eat it too: Bridging species and ecosystem recovery. New Zealand Ecological
  Society Conference, Lincoln University.

  New knowledge old legislation: An integrative approach for enhancing resilience in Antegras New
- New knowledge, old legislation: An integrative approach for enhancing resilience in Aotearoa New Zealand's threatened freshwater biota. International Congress for Conservation Biology, Malaysia.

  Underwater, out of mind? A call for integrative legislation reform, Crazy & Ambitious 2 Symposium, Te Papa, Wellington.
- 2018 Critical first steps toward enhancing resilience in two threatened freshwater endemics, UNVEIL Symposium, U.S.A. (co-presented with Levi Collier-Robinson).