

Position Description

Date: September 2026 **Ref:** 2083

Position | Tūranga: Internship – Mitigation of N₂O fluxes from pastoral soils

Responsible to Tō kaiwhakahaere:	Science Team Leader, Steve Thomas and Scientist, Pablo Lacerda Ribeiro
Group Tari:	Ethical Agriculture
Function Wāhanga:	Environmental Science South
Team Tīma:	Environmental Science South
Location Wāhi:	Invermay, Dunedin
Employment Type Momo Mahi:	Fixed Term – 12 weeks
Korn Ferry Grade Taumata Korn Ferry:	12

Organisational context

The Bioeconomy Science Institute Maiangi Taiao is New Zealand's newest public research organisation, formed through the merger of AgResearch, Plant & Food Research, Manaaki Whenua - Landcare Research, Scion, and the New Zealand Food Innovation Network. Our purpose is to drive innovation and commercial outcomes in the bioeconomy, using research and technology to support enduring economic growth and resilience, a healthy environment and beneficial social outcomes for New Zealand. We pursue opportunities to lift innovation, commercial outcomes, and adoption of advanced technology to drive economic growth across New Zealand. Through world-leading science, we drive innovation across agriculture, horticulture, forestry, aquaculture, biotechnology, and manufacturing. We protect and enhance ecosystems, strengthen biosecurity and climate resilience, and develop cutting-edge bio-based products and technologies.

We honour Te Tiriti o Waitangi and embed te ao Māori throughout our transformation journey. As we come together, we are committed to learning and growing together through inclusive, equitable, and culturally responsiveness ways of working. All roles contribute, in ways relevant to their work, to giving effect to our Te Tiriti commitments through partnership, participation, protection and equity.

Role purpose | Te Take o te Tūranga

Nitrification and denitrification are natural soil processes that contribute to nitrous oxide (N₂O) emissions from grazed pastures. Finding ways to slow these processes could help reduce agriculture's environmental impact and improve nitrogen-use efficiency. There is evidence that sulphur application can reduce N₂O emissions from agricultural soils through different mechanisms. This project will investigate the effects of a range of sulphur application rates on N₂O emissions from soils. The research could contribute to the development of tools to lower N₂O emissions and contribute to the sustainability of farming systems.

Accountabilities | Ngā whakaritenga

- Assist with establishing and conducting field and laboratory experiments investigating N₂O emissions from pastoral soils.
- Measure greenhouse gas fluxes from soils using specialised field and laboratory equipment.
- Prepare and process soil samples and extracts for analysis.
- Calculate, interpret and evaluate greenhouse gas emissions data.
- Analyse results and contribute to data visualisation, reporting and presentation of findings.

About you | Ō Pūmanawa

We are seeking a motivated student who:

- Currently enrolled in, or recently completed, an undergraduate degree in environmental science, agricultural science, soil science, biology, or a related field.
- An interest in climate change, greenhouse gas mitigation, and sustainable agriculture.
- Strong analytical skills and attention to detail.
- Ability to work independently and collaboratively within a research team.
- Good written and verbal communication skills, including the ability to work with scientific data.
- Motivation to learn new laboratory and research techniques.

Information And Records Management | Te Whakahaere | Ngā Mōhiotanga Me Ngā Putu Raraunga

- Ensure that information and records are maintained, created, and disposed of in compliance with relevant statutory, regulatory, and Institute policy requirements, documenting business transactions and activities securely and following established policies and procedures.

Health, Safety, And Wellbeing | Hauora, Haumaru Me Te Oranga

- Contribute to a positive health, safety and wellbeing culture by taking reasonable care for their own health, safety and wellbeing and that of others; complying with legislative requirements, organisational policies and standard operating procedures; reporting hazards, incidents, near misses, and safety observations; and promoting psychological wellbeing through open communication and the early recognition of stress, fatigue, and mental health concerns.

Organisational objectives | Ngā Whāinga Tōpūtanga Katoa

- Actively develops and applies the cultural capability relevant to their role and contributes to giving effect to the organisation's Te Tiriti o Waitangi Framework
- Ensures that all information created or received during your work is managed as per the Institute's Information Management policy. This includes naming, storing, classifying, and ensuring it is available to other employees.

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- Takes responsibility to understand and apply Institute policy, processes, systems, and procedures daily.
 - Commits to accurate and timely information sharing and recordkeeping as per set organisational standards.
 - The accountabilities set out above are not exhaustive. Therefore, it may be necessary for you to undertake other reasonable accountabilities as required, which are within your abilities.