

2026 / 2027 Summer Research Scholarship Programme Projects

102 - Harnessing Te Ra: Photon Splitting Solar Cells

School of Chemical and Physical Sciences

Project number: 102

Project description:

Inspired by Māui and his brothers harnessing the sun, Tamanuiterā, this project is for Māori students at any stage of study, ideally in Chemistry or Physics (not required).

Most photovoltaic cells (PVs) are expensive and have a single absorption threshold, wasting excess energy and capping efficiency at $\approx 32\%$. We have patented a hybrid material: an organic singlet fission (excitation multiplication) interlayer between 2D-perovskite layers. It transfers multiple excitations to the perovskite, two per high-energy photon, raising efficiency to 42% — PV cells that split photons in half.

Work involves exploring our new materials, optimising device fabrication, and characterisation (NMR, Mass Spec, SEM, XRD, optical spectroscopy).

Led by Assoc. Prof. Nathaniel Davis (PI) with advisor Chase Zemke-Smith; funded by Te Whai Ao–Dodd-Walls Centre (Te Ao Māori grant), with Katharina Ruckstuhl (DWC), Dr Pauline Harris and Kirsty Doyle (McDiarmid Institute).

Supervisor:

Nathaniel Davis

103 - Improving a Cavity Ring-Down Spectrometer for Trace Humidity Measurements

School of Engineering and Computer Science

Project number: 103

Project description:

Measurement Standard Laboratory (MSL) NZ has designed and built a small laser-based Cavity Ring-Down Spectroscopy (CRDS) system to measure humidity at concentrations ranging from approximately 10 ppb to 100 ppm.

This project aims for improvements to the existing system's signal acquisition, signal processing algorithms, and data logging software to enhance measurement sensitivity, stability, and usability. The student will identify and evaluate sources of noise, assess the performance of the existing electronics and data acquisition system, develop and implement improvements, and quantify the resulting performance gains. It finishes with an experimental characterisation of the optimised system and an assessment of its performance across the target humidity range.

The work combines electronics, software development, data analysis, and experimental measurements and is co-supervised by Jimmi Rosa (VUW) and Stefaan Janssens (MSL).

Supervisor:

Jimmi Rosa

104: Data Science and Artificial Intelligence for Aquaculture

School of Engineering and Computer Science

Project number: 104

Project description:

This large project seeks 4-5 individual excellent summer scholars from current year-3 and year-4 students in AIML, DATA, COMP/SWEN with AI specialisation to carry out research in data science and AIML for NZ aquaculture industry. The successful scholars/students will use/develop DSAI, machine learning and computer vision algorithms and techniques to support decision-making in NZ aquaculture industry for responding to climate challenge, managing fish disease, improving fish production yields and fish farm sustainably at scale.

A good background in Python programming and COMP307/309/AIML231/232 is required. A good background in statistics/optimisation would be preferred. The successful scholars will be working with one of the experienced supervisors in the Centre for Data Science and AI: Mengjie Zhang, Ivy Liu, Bing Xue, Richard Arnold, Yi Mei, Binh Nguyen, Junhong Zhao and Fangfang Zhang. The students/scholars will be located at VUW, and are expected to generate a paper/prototypes.

Supervisor:

Mengjie Zhang

105 - Safe Agentic AI for Healthy Ageing: Reinforcement Learning for Personalized Physical Activity Support

School of Engineering and Computer Science

Project number: 105

Project description:

This project will investigate how reinforcement learning and agentic AI can provide personalized physical activity support for healthy ageing. The aim is to develop an AI agent that learns when to provide support, what type of activity to recommend, and when not to intervene, while considering effectiveness, safety, and intervention burden.

The student will work with researchers in artificial intelligence and healthy ageing at Victoria University of Wellington. Public physical activity and healthy-ageing datasets, together with reinforcement learning simulation environments, will be used to develop and evaluate the proposed approach.

Expected outcomes include a working prototype, experimental evaluation against existing approaches, and new insights into personalized AI support for healthy ageing. The project may also contribute to future research publications and further development using real healthy-ageing data.

Supervisor: Aaron Chen

111 - New approaches to control pests in honey bee hives

School of Biological Sciences

Project number: 111

Project description:

Honey bees are essential pollinators for agriculture and natural ecosystems, but their health is threatened by the parasitic Varroa mite. This project will investigate two promising new approaches for controlling Varroa: RNA-based biopesticides and antibody-based treatments. A summer research student with an interest in honey bees will assist with laboratory and hive-based experiments testing these new control methods. Ideally, the student will have some experience in handling honey bees. The research aims to develop safer and more effective alternatives to conventional pest control, supporting healthier bee populations and advancing entomological research and sustainable beekeeping. The student will be working with Professor Phil Lester and his research team.

Supervisor:

Phil Lester

113 - Developing mātāuranga maramataka for Poneke, Aotearoa New Zealand

School of Biological Sciences

Project number: 113

Project description:

Mātāuranga maramataka (Māori knowledge of lunar cycles and their impacts) is an indigenous knowledge-based approach to resource management and ecology that is intricately linked to place. Iwi Māori across Aotearoa are carefully curating mātāuranga that was lost and revitalising maramataka frameworks for their rohe. However, limited mātāuranga maramataka currently exist for Te Whanganui-a-Tara (Wellington), despite decades of ecological research and conservation management. As native species re-establish themselves, there is opportunity to investigate and rebuild this knowledge.

This research will be based at Zealandia Te Māra a Tāne, which provides an ideal location for studies on maramataka, being home to forest (e.g. kākā) and freshwater taonga (e.g. tuna, kākahi and kōura). The kaupapa aims to examine mātāuranga maramataka and its interconnected intelligence to better understand kākā activity patterns and phenology in relation to lunar cycles specific to the Wellington region.

Supervisor:

Rachael Shaw

114 - Properties of highly resistive lanthanide nitrides

School of Chemical and Physical Sciences

Project number: 114

Project description:

Lanthanide nitrides are a novel class of materials that combine ferromagnetism with semiconducting electrical conductivity. They have demonstrated potential for use in superconducting electronics and quantum technologies, but to realise their potential requires a detailed understanding of their fundamental properties.

This project will involve the growth of lanthanide nitride thin films and the measurement of their structural electrical, and magnetic properties down to cryogenic temperatures, and, time permitting, the photoconductivity of the films. The project will yield new insight into the fundamental electronic energy states in the lanthanide nitrides, and the mechanisms by which they are coupled to their magnetic properties.

The work, which is part of a joint SCPS/Robinson Research Institute programme, will be carried out primarily at the Kelburn Campus with the support and supervision of Prof. Ben Ruck and collaborating postgraduate students and researchers.

Supervisor: **Ben Ruck**

116 - Establishment and spread of exotic pasture dung beetles: a regional case study

School of Biological Sciences

Project number: 116

Project description:

Introduced dung beetles can significantly benefit New Zealand farmland by rapidly burying dung, improving soil health, enhancing grass growth and reducing parasite exposure and nutrient run-off. Since 2013, eleven exotic species have been released across New Zealand, yet establishment success, population spread, and the environmental and farm management practices influencing these rates remain largely unmonitored.

Partnering with Greater Wellington Regional Council, this project will utilise a database of releases, mail-outs, and field surveys to measure establishment success. The successful applicant will require a drivers licence and should be comfortable working in pastoral farm settings. Access to a vehicle may also be beneficial on occasions.

OUTCOMES: The research will identify which species establish best under what conditions, ultimately guiding more effective future deployments for better pastoral ecosystem services.

Supervisor:

Stephen Hartley

117 - Thermal Properties and Strain Response of Greywacke in Geothermal Environments

School of Geography, Environment and Earth Sciences

Project number: 117

Project description:

New Zealand has a world-leading history of geothermal energy generation, and expanding this reliable, renewable resource could play an important role in future energy security. This project will investigate a key challenge for next-generation geothermal development: how greywacke basement rock responds to rapid temperature change, and whether that response can be used to better control fracture formation around geothermal wells. In this project, you will compile and evaluate existing data on the thermal properties of greywacke basement rocks. Then, you will collect new measurements of thermal conductivity, diffusivity and specific heat capacity in the laboratory. Finally, you will heat greywacke samples, using a thermal camera to track temperatures changes and digital image correlation (DIC) to map surface strain. These experiments will help researchers understand the physical controls on thermal stimulation, a low-cost method used to enhance permeability in geothermal reservoirs.

Supervisor: Carolyn Boulton

118 - Professor Bob Clark, VUW's visionary Professor of Geology from 1954 to 1983

School of Geography, Environment and Earth Sciences

Project number: 118

Project description:

Bob Clark was Professor of Geology from 1954 to 1983, a period of significant change in Earth Sciences following the Plate Tectonics revolution in the 1960s. Clark was a visionary who saw research opportunities for his students and staff. In that period he built the foundations of the Geology Department at VUW by appointing strong and varied academic staff, expanding the physical building space, and fostering a vibrant staff-student research-oriented culture that continues to this day.

The project will involve four phases leading to a summary of the Clark years: 1) seeking relevant documents, 2) compiling a database, 3) writing summaries on ten key aspects, and 4) preparing a 2-page report, a poster and a Powerpoint presentation.

You will work with Senior Lecturer Cliff Atkins, and Em Prof Peter Barrett, former Geology staff and appointed by Clark in 1970. They will be assisted by other former staff and students with personal experience of the Clark years.

Supervisor:

Cliff Atkins

119 - Time Series Analysis of Volcano Monitoring Data at New Zealand Volcanoes

School of Geography, Environment and Earth Sciences

Project number: 119

Project description:

This project will compile and analyse multi-parameter volcano-monitoring data from Whakaari, Ruapehu, Tongariro, and Taupō using GeoNet's open-access datasets. The student will investigate how seismic, geodetic, geochemical, and other observations vary through time and relate to periods of volcanic unrest and eruption.

The student will work with Professor Martha Savage of Te Herenga Waka Victoria University of Wellington and Dr. Pasan Herath of Earth Sciences New Zealand, alongside scientists involved in volcano monitoring and research in Aotearoa New Zealand.

The project will deliver a quality-controlled volcano-monitoring dataset and reproducible analysis workflows. The student will apply time-series methods, including cross-correlation, spectral analysis, and anomaly detection, to identify relationships among monitoring signals. Expected outcomes include visual summaries and an initial interpretation of volcanic processes, supporting the wider Marsden Fund Fast-Start project.

Supervisor:

Martha Savage

120 - NanoElectrochemistry for Ammonia Detection

School of Chemical and Physical Sciences

Project number: 120

Project description:

The electrochemical nitrogen reduction reaction (NRR) could enable sustainable ammonia production from nitrogen, water, and renewable electricity, but detecting the small amounts of ammonia produced, and pinpointing where on a catalyst it forms, remains a major challenge.

In this summer project, you will fabricate and characterise micro/nanoscale scanning probes, then use a combined SECM–SECCM approach to detect ammonia generated directly at electrocatalyst surfaces developed by our collaborators at Earth Sciences New Zealand. You'll gain hands-on skills in probe fabrication, electrochemistry, and nanoscale imaging. No prior experience required, ideal for students interested in electrochemistry or sustainable energy.

Supervisor: Kim McKelvey

121 - Predicting the near-future of Franz Josef Glacier

Antarctic Research Centre

Project number: 121

Project description:

Franz Josef Glacier | Kā Roimata o Hine Hukatere has undergone rapid thinning and retreat over the past ~20 years. In this project, we will use high-resolution observations collected since 2015 to investigate how the glacier is likely to change over the next 5–10 years.

We will work with detailed datasets of glacier thinning and terminus retreat, and use these to inform a high-order numerical glacier model. The goals are to understand: 1) How much of the glacier's future change is already "locked in" due to its current shape and mass balance, and 2) How sensitive the glacier is to future weather and climate conditions.

This project combines data analysis, ice flow modelling, and climate interpretation, and is well-suited to students interested in fluid mechanics, geophysics, or applied modelling. This research is with the Antarctic Research Centre, and will result in a suite of near-term future projections of the Franz Josef Glacier to better understand how it is likely to change.

Supervisor:

Lauren Vargo

122 - Designing better vaccines

School of Biological Sciences

Project number: 122

Project description:

We recently made a surprising discovery. We constructed a vaccine by linking protein antigens from two SARS-CoV-2 variants and found that this gave stronger-than-expected protection against both of them. The key appears to have been displaying the two antigens "just right" to the immune system, allowing the two arms of specific Y-shaped antibody molecules to engage them both simultaneously.

This project will build on our finding. You will vary—and precisely define—antigen spacing and orientation by designing fusion proteins and also immobilising the antigens on DNA-based nanostructures that you build. Downstream experiments will determine how antibody binding is altered as a result.

The project will be supervised by Dr Mitali Mishra and Prof Wayne Patrick at VUW, in collaboration with Dr Lisa Connor (Malaghan Institute). It will suit a student who is interested in

postgraduate study at the interface of DNA nanotechnology, protein engineering and immunology.

Supervisor:

Wayne Patrick

123 - Defining Sex-Specific Patterns of Gut Mucin Glycosylation

School of Biological Sciences

Project number: 123

Project description:

Our team is interested in sex-specific mechanisms of healthy ageing and disease. In this project, you will investigate whether biological sex influences the composition and glycosylation of gut mucins. Mucins form an important protective barrier in the gut, and their glycosylation patterns influence which microbes can colonise and utilise the mucus layer. We hypothesise that males and females have distinct patterns of mucin glycosylation.

You will work at the interface of immunology, biochemistry and chemistry, alongside Drs Candice Quin, Wayne Patrick, Bridget Stocker and Mattie Timmer. You will characterise sex-associated differences in gut mucins and their glycosylation. These data will be considered alongside measures of the gut microbiome and intestinal permeability to explore relationships between mucin structure, microbial composition and gut health.

Supervisor:

Candice Quin

125 - Multi-class machine vision model for detecting events of interest in on-board camera footage

School of Engineering and Computer Science

Project number: 125

Project description:

The Fisheries New Zealand on-board cameras programme collects video from 220 inshore commercial vessels, providing critical data for sustainable fisheries management. This footage verifies protected species interactions—such as seabirds, marine mammals, or turtles—and ensures fishers employ effective mitigation measures.

Previous Victoria University of Wellington scholars developed a multi-class machine vision model to detect these interactions, but it requires refinement to reduce false positives and improve reliability. Summer scholars will collaborate with MPI and Lynker Analytics to enhance the algorithm through dataset curation, model tuning, and synthetic data generation.

Given the commercially sensitive nature of the information, students must strictly adhere to MPI's Code of Conduct and information security protocols. This project offers a unique

opportunity to apply cutting-edge computer vision techniques to real-world conservation challenges, directly supporting New Zealand.

Supervisor:

Bing Xue

129 - Using Security Video Footage to Track the Propagation of Large Earthquakes Ruptures

School of Geography, Environment and Earth Sciences

Project number: 129

Project description:

Using Security Video Footage to Track the Propagation of Large Earthquakes.

This project will investigate whether video footage can be used to measure strong ground motion and track the propagation of large earthquake ruptures. The successful student will analyse video footage from large earthquakes around the world using computer-based image-processing and tracking techniques, and compare these observations with data from strong-motion seismometers, GNSS, and satellite imagery. The project will explore a novel approach to observing earthquake rupture that could reveal information not captured by conventional seismic networks.

Supervisor:

Jesse Kearse

130 - Techno-economic Model for Thermoelectric Generator for Low-temperature Geothermal Environment

School of Engineering and Computer Science

Project number: 130

Project description:

Low-temperature geothermal heat offers opportunities for local and distributed renewable electricity generation. Thermoelectric generators convert heat directly into electricity using compact, solid-state devices with no moving parts, but their economic viability depends on temperature difference, heat-transfer performance, operating conditions, system cost and actual energy output. We are seeking an engineering student with an interest in energy and economics to develop a techno-economic model for geothermal thermoelectric generation. The Summer student will review technical and cost data, model energy generation and economic performance, undertake sensitivity analysis, and identify promising applications and future opportunities for low-temperature geothermal environments.

Supervisor:

Ramesh Rayudu

131 - Market Analysis for Solid-state Colling Devices for New Zealand Environment

School of Engineering and Computer Science

Project number: 131

Project description:

Solid-state cooling technologies, including thermoelectric and magnetocaloric cooling, offer promising sustainable alternatives to conventional vapour-compression refrigeration, with potential benefits in energy efficiency, compactness, low maintenance, and reduced environmental impact. However, there is limited information on their current market potential and future growth opportunities, particularly in New Zealand. We are seeking an enthusiastic engineering student with an interest in technology, economics, and market analysis to investigate the emerging solid-state cooling sector. The Summer Scholar will undertake literature and market research, analyse relevant data, and develop models to assess the current market landscape and forecast future growth opportunities for solid-state cooling technologies.

Supervisor:

Ramesh Rayudu

132 - Seeing risk: linking eye morphology to insect vulnerability to light pollution

School of Biological Sciences

Project number: 132

Project description:

Artificial light at night (ALAN) is an emerging conservation threat for insects due to their strong attraction towards light (termed “flight-to-light”). Here, we aim to determine whether eye morphology predicts the timing and intensity of insect attraction to ALAN. We will capitalise on an existing collection of flying invertebrates that were captured using light traps over the 2025/2026 season at Zealandia. We will use microscopy to determine eye size, body length and wing surface area to compare eye morphology of moths across each of the collection periods to determine whether visual traits predict response to light. Early conversations regarding this position are encouraged with Dr Farnworth. This role may require fieldwork - candidates will require appropriate clothing, gear (e.g. head torch) and transport with full license.

Supervisor:

Bridgette Farnworth

301 - In Awe of the Night Sky

School of Psychological Sciences

Project number: 301

Project description:

Recent advances in emotion science highlight the power of awe-inspiring experiences to foster human health and well-being, and to strengthen feelings of connectedness to others and the environment. Most of this research is correlational, or conducted in virtual reality, where we can only simulate the experience of stargazing. This project will allow us to understand whether and how real experiences of the night sky create feelings of awe, and whether those experiences translate into emotional well-being or shifts in environmental attitudes. The Summer Scholar will work with Matt Crawford, Gina Grimshaw, & Yvette Perrott.

Supervisor:

Matt Crawford

302 - Supporting Trans-Tasman Collaborations in Addressing Cancer Inequities

School of Health

Project number: 302

Project description:

Inequities in cancer outcomes remain a reality in both Aotearoa New Zealand and Australia. These are present, to varying degrees, by ethnicity, by rurality, and by deprivation level, as well as across other social axes.

The conference of the Health Services Research Association of Australia and New Zealand (HSRAANZ) is being held in Wellington in December 2026. We are hosting a half-day, pre-conference workshop on the topic of Addressing Cancer Inequities on 1st December. The successful student would be involved in assisting with the design of the content of the workshop, participating in the workshop, assisting with the running of the conference, summarising the discussions held at the workshop, identifying agreed action points arising from these discussions. The expected output is a roadmap for collaboration across HSRAANZ members, and potentially wider.

The project would suit somebody who is considering a future career in health services research.

Supervisor:

Mona Jeffreys

303 - The First-Year Transition Experiences of Graduate Entry Nurses (GEN) from Student to Registered Nurse: A Scoping Review

School of Health

Project number: 303

Project description:

The First-Year Transition Experiences of Graduate Entry Nurses (GEN) from Student to Registered Nurse: A Scoping Review

The aim of this project is to complete a scoping review that explores the first-year experience and perceptions of transitioning from student nurse to registered nurse after completing a Graduate Entry Nursing (GEN) Programme including their professional journey post qualification. The summer scholar will gain experience in completing a scoping review protocol, searching and screen relevant studies, and extracting and analysing data. The summer scholar will draft the results from the scoping review findings which will contribute to a publication.

Supervisor:

Leanne Pool

307 - Building an Interdisciplinary Research Network on Mind and Brain

School of Psychological Sciences

Project number: 307

Project description:

Mahuki is the newly launched Mind and Brain Research network at te Herenga Waka - Victoria University of Wellington. It brings together researchers from the disciplines of psychology, biology, neuroscience, linguistics, philosophy, education, health, artificial intelligence and music who all seek to better understand kinds of minds. This network creates new opportunities for collaboration and for sharing skills and resources. But building an effective network requires teamwork. The summer scholar will work with the Mahuki steering committee to strengthen this new network. Potential projects include mapping the network's collaborations, building a web presence to link us to communities, creating internal channels of communication, and/or planning a research event. The ideal applicant will have an interest in mind and brain, but also in better understanding how team science works. Strong organisational and communication skills are essential.

Supervisor:

Gina Grimshaw

308 - Research Together: Building Connections in Child and Family/Whānau Research

School of Education

Project number: 308

Project description:

Research Together: Building Connections in Child and Family/Whānau Research

This project supports Whangaia, a research network at Te Herenga Waka—Victoria University of Wellington, in developing a new platform to connect families/whānau with researchers. The platform aims to identify community research priorities, improve recruitment of representative samples, and reduce inequities in research participation. The student will be supervised by Dr Burt Hatch (School of Education) and A/Prof Mele Taumoepeau (School of Psychological Sciences), working alongside Whangaia network members, community stakeholders, and technical staff. The project will deliver a summary report outlining key design, ethical, and technical considerations to inform the future development of the platform.

Supervisor:

Burt Hatch

309 - Supporting Wellingtonians to keep their cats safe at home : Analysis of online conversations

School of Psychological Sciences

Project number: 309

School of Psychological Sciences Project number: 309 Project description: Roaming pet cats are a threat to Wellington's taonga native birds. Zealandia is developing an evidence-based long-term plan to support Wellingtonians to keep their cats contained at home in a safe, enriching environment. For this project, you would collaborate with Zealandia to contribute to the evidence base for this plan by conducting a systematic analysis of online content and discussion of pet cat impacts and cat containment. This will include capturing recent developments where cat owners are considering whether to keep their cats inside due to bird flu.

Supervisor:

Anne Macaskill

401 - Crisis Translation: Developing research-informed training for police call-takers - Tennant-USRF-RMF 2025

School of Arts and Media

Project number: 401

Project description:

This is a 'research mobilization' project based on Dr Tennent's research about emergency call communication. We are working with NZ Police to 'mobilize' research findings to strengthen emergency call-taker training.

We're seeking a summer scholar to help us think creatively about how this work can be communicated in accessible, visually engaging and useful ways. You will be supervised by Dr Tennent and work alongside research assistant Gabrielle Watson. You will develop creative materials such as infographics, visual summaries, slide shows, short explanatory videos or other digital resources. We are seeking someone with experience in these sorts of media who can help us identify what sorts of materials would be most engaging and feasible. Applicants are encouraged to describe their relevant design, communication, media or digital content experience, and may include examples of their work where appropriate.

Supervisor: Emma Tennant

402 - Governing foreign bodies

School of Social and Cultural Studies

Project number: 402

Project description:

This project is part of a research programme on migration, health and governing. The summer scholar will work with supervisors to identify cases of appeals related to acceptable standard of health (ASH) declines on the Residence Decisions database housed by the Ministry of Justice. The student will summarise the appeal decisions related to an agreed condition or situation, for example, where residence is declined because of an unacceptable standard of health of a dependent of the applicant. A report will be written up based on the summaries.

Supervisor: Kevin Dew

405 - Tracing Taonga using Alexander Turnbull Library collections

School of Arts and Media

Project number: 405

Project description:

How does a taonga come to be in a museum or library? Who made it and through whose hands did it pass along the way? How do we trace a taonga's whakapapa? Provenance research follows the clues found in archives and in the objects themselves to help reconstruct these histories. It can reconnect taonga with their kaitiaki, communities and tipuna, while helping us understand how collections in Aotearoa and overseas were formed.

The Alexander Turnbull Library holds rich collections that are important for research into the history and provenance of heritage items held across Aotearoa and overseas, including those of dealers and collectors such as Gideon Mantell, Kenneth Webster, Julius von Haast and others.

The scholarship recipient will work with the Curator Māori and others in the ATL curatorial team to research the origin and provenance of selected items in the collection. They will also contribute to a Research Guide, which will give advice to other researchers undertaking provenance research. They will also work with Library and Archives staff to scope potential

collections for digitisation, and with colleagues in the Community Engagement team to write about and share their work.

Supervisor:

Charles Ferrall

501 - Designing apartments for waste prevention and resource recovery

School of Architecture

Project number: 501

Project description:

How does the design of an apartment influence what residents do with food waste, recycling and rubbish?

This project will investigate how the design and organisation of medium- and high-density homes can better support food waste prevention and effective separation of food scraps and recycling. Looking at the resident journey from food storage and preparation through to separation, temporary storage and transfer to communal collection areas or individual bins, the research will identify practical design barriers and opportunities.

Working with Auckland Council, the student will translate the findings into evidence-based design recommendations that could inform future Multi-Unit Developments (MUDs) waste guidance and the Auckland Design Manual.

Supervisor:

Emina Petrovic

701 - Earth Sciences New Zealand – Ahunuku

Project number: 701

Project description:

AHUNUKU SUMMER RESEARCH SCHOLARSHIP 2026

Earth Sciences New Zealand (ESNZ)

Explore your future. Contribute to the future of Aotearoa.

Are you a Māori student interested in science, technology, innovation, or understanding the world around us?

Earth Sciences New Zealand (ESNZ) is offering a Summer Research Scholarship Programme opportunities for tauira Māori who want to explore science that makes a difference for people, communities, and the taiao.

Rather than applying for a predefined project, you'll apply based on the science challenges and opportunities that inspire you most. Successful applicants will be matched with ESNZ scientists and research teams.

No previous research experience is required. We're looking for curious, motivated students who are keen to learn, explore, and gain hands-on experience.

Our Science Missions:

 Geological Hazards - Helping communities prepare for and respond to earthquakes, volcanoes, landslides, and tsunamis.

 Weather and Climate Hazards - Supporting science that helps New Zealand anticipate and respond to extreme weather, flooding, drought, coastal hazards, and other environmental risks.

 Energy - Advancing a secure, sustainable, low-emissions energy future for Aotearoa.

 Land and Water - Supporting healthy freshwater systems, ecosystems, and sustainable resource management.

 Atmosphere and Climate - Helping communities adapt to climate change and improve understanding of our changing environment.

 Oceans and Fisheries - Supporting the sustainable management of our oceans, marine ecosystems, and fisheries.

What We'd Like to Know:

This Summer Research Scholarship Programme is designed to excite and inspire taurua Māori about the possibilities a career in science can offer, while providing exposure to real-world research and scientific careers.

To help us get to know you, please tell us:

Which science mission interests you most and why?

What science challenges inspires you most?

What do you hope to learn or experience through this Summer Research Scholarship Programme?

What strengths, experiences, skills, or perspectives would you bring?

Please share your tribal connections, if you are comfortable. This may include iwi, hapū, marae, rohe, whānau, or where you are in your whakapapa journey.

There are no right or wrong answers. We're interested in what inspires you, what you're curious about, and where you hope to make a difference.

Successful applicants will be matched with mentors and teams across ESNZ based on their interests, skills, aspirations, and location preferences.

Students will contribute to existing research programmes, with opportunities to shape part of their summer experience around their academic interests, strengths, and future goals.

Final placement location will be discussed with successful applicants and will depend on student interests, mentor availability, and suitable research opportunities.

Your preferred placement location/s: Auckland, Bream Bay/Ruakākā, Hamilton, Wairākei/Taupō, Wellington/Lower Hutt, or Christchurch.

Student Project Queries:

Queries specific to Ahunuku projects can be sent to darcel.rickard@earthsciences.nz from Earth Sciences New Zealand.