



## Summer research scholarships 2020

***Are you planning on coming back to university next year?  
Would you like to carry out an interesting 10-week research project over summer?***

Scholarships worth \$5000 (tax free) are available for the following projects, to be based at the Centre for Sustainability, University of Otago, Dunedin. **Application details on the last page.**

### **1. Pūrākau of past South Island earthquakes, and iwi understanding of Rūaumoko and the Te Wai Pounamu whenua**

We seek a Ngāi Tahu student with creative flair and an interest in pūrākau to help develop indigenous perspectives of earthquake hazards, in partnership AF8 [af8.org.nz]. The student will have a flexible workplan that will draw on conversations with Ngāi Tahu knowledge holders, and may involve some design and creative writing. A student with a social science, fine art, communication, design or other creative background would be ideal for this project.

Supervisor: Dr Caroline Orchiston

Funder: QuakeCoRE

### **2. Using photo diaries for enhancing earthquake preparedness: an exploratory study**

This exploratory research project will investigate the use of a novel methodology – photo diaries – for understanding public perceptions of earthquake preparedness. The first part of the research will involve a literature review of past use of this methodology, following by a pilot survey to test the approach in Dunedin. A student with a social science, human geography, marketing, or similar discipline would be suitable.

Supervisor: Dr Caroline Orchiston

Funder: QuakeCoRE

### **3. Business recovery after the Southland floods: a quantitative survey analysis**

This quantitative research project will involve developing a questionnaire survey for selected businesses in Southland to investigate their recovery from the floods in January/February 2020. Fieldwork will involve travelling to three Southland communities to deliver the survey to business owners. Data collection and analysis, and completion of a short research report will conclude the project. Students with skills in quantitative research methods, with strong verbal and written communication skills are encouraged to apply.

Supervisor: Dr Caroline Orchiston

Funder: Centre for Sustainability

### **4. Carbon mitigation & sequestration options for Māori communities**

In the Kainga and Climate Change research project (2019-2024) we are working with 7 rural marae communities that are seeking to respond to the challenges of climate change. These communities want to build resilience to climate change impacts that they are already experiencing such as flooding, droughts, changing waterways and sea level rise. They also wish to explore innovative new activities for their lands, households and marae to help reduce greenhouse gas emissions. The summer project will involve a literature search on carbon mitigation and sequestration options for potential adoption by Māori communities, and the development of online resources for making this information available to communities. Students with skills in literature reviews, development of material for social media, and good written and verbal communication skills are encouraged to apply. Applicants will preferably be familiar with rural Māori communities.

Supervisor: Prof Merata Kawharu

Funder: Kainga and Climate Change project

### **5. Overcoming Barriers to a Sustainable Digital Technology Industry**

Information and communication technologies (ICTs) constitute a rising percentage of the world's electricity consumption and greenhouse gas emissions. While hardware engineers and software developers are trained to value efficiency, currently this value is more likely to translate into improvements in speed and expanded capabilities than reduced power consumption or greenhouse gas emissions. In our current climate tipping point, the performance-centric notion of efficiency needs a rethink.

We are looking for a summer researcher interested in the sustainability implications of unlimited growth in the ICT industry. In October of this year, we are planning to hold a workshop at the Centre for Sustainability titled Overcoming Barriers to a Sustainable Digital Technology Industry. The summer researcher's work will build on the conversations from the workshop. The work will involve: (1) engaging in brainstorming sessions with other scholars and experts outside academia; (2) reading academic literature; (3) writing a literature review around issues related to ICT's carbon footprint, as well as particular aspects which might make it easier or harder to improve ICT's carbon footprint (regardless of the application); and (4) possibly some transcription work.

We welcome applicants interested in the technical aspects, social aspects, or a combination of both. We also welcome applicants with specific interests in the agritech industry and how to think about sustainable ICT in that field. Desired skills: familiarity and interest in the field of science and technology studies; technical skills or social science skills related to the topic; desktop/online research skills; literature review skills; familiarity with qualitative or quantitative methods and analysis; written and oral communication skills. Preferred interests: energy, sustainability, social science, agriculture and food systems.

Supervisors: Dr Dawn Nafus & Dr Karly Burch

Funder: Centre for Sustainability

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### INTERESTED IN APPLYING FOR ANY OF THESE?

#### ELIGIBILITY

- The Summer Research Scholarships are open only to students who are returning to study at a New Zealand or Australian University in the following year.
- Students must not be receiving alternative scholarship support for the same project or any other project over the same time-frame. Students may hold only one Summer Research Scholarship for the period.
- Students who currently hold a University of Otago Doctoral or Master's Scholarship are not eligible for a Summer Research Scholarship.

#### TENURE

The Summer Research Scholarships take place over the November to February period, and are for 10 weeks each. Time off for holidays during this time can be negotiated.

#### SCHOLARSHIP VALUE

\$5,000 to be paid in 3 instalments with the final \$500 paid after the project report or other outputs have been submitted.

*Note all scholarship holders will be expected to make a short presentation of the results at the Centre for Sustainability's end-of-summer student scholarship research symposium.*

#### TO APPLY

Please send your CV and academic record, together with a cover letter explaining your suitability for the project, to [centre-sustainability@otago.ac.nz](mailto:centre-sustainability@otago.ac.nz). Shortlisted candidates will be interviewed and you will be notified of decisions shortly after that.

**Closing date for applications: Friday 2 October 2020**

**Start date if successful: November 2020**  
**(exact start date to be negotiated depending on your examination commitments etc)**