

Summer Studentships 2026/2027

PROJECT TITLE:

Biostatistics Summer Studentship: Building Collaborative Expertise

AIM:

This Summer Student scholarship is designed to encourage and provide development for someone interested in a future career in biostatistics, working to use statistical methods for applied health research questions.

This opportunity will appeal to students with a desire to develop and expand their statistical analysis skills, and particularly those who are motivated to learn how to improve the quality of health-related research, from design stages right through to publication.

At the University of Otago, biostatisticians contribute to refining research questions, research design and research method expertise as members of research teams within the Health Sciences. This Biostatistics Summer Studentship at the University of Otago, Wellington, will contribute advice to a number of projects across many applied topics, supporting fellow summer students, in conjunction with UOW's team of biostatisticians. This breadth of project exposure would be a great opportunity for students who are considering a career in a health research setting.

This summer, this studentship includes the opportunity to collaborate on an HRC funded project ("the project") under the supervision of Dr Alice Kim (Biostatistics Group, UOW). The project aims to examine the pattern of inequity and the impact of environmental factors on enteric infection hospitalisations. This part of the studentship will involve a scoping review of time series methods used to analyse associations between climate patterns and foodborne infectious diseases.

METHODS:

The Biostatistics Summer Student will work with the UOW Biostatistics Group to support other summer students at UOW who are working on applied quantitative projects (roughly half of the summer student group each year). These projects range from biomedical research, through clinical studies of people engaged in the health system, and on to population-level studies of public health.

The work within this studentship includes a combination of advice on project design, data analysis planning, and some hands-on assistance with statistical analysis (typically supporting students to complete their own analysis). These studies are typically observational designs and/or analysis of existing datasets, and as summer student projects can be handled using relatively standard statistical methods. The Summer Student will work with the Biostatistics Group to advise on these methods, steer the other summer students and guide them towards appropriate learning resources, and give hands-on input into some analyses.

The project work will involve planning the review search and critically assessing different statistical methods used to analyse the impact of environmental factors on rates of enteric infections. The student will be guided in conducting the review in accordance with the PRISMA guidelines and synthesising review findings into a summary table/figure.

RESEARCH SIGNIFICANCE:

Every year the UOW campus supports many student researchers to complete projects on health research topics. About half of these projects have quantitative designs and use statistical methods, but students and supervisors benefit greatly from having biostatistical input into these projects to improve the statistical rigour, starting from the study design phase through analysis to interpretation.

The scoping review for the project will contribute to the development of future research pipeline with findings used to plan investigations incorporating long-term climate projection models to epidemiological studies of enteric infections in Aotearoa New Zealand.

STUDENT'S ROLE AND EXPOSURE TO SCIENTIFIC METHOD:

The Biostatistics Summer Student will have the opportunity to contribute to several projects and develop the following skills which are critical to collaborative work in biostatistics:

- Work with applied research project students to help them to address the right research questions
- Consider the relevance and effectiveness of statistical methods for addressing specific research questions
- Ability to provide clear, coherent and practical statistical advice so that researchers can draw appropriate conclusions that match their research questions
- Advising on statistical computing methods (typically a mix of R and point-and-click interfaces)
- Learn from working with other biostatisticians
- Developing good communication skills in a collaborative working environment

Note that the summer students are expected to complete their own analyses: this role is not intended to take responsibility for completing hands-on analysis for such projects, though it does include guiding students to be able to complete that analysis.

For the specific project work, the student will be completing methods-related review activities and will gain experience in translating research into practice and policy recommendations.

RELEVANT PREVIOUS EXPERIENCE FOR STUDENTS (Education or Research):

The ideal candidate would meet the following criteria:

Essential:

- Background in statistics/biostatistics/data science (with or without experience in a health research setting)
- Interested in applied work in a health setting disciplines
- Keen to learn how to communicate statistical concepts and interpretation to non-statistician researchers
- Skills in using statistical software, and ability to pick up some additional software navigation skills in supporting students completing their own analysis (e.g. supporting students doing basic analysis in a point-and-click environment)

Useful skills: (these can be developed throughout the studentship)

- Managing workflow across several small projects
- Knowledge of data storage/stewardship in a health research context
- Collaboration skills for working with people across a range of topic areas and levels of statistical expertise
- Learning to balance practical scope of advice with sufficient statistical rigour (esp. in the context of projects with a short timespan)

Main supervisor:	Alice Kim	
Email address:	alice.kim@otago.ac.nz	
Other Supervisor/s:	James Stanley	
Host Department:	Biostatistics Group, Dean's Dept, University of Otago Wellington	
Location:	Wellington Campus	
	Can students work remotely?	No