

INFORMATION FOR CANDIDATES

for appointment as

RESEARCH FELLOW

Fixed term for one year

CENTRE FOR INTERNATIONAL HEALTH

Division of Health Sciences

THE UNIVERSITY OF OTAGO

The University of Otago was established in 1869 and is New Zealand's oldest university. It has an international reputation for excellence in education and research. The University currently has over 20,000 students, spread over a wide range of disciplines.

Based in Dunedin, the University also has specialist campuses in Christchurch, Wellington, and Invercargill, as well as a centre in Auckland. The University has four academic divisions – Humanities, Sciences, Health Sciences, and Commerce (also known as the School of Business) and is the most research-intensive university in New Zealand. It is also the top-ranked university for research quality. There are a variety of links with the city and its business community, and the relatively compact campus contributes to easy relationships between departments.

The University teaching year generally ranges from late February to the end of November. The teaching period is broken into two 13-week semesters. A Summer School is held for six weeks during January and February.

Further information about the University is available on the University of Otago [website](#), including the University's mission statement and strategic direction. Key statistics relating to each Division and to the University can be found in the Annual Report. Other useful sources of information are He Kitenga (an annual report on research) and the University of Otago Magazine.

THE CITY OF DUNEDIN

Dunedin is a university city of about 130,000 people, providing a vibrant environment for academic staff. The city is the southernmost of New Zealand's main centres and is attractively situated at the end of a long harbour, within easy distance of mountain, lake, fiord, and coastal country of outstanding natural beauty. A number of ski fields are also located nearby, and ample opportunity exists for the pursuit of other outdoor activities including fishing, tramping, sailing, and rafting.

Dunedin offers excellent infrastructure, a temperate climate and many of the amenities and cultural richness usually found only in much larger urban centres, while still retaining its traditional friendliness and ease of getting around. The city provides a good quality of life with moderate living costs.

For further information, click [here](#).

THE DIVISION OF HEALTH SCIENCES

The University of Otago is comprised of four teaching Divisions (Commerce, Humanities, Health Sciences, and Sciences). The Division of Health Sciences comprises seven Schools: the four Schools of the Otago Medical School (Dunedin School of Medicine, University of Otago, Christchurch, University of Otago, Wellington, and Otago School of Medical Sciences), the Faculty of Dentistry and the Schools of

Pharmacy and Physiotherapy. The executive head of the Division is the Pro-Vice-Chancellor. All Schools/Faculties are headed by a dean (who is the executive head of the school) and report to the Pro-Vice-Chancellor (Health Sciences).

THE CENTRE FOR INTERNATIONAL HEALTH AND THE OTAGO GLOBAL HEALTH INSTITUTE

The Centre for International Health is based in and works across the Division of Health Sciences. The Otago Global Health Institute (OGHI) is an official University of Otago Research Centre with >140 members and the goal of fostering multi-disciplinary global health research with partners. We facilitate and promote research to contribute to the understanding and improvement of health in under-resourced countries, while focusing on postgraduate training and strategic mentorship of leaders.

The Centre hosts two Chairs:

- [McAuley Chair in International Health](#) supported by the Sisters of Mercy.
- Professor of Medicine, Pathology, and Global Health.

The Centre is led by Professors Philip Hill (McAuley Chair of International Health) and John Crump (Professor of Medicine, Pathology, and Global Health). Professors Hill and Crump are New Zealand medical graduates with specialty training in infectious diseases, microbiology, and public health, and advanced research training with the British Medical Research Council, the London School of Hygiene and Tropical Medicine, the US Centers of Disease Control and Prevention, and Duke University.

From our New Zealand base, we partner on projects in Africa, Asia, and the Pacific. We are involved in multi-million-dollar projects with:

- The Bill & Melinda Gates Foundation.
- The US National Institutes of Health.
- The Department for International Development.
- The European Commission/Union.
- The Global Fund.
- The Canadian Institutes of Health Research.
- Research Councils United Kingdom.
- The Australian National Health and Medical Research Council.
- The Wellcome Trust.

Our professors serve on committees of several of these organisations, and the World Health Organization.

FUNCTIONS OF THIS ROLE

TB vaccine development is hampered by fundamental gaps in our understanding of the immune response that an effective TB vaccine needs to induce. The Bill & Melinda Gates Foundation's Consortium for Tuberculosis Vaccine Discovery (CTVD) brings together researchers from across the TB basic science spectrum, along with epidemiologists, to help make breakthroughs in this regard. While many groups have conducted reasonably large, and even multi-site and multi-country, field studies with field-lab linkage, these have tended not to be connected to each other and there has been no attempt to explore global connectivity in relation to sample collections. There is an opportunity to explore building more global connectedness of data and exploitation of field study sample collections. Epidemiological and Modelling expertise could ultimately help with the strategic selection of samples on a large scale for investigations on a scale which has previously not been possible. Resulting data analysis could also benefit from large population-based analytical expertise within CTVD.

This project will characterise field-lab link studies in TB over the last 20 years in relation to samples and data of relevance, gauge investigator willingness to engage in more global collaboration around these resources and explore possibilities for a regularly updated user-friendly inventory to serve the global research community in solving fundamental questions.

The person will be based in Dunedin, New Zealand, with close mentorship by Professor Philip Hill, Co-Director of the Centre for International Health and Otago Global Health Institute, who is an expert in tuberculosis field-lab link studies especially in low-resource settings. The work will involve interaction with CTVD researchers in a range of international locations.

A person with a doctoral degree in a field related in the project would be suitable. Experience and expertise in aspects of field-lab link studies that involve bio- and data archiving are required. Clinical experience and training is not required. The successful applicant will be highly motivated and able to work independently, enjoy working with data, the literature, and synthesising large amounts of data, have excellent written and oral presentation skills, willing to achieve deadlines, be able to engage and communicate effectively with global collaborators, have sound organisational and communication skills, and be attentive to detail. The position would suit someone seeking experience while in transition to becoming an independent researcher in global health or infectious diseases, offering an extraordinary opportunity to build global tuberculosis research connections for the next career step.

MAIN OBJECTIVES/KEY TASKS

Research

- Based in Dunedin, New Zealand, engaging with collaborators worldwide.
- Literature review, with snowballing data gathering through the publications identified and direct contact with investigators, to characterize the 'landscape' of TB field-lab link studies globally, of possible relevance.
- Develop and implement a standardised tool to identify exactly what data and samples are potentially available and gather critical information in consultation with CTVD lab groups, to inform strategy around these. Critical information will be defined by consensus with CTVD member and Gates CTVD leadership. Implementation of the tool will yield a dataset documenting available data and samples from the investigation.
- Formally interview those who lead or have led the studies to assess ability and willingness to provide reliable details of available data and samples and collaborate globally.
- Through consultation of key stakeholders develop and finalize a template term of reference for long term engagement with those in charge of the bioarchives.
- Identify and propose options for establishing a 'living inventory' of studies and data and samples which can be added to with new studies over time. This will include indicative costings of each option. Consult with potential users of such an inventory, including CTVD researchers, but also other researchers globally who conduct relevant research. CTVD researchers will be the primary source of design input of options.

Service to the University and collegiality

- Demonstrate and foster collegiality with international collaborators.
- Participate in quality assurance activities.
- Engage with Centre for International Health postgraduate student and academic staff activities.
- May contribute to external academic and professional activities.
- May contribute to continuing education in the professional field.

RELATIONSHIPS

Directly responsible to:

- Professor Philip Hill, Co-Director, Centre for International Health.

Functional relationships with:

- University staff.
- Staff of the Centre for International Health and Division of Health Sciences.
- Investigators and collaborators on projects that are the focus of the project.
- Global typhoid fever subject matter experts and researchers.

EXPECTED OUTCOMES

- 'Landscape analysis' of TB field-lab link studies of possible relevance to globally connected laboratory studies of stored samples.
- Standardised tool to identify exactly what data and samples are potentially available, dataset of currently available samples, and gather critical information in consultation with CTVD lab groups.
- Analysis of study PI ability and willingness to provide reliable details of available data and samples and collaborate globally.
- Develop a template term of reference for long term engagement.
- Options analysis and proposal, with indicative costings, for establishing a 'living inventory' of studies and data and samples.

PERSON SPECIFICATION

- A Doctoral degree in a field related to the project with substantial experience in field-lab link research.
- Appropriate research experience and publications.
- Experience in tuberculosis research with understanding of the needs and potential of bio- and data- archiving in field-lab link studies to facilitate new analyses to make scientific breakthroughs.
- Experience on projects that involve low-resource settings.
- Ability to work effectively as a member of a team and independently.
- Ability to maintain a professional approach with both staff and students while under pressure.
- Evidence of collaborating with students and staff from differing academic and cultural backgrounds and across multiple institutions.

DATE OF APPOINTMENT

It is hoped that the person appointed will take up the position as soon as possible. Candidates should state the date on which they would expect to be free to take up the appointment in their application.

TENURE

This is a full-time (1.0 FTE), 1-year fixed-term appointment.