

Scholarships

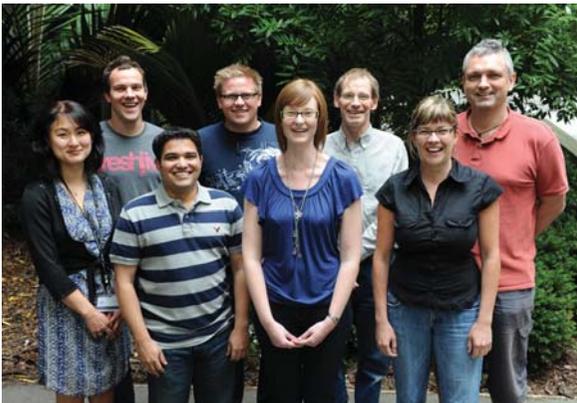
The GeoHealth Laboratory provides scholarships to suitably qualified postgraduate students who wish to undertake a Masters or PhD degree in the areas of Health Geography, Health and GIS and/or Spatial Epidemiology.

A number of scholarships are available each year. For Masters students, a full scholarship includes domestic fees. For PhD students, a full scholarship includes full fees and an annual stipend. For more information, please visit our website (www.geohealth.canterbury.ac.nz).

To apply, please send a brief CV and covering letter outlining your area of research interest to Simon Kingham. It may be helpful to discuss your research ideas with a staff member before submitting your application.

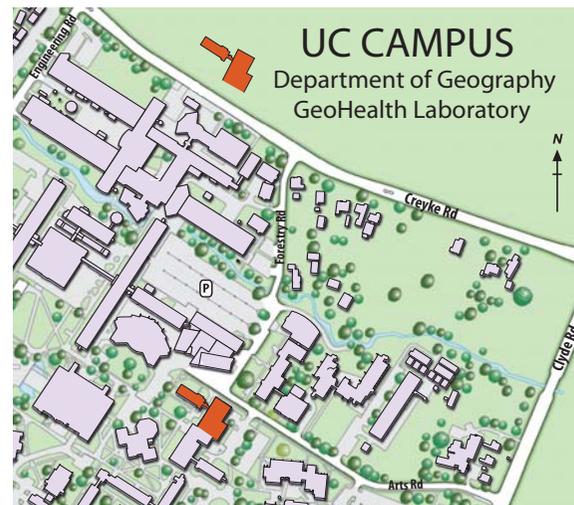
Email: simon.kingham@canterbury.ac.nz

Members of the research group at the GeoHealth Laboratory.
Clockwise: Ed Griffin, Matt Willoughby, Peter Day, Simon Kingham, Kyoko Fukuda, Ibrahim Alkhaldy, Catherine Tisch and Amber Pearson.



Research Staff

Assoc. Prof. *Simon Kingham* (Director, Geography, UC)
Assoc. Prof. *Jamie Pearce* (Director, University of Edinburgh)
Prof. *Ross Barnett* (Geography, UC)
Dr *Greg Breetzke* (Geography, UC)
Dr *David Conradson* (Geography, UC)
Dr *Arin Basu* (Health Sciences, UC)
Peter Day (GeoHealth Laboratory, UC)
Dr *Amber Pearson* (GeoHealth Laboratory, UC)
Ed Griffin (GeoHealth Laboratory, UC)
Catherine Tisch (GeoHealth Laboratory, UC)



Cover photo: Kuaotunu, Coromandel Peninsula, New Zealand (Marney Brosnan)

GeoHealth Laboratory

Department of Geography
University of Canterbury - Te Whare Wananga o Waitaha
Private Bag 4800,
Christchurch 8140, New Zealand
p: +64 3 364 2900, f: +64 3 364 2907
e: admin@geog.canterbury.ac.nz
www.geohealth.canterbury.ac.nz



'Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.' – WHO, 1948

The GeoHealth Laboratory

‘Creating a fairer society is fundamental to improving the health of the whole population.’

‘A debate about how to close the health gap has to be a debate about what sort of society people want.’

— Marmot Review report

A collaborative research team

The GeoHealth Laboratory, established in early 2005, is a joint venture between the Department of Geography, University of Canterbury and the New Zealand Ministry of Health. The aims of the collaboration are to build a strategic partnership between the parties around health geography, spatial and social epidemiology and Geographic Information Systems (GIS); and to increase research capacity and research outputs in the health and GIS academic sectors. The collaboration offers the unique opportunity to translate research into health-relevant policy to improve the health of all New Zealanders. We are a team of 15 academic staff, researchers and graduate students with expertise in epidemiologic methods, exposure assessment, spatial analysis, management of large geo databases, creation of geographic covariates for analysis, and display of geographic data. We acquire, store, analyse, and display geographic and health data.

Policy-relevant research focus

The GeoHealth Laboratory undertakes applied research which focuses upon the ways in which the social and physical environments interact to influence health outcomes, health behaviours, and health disparities. The intention is to conduct research to address areas of policy concern such as health inequalities and the influence of neighbourhood community resources or environmental contaminants on health outcomes. The findings of the GeoHealth Laboratory are then used by other researchers, health officials, policy analysts at the Ministry of Health, and environmental health professionals for decision-making, monitoring and evaluation and designing legislation.

Advanced methods

Health and ill-health is largely determined by environmental factors (including the social, built and physical environment) which have important spatial dimensions. We use spatial modelling capacities offered by GIS to understand the spatial variation in the incidence of disease, health outcomes and its covariation with environmental factors and the health care system.

We analyse spatial data to understand the distribution and diffusion of disease and its relationship to environmental factors, which aids in a broader understanding of disease etiology, disease control and prevention, and health promotion. We also evaluate many questions concerning the provision of health care which are related to space. Health problems vary by location and so do the needs of people. We also use GIS to help resolve health care issues related to equity, resource allocation and targeting services. Being based at the University of Canterbury, we are also able to take advantage of the Super Computer (UCSC) facility, being the first research institution in the southern hemisphere to have a Blue Gene supercomputer.

Research partners

The Lab has rapidly emerged as a nexus for discovery, and understanding of spatial health research in New Zealand and beyond. A number of academic and research staff are associated with the GeoHealth Laboratory work in collaboration with Ministry of Health officials on a range of research projects concerned with the social and environmental determinants of health and healthcare. We collaborate with other departments and research groups across the University of Canterbury campus and beyond, including Health Sciences, the Geospatial Research Institute, the Super Computer facility, Massey University’s Centre for Public Health Research and the University of Edinburgh.

In addition, the high standing of the research group has attracted a number of international visitors with a strong interest in the health geography, including academics from the UK, the USA and Canada. These universities include: Portsmouth, St. Andrews, Sheffield, East Anglia, North Carolina, Queens and Waterloo.

Research Areas

The research staff and students associated with the GeoHealth Laboratory are working on a range of health and health-related research projects. Our current work considers how various characteristics of local neighbourhoods and communities influence health outcomes, health-related behaviours, and resilience. These projects include the effect of community resource access (such as access to parks, food stores and health care provision) on health inequalities; the influence of socioeconomic deprivation and rurality on suicide rates; environmental justice and air pollution; and the importance of income inequality and macro-level process on inequalities in life expectancy.

Some key research projects include:

- Neighbourhoods and health
- Built environment and health
- Air pollution and health
- Social inequality and smoking
- Social and spatial dimensions of cancer incidence and survival
- Environmental health indicators
- Spatial - temporal modelling of road traffic accidents
- Crime and health
- Healthy, resilient communities
- Obesogenic environments
- Geographic disparities in uptake of smoking cessation programmes in New Zealand