



CHRISTCHURCH
WINTER 2014

University of Otago, Christchurch **Newsletter**

Dean's Welcome

Welcome to the winter edition of our Community Newsletter.

Almost four years after the first major earthquake hit Christchurch, we are still being affected in myriad ways. Ongoing repairs to homes, roads and infrastructure – among other disruptions – continue to place stress on our community, however resilient and positive we are.

Our world-renowned longitudinal researcher Professor David Fergusson has just published a paper on the impact of quakes on mental health. For more than 30 years Professor Fergusson has collected data, such as mental health details, on the same group of Cantabrians born in the early 1970s. By chance, just over half of this group were in Canterbury for most of the magnitude 6 plus quakes, providing a unique opportunity to study how they were affected compared to participants not here. A story on his findings is on page three of this newsletter.

We continue to host conferences and health events where the community are invited to visit us and hopefully learn more about health or research. Recent examples were the Simulation Learning conference, as well as the very well-attended display by Beat Bowel Cancer Aotearoa, featuring a giant blow-up colon people could walk through.

This newsletter contains a list of upcoming events, including some on postgraduate study, cancer and arthritis. We would be happy to receive suggestions from you about events. Email Kim Thomas (kim.thomas@otago.ac.nz) with your ideas.

Regards
Peter Joyce



Did you see this?

- The Press newspaper item on Beat Bowel Cancer Aotearoa's giant colon on display in our foyer during June for Bowel Cancer Awareness Month.



The Health University in Christchurch City

Young doctor wants to contribute to advances in medicine

Intelligence paired with compassion earned Christchurch-trained doctor Nick Douglas a prestigious scholarship at Oxford University

Douglas did his final years of medical school at the University of Otago, Christchurch. He applied for and was successful in gaining one of three prestigious Rhodes Scholarships awarded annually to New Zealanders. The scholarship funds students' postgraduate study at Oxford University.

In England, Douglas undertook a Masters of Public Health. His focus was on epidemiology, which is the study of how often diseases occur in different groups of people and why. He continued his study there by completing a PhD on malaria in developing countries.

"I was attracted to this area because malaria kills a million people a year, mostly disadvantaged people. It's a preventable disease but not much money has been spent on it. I felt like even a small discovery in this area could make a big difference globally."

He studied malaria in the Papua population for his PhD.

Douglas has now returned to Canterbury with his wife Zoe, who is also a doctor, and their infant son Arthur. He is working at Christchurch Hospital.

"In the future I would like to combine research with clinical work. Research is satisfying and interesting and is the driver of advances in medicine. It's nice to be at the heart of that."

Douglas' brother Tom was also awarded a Rhodes Scholarship to study Philosophy.



Dr Nick Douglas outside his research facility in Papua.

"In the future I would like to combine research with clinical work"

Events calendar

WANT TO UNDERTAKE POSTGRADUATE STUDY IN HEALTH?

Get information about courses offered by the University of Otago, Christchurch (UOC) in 2015.

Wednesday August 13 and Thursday August 14

From 11am to 3pm both days in UOC's ground floor foyer.

OPEN DAY AND LECTURES ON CANCER

To mark the Cancer Society's Daffodil Month. Short, user-friendly lectures.

Thursday August 28

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| 2pm – 3pm | Laboratory displays and posters in the UOC foyer. |
| 3pm – 4.10pm | How can a healthy lifestyle help cancer patients? |
| 4.10pm – 4.30pm | Tea break |
| 4.30pm – 5.15pm | What is being done in Christchurch to support cancer patients? |
| 5.15pm – 6pm | What's new in the clinic for cancer patients? |

LECTURES ON ARTHRITIS

To mark Arthritis Awareness Month.

Tues 23 September, 7pm to 8pm

Series of short lectures on "Employment matters: working with arthritis".

For more information call 0800 663 463.

Thurs 25 September, 7pm to 8pm

Series of short lectures on latest research into Arthritis: – Gout, smoking in rheumatoid arthritis, ankylosing spondylitis, genetics and gout.

All events held in the University of Otago, Christchurch, building at 2 Riccarton Ave.

For more information visit: otago.ac.nz/christchurch/news/events or call Kim Thomas on 027 222 6016.



Community's important role in earthquake resilience

The Canterbury community's support for families affected by earthquakes may have minimised the disaster's effect on mental health.

Professor David Fergusson and his Christchurch Health and Development Study (CHDS) team recently published the first paper in a series on the psychological impact of the earthquakes. Study participants were a group of almost 1000 people aged in their early 30s.

They found Cantabrians who experienced serious adversity, both the earthquake event and following consequences, were 40 per cent more likely as those living outside the region to have at least one of several kinds of disorder including: major depression, post-traumatic stress disorder, anxiety or nicotine addiction.

However Professor Fergusson says the outcome could have been worse.

"A key consideration is the well-organised and responsive way in which the Canterbury community responded to these disasters with widespread support for those families affected by the disasters. This is likely to have acted as a protective factor in mitigating the consequence for those with high levels of exposure to earthquake-related adversity."

Professor Fergusson is in a unique position to study earthquake effects. His study, running for more than 35 years, has in-depth details on participant's mental health. Just over half of participants were in Canterbury for the majority of earthquakes, allowing comparison with those not there.

The research was funded by the Health Research Council, Cure Kids, the Canterbury Medical Research Foundation and the New Zealand Lottery Grants Board.

Christchurch geneticists get access to tiny, super DNA tester

Christchurch geneticists have won the right to trial what is arguably the world's smallest and most efficient DNA analyser.

Professor Martin Kennedy and his colleagues are among a select group of researchers worldwide given the hand-held DNA sequencer. The tiny device can analyse DNA 500 times faster than the expensive, suitcase-sized machine currently used by Professor Kennedy's laboratory.

The 'MinIon' machine was developed in the United Kingdom. Scientists applied, then had to pass a selection process to test the machine and provide feedback before the units are released for sale.

Professor Kennedy says the machines are novel because of their small size, ability to analyse long strands of DNA, and the technology used in them.

"There are other machines on the market which can do the same thing but they cost \$1 million each. We really hope these simple-to-operate, little machines will allow more people to access the technology for a lot less money."



Professor Martin Kennedy and Dr Simone Cree with the large machine currently used, and the tiny MinIon analyser.

Crucial funding welcomed

The Health Research Council recently recognised the importance of key University of Otago, Christchurch, research projects by granting them more than \$8 million in combined, ongoing funding.

The research projects are:

- Trialling a suite of new tests for heart failure and related conditions. (Programme grant for \$4,980,858, led by Professor Mark Richards).
- Testing a potentially, better and safer treatment for osteoarthritis pain. (Project grant for \$1,190,921, led by Dr Ben Hudson).

- Implementing a programme to measure the impact of Legionnaire's disease nationwide. (Project grant for \$999,467, led by Professor David Murdoch).
- Using genetics and brain scanning to better understand which Parkinson's disease patients develop dementia. (Project grant for \$1,178,804, led by Professor Tim Anderson).
- Examining a key brain network to understand its role in dementia in Parkinson's disease patients. (Emerging Researcher First Grant for \$149,943, led by Dr Tracy Melzer).

For more details see media release at www.otago.ac.nz/christchurch/news

Technology aids health professionals' learning



Conference attendees participate in a simulated scenario, using a mannequin.

Latest developments in simulation-based learning were shared at the recent New Zealand Association for Simulation in Healthcare annual meeting held at the University of Otago, Christchurch. More than 90 delegates from Australia and New Zealand attended the two-day event, learning how simulation-based learning and research can improve the quality and safety of healthcare delivery. Simulation-based learning means students and health professionals such as paramedics, doctors, nurses and midwives can practise scenarios using advanced technology such as mannequins before using these skills on real patients. The event was co-hosted by the Canterbury District Health Board.

Exciting start for new Canterbury Medical Research Foundation boss

Tangible. Real. Exciting.

These are words used repeatedly by Canterbury Medical Research Director (CMRF) Kate Russell as she describes both her new job and medical research in Canterbury.

Russell was CEO at Cystic Fibrosis New Zealand for a decade. Prior to that, she worked in numerous fundraising and marketing roles in community organisations. She decided a few months ago to take on the top job at CMRF because it offered so many opportunities to make a difference.

CMRF provides funding to Canterbury-based health researchers including those at the University of Otago, Christchurch.

"Here in Canterbury we have some of the brightest minds in the world. The work being done is so exciting and many people don't know a lot about it. I want to support these researchers so they can get on and do their jobs."

"Everybody should be doing what they are good at. A lot of researchers' time is spent on funding applications and administration. I believe we could be better at knitting the right people together with the right resources," Russell says.



*"Tangible.
Real.
Exciting."*

Russell says she has a lot of admiration for the work of University of Otago, Christchurch, researchers.

"There's a real depth of health research being done there. The commitment the University of Otago has to research is admirable. I can only hope we (CMRF) can do more to help support its goals."

Healthier Future Appeal

Be part of Christchurch's healthier future

See how to foster some of the best and
brightest students and researchers.

otago.ac.nz/christchurch