He Kete Kōrero

UNIVERSITY of OTAGO
Te Whare Wānanga o Otāgo
NEW ZEALAND
WELLINGTON

University of Otago, Wellington Newsletter | Winter 2016

Dean's welcome

Welcome to *He Kete Kōrero*, the University of Otago, Wellington's newsletter. It has been a busy year so far with students, staff and graduates excelling in their work and achievements, both in Wellington and further afield. We were pleased to hear of the $97 million boost to health research spending announced by the Government in May. Many of our researchers were successful in the Health Research Council 2016 round, and we are excited about programmes of work across the campus and collaborating with others in Wellington and the wider New Zealand community.

The recent University of Otago economic impact report showed that in 2015 we contributed $50.5 million to Wellington's economy. There are also many social and cultural benefits of the University of Otago's presence in Wellington that were not quantified in the report. We are proud to be the city's medical school, and of our role in making a difference to the health of New Zealanders, providing excellence and leadership in health research and teaching.

This newsletter provides just a few recent highlights and examples of our work, but you can find more details about the latest research and what we do at otago.ac.nz/wellington.

Ngā mihi nui, nā

Sunny Collings
Dean and Head of Campus
University of Otago, Wellington

Research that makes a difference

Several of our Wellington researchers gained funding from the Health Research Council (HRC) of New Zealand annual funding round in June to support world-class studies aimed at improving New Zealanders' health and well-being:

One programme will model preventive interventions to improve health and social outcomes. As life expectancy increases, health questions increase in number and complexity. Things like how do we increase productivity and reduce welfare payments? How do we get a healthier population? Researchers at the Burden of Disease Epidemiology, Equity & Cost-Effectiveness Programme (BODE[3]) want to find out how preventive interventions can contribute to a healthier working age population. Public Health **Professor Tony Blakely** will lead a team focusing on dietary and physical activity interventions, and will assess these and other interventions specifically for populations with a particular risk of cardiovascular disease. They will look at how these preventive interventions contribute to a healthier working-age population and which interventions increase quality of life among older people. This research aims to inform decisions on how to best spend limited health resources in a way that improves health outcomes for New Zealanders.

Another major programme, *Whanau Manaaki,* aims to tackle the social and health disadvantages that Māori pregnant women and their tamariki (children) face up to age five, which is a crucial window for good health outcomes and long-term achievements of children as adolescents and adults. Led by **Associate Professor Beverley Lawton** (Obstetrics and Gynaecology), *Whanau Manaaki* will put Māori pregnant women and children at the centre to explore the health care delivery system and determinants of health. The three projects in the programme are: a community intervention that will integrate maternal and child care services into one care pathway; and two projects which explore preterm delivery (prematurity), a major contributor to disability and death for Māori.

The eyes have it: making science relevant

We work with local schools to get younger children interested in hands-on science. Recently nearly 300 children (aged 11-13) from South Wellington Intermediate School visited the pathology department over two days to discover how science/pathology can help us to diagnose, research and understand disease. The students looked at preserved healthy hearts, lungs and brains and other organs, as well as diseased specimens in the Pathology Museum. For many, the highlight of the visit was the chance to dissect eyeballs. View video taken on the day here: vimeo.com/173858619

At the forefront of neonatal research

Dr Maria Saito Benz monitors oxygen delivery using NIRS, while Ruby helps out with the study.

The neonatal research team in the Wellington Neonatal Intensive Care Unit (NICU) is using new technology to improve understanding of oxygen delivery to the brain in premature babies.

Making sure that the brain gets an adequate and steady supply of oxygen is crucial for vulnerable babies in the neonatal unit. By improving understanding of how oxygen delivery to the brain is controlled, the team is developing new ways to support the health and development of even our smallest and sickest babies.

"For the first time we can 'see' the oxygen levels in a baby's brain in real-time, using Near-Infrared Spectroscopy (NIRS) a new technology that monitors oxygen flow to the brain,"says Dr Max Berry, from the Paediatrics Department of UOW.

"We have a series of observational studies underway monitoring oxygen delivery to the brain, starting with one for anaemic infants. Anaemia is a very common problem for preterm infants, but there is huge variation in the way they are treated. This study looks at effects on oxygen levels in a baby's brain and other organs when anaemia is treated with blood transfusion. Another project with extremely preterm babies will look at how brain oxygenation is regulated in the tiniest of our patients during the first week of life – the 'transition period', when every effort to maintain stability in our smallest babies can make a huge difference to the rest of their lives. Once the study results are complete, we'll share them with the wider neonatal community. We thank the Neonatal Trust, (neonataltrust.org.nz), dedicated staff in Wellington NICU and the whole community of past and present families, for helping make this research possible," says Dr Berry.

2015 Māori Health Profiles now in te reo Māori

I whakaputaina he Tirohanga Hauora mō ngā Poari Hauora a-Rohe i roto i te reo Māori

During Māori Language Week, Te Wiki o te reo Māori, we released the 2015 Māori Health Profiles (otago.ac.nz/mhp2015 – snapshots of Māori health for the 20 District Health Boards) in te reo Māori, a first for us.

The 2015 Māori Health Profiles were researched and compiled by Te Rōpū Rangahau Hauora a Eru Pōmare, at UOW. Commissioned by the Ministry of Health, and translated by Piripi Walker, they focus on the health status of Māori, and reveal where there are inequalities compared to non-Māori.

"It's important to have this information in te reo Māori, because the people and communities most affected must have the statistics in their own language, assisting reo speakers to engage with Māori health data and advocate for the issues affecting their communities," says Bridget Robson, Associate Dean Māori. See more here (in Māori and English): otago.ac.nz/wellington/news/otago616874

Matariki

We also celebrated Matariki on the University of Otago, Wellington campus with a week of activities, including evening star-gazing with telescope, mobile Smartdome planetarium and an evening dinner and guest speakers.

UOW Data Lab

In July the Government Statistician Liz MacPherson officially launched the UOW Data Lab. A team led by June Atkinson developed the UOW Data Lab, a remote access secure facility for researchers to access massive amounts of data and information needed for research. It is one of just 18 such data laboratories in New Zealand, connected to Statistics NZ's Data Laboratory. Remote data labs are becoming increasingly essential in the era of 'big data'.

The launch was a significant milestone and the culmination of 20 years of engagement by a dedicated team of researchers, working closely with Statistics NZ. The speakers emphasised the importance of data-based research to inform policy, as well as keeping in mind the people behind the statistics. The UOW Data Lab will boost our research and ultimately benefit the health of all New Zealanders. The UOW Data Lab launch presentations can be watched via this link: connect.otago.ac.nz/p8r4hc7osw3/

L to R Sunny Collings, Len Cook, Liz MacPherson, Peter Crampton, June Atkinson, Clare Salmond, Sandra McDonald and at back (L to R) John Upfold, Mark Sowden.

For more info:
otago.ac.nz/wellington/research/tools/otago619835.html

Maternal and Infant Mental Health conference

We are a central hub for health research, and our conference centre is becoming very popular for health related seminars and meetings. We were delighted to host the first NZ Maternal and Infant Mental Health Conference in May as part of a worldwide focus on maternal mental health issues.

"The event was a huge success bringing together and delivering training to perinatal mental health practitioners. The national conference attracted 160 attendees – medical and mental health clinicians from across the country, as well as mothers, babies and community and primary health providers," said Dr Mark Huthwaite from UOW and the Maternal Mental Health Service. Feedback was very positive with attendees saying they would be able to use the knowledge gained to take back into the community. One said: "I come across mental health and domestic issues all the time in my work in communities. Knowledge from this conference has given me more confidence in my work working alongside mothers and communities."

Additional efforts by the team with a movie fundraiser *(The Maiden's Blush)* in conjunction with the conference raised funds for Post Natal Distress Wellington.

Success in rural programme

We also work closely with our communities, such as in the rural interprofessional education programme at Tairāwhiti (TIPE) which will reach a milestone of 300 students this year. A study this year showed this programme on the East Coast of the North Island is highly successful for students, patients and the local community.

See more at **otago.ac.nz/otagobulletin/research/otago615379**

Recent research shorts

Removal of point-of-sale tobacco displays working

A new study suggests that July 2012 legislation that removed all point-of-sale tobacco displays from shops selling cigarettes has helped reduce smoking among New Zealand school students to record low levels. The research published in the international journal Tobacco Control included Year 10 students (age 14-15) at schools across New Zealand. Removal of point-of-sale (POS) tobacco displays, accompanied by increased enforcement measures and penalties for selling tobacco to minors, was followed by significant reductions both in experimental and regular smoking. Contact Richard Edwards, Department of Public Health.

Homelessness accelerates between censuses

At least one in every 100 New Zealanders were homeless at the latest census in 2013, compared with 1 in 120 in 2006, and 1 in 130 in 2001, says UOW researcher Dr Kate Amore, from the Health Research Council-funded He Kainga Oranga, Housing and Health Research Programme. healthyhousing.org.nz

Novel nicotine inhaler doubles smoking quit rates

Research showed that smokers who used a nicotine inhaler were twice as likely to quit smoking as smokers using a placebo inhaler. The researchers developed and tested a novel nicotine inhaler to see whether it helps smokers to quit smoking. Participants in the study were randomly assigned to receive either a nicotine inhaler plus a nicotine patch, or a placebo inhaler plus a nicotine patch. Contact Julian Crane, Department of Medicine.

Insulating houses keeps children out of hospital

Public Health researchers analysed data from the *Warm Up New Zealand* programme and found hospitalisation rates for children in households where any member carried a Community Services Card were reduced by 12 %, and retrofitting insulation to current 2008 standards in existing houses reduces hospitalisation rates for all children by 6 %. The study in the online journal People, Place and Policy found that around 25 % of New Zealanders experience fuel poverty, or are unable to afford adequate energy and electricity for their household, and available evidence suggests that children are at increased risk. Contact Kimberley O'Sullivan, Department of Public Health.

Much healthier low-cost bread possible

Bread design could be substantially improved to better protect heart health according to new research, which looks at bread design from the perspective of reducing risk of heart disease, while keeping ingredient costs down. As a staple of the New Zealand diet, bread is a high priority food to research when improving options for people to reduce diet-related disease risks. Most breads are high in salt, so this design reduces sodium-based salts and increases healthier potassium-based salts. Potassium is particularly good for heart health. Contact Nick Wilson, Department of Public Health.

NZ contributes to global report on Indigenous and tribal peoples

Bridget Robson, UOW's Associate Dean Māori, was the New Zealand author of a comprehensive world-first study into the health and wellbeing of Indigenous and tribal peoples. The report, by Australia's Lowitja Institute and The Lancet journal, contains data from 154 million Indigenous people in 23 countries around the world, representing 50 per cent of the global Indigenous population. Contact Bridget Robson, Eru Pomare.

Congratulations to **Dr Giles Newton-Howes**, Department of Psychological Medicine, who received a University of Otago Early Career Award for distinction in research.

World Ultimate and Guts Championships 2016

Daniel Aldridge, assistant research fellow in UOW's Department of Medicine, was in the New Zealand Ultimate national team in the mixed division of the World Ultimate and Guts Championships 2016 in London in June. Daniel competed in the quadrennial tournament in Ultimate Frisbee, a team sport with similarities to netball and football. The tournament had more than 100 teams across five divisions. Daniel says he was lucky to be selected for this team, which included players chosen from all around New Zealand, based on performance in several selection camps. NZ last sent a mixed team in 2004 when they achieved a bronze medal. For further info: ultimate.org.nz/p/nzu-announces-mixed-team-for-worldchamps, and more details on the tournament at wugc2016.com/

Diary

30 August | 5 pm, Nordmeyer Lecture Theatre
Beyond Death and Taxes: A Public Health Perspective
Inaugural Professorial Lecture by Professor Nick Wilson

20 September
Otago Spotlight Series: Cardiovascular disease research

11 October
Symposium: Towards a sugary-drink free Aotearoa

18 October
Healthier Lives Research Colloquium, an update on the Healthier Lives National Science Challenge

The Public Health Department runs Friday seminars on a variety of Public Health topics. Please see otago.ac.nz/publichealthUOW for upcoming seminars.

You can find more detail on all UOW upcoming events at otago.ac.nz/UOWevents and news on our research on our news page at otago.ac.nz/UOWnews

Follow us on Twitter @otagowellington

For more information on any of these items, please contact fleur.templeton@otago.ac.nz