



UNIVERSITY  
of  
**OTAGO**

Te Whare Wānanga o Ōtago  
NEW ZEALAND

WELLINGTON

# He Kete Kōrero

University of Otago, Wellington Newsletter | Spring 2017

## Dean's welcome

Tēnā koutou katoa, talofa lava and welcome to He Kete Kōrero, the newsletter for the University of Otago, Wellington (UOW).

We've achieved a lot over the last few months, and reached significant milestones, including the official opening of the Centre for Translational Physiology. Fast becoming a health hub for biomedical research in Wellington, the Centre is forging new links between health researchers and clinicians to find for solutions for complex diseases such as diabetes, obesity and stroke.

We marked Mental Health Awareness Week (MHAW) this year by encouraging everyone to take an hour's lockout from workspaces. Our library once again hosted a wellness space for time out for everyone. Staff attended the Silverline Festival, a student-led event aimed at raising awareness and challenging the struggle around mental health.



'Nature is Key' was the theme for MHAW 2017.

We also celebrated Te Wiki o te reo Māori 2017 Māori Language Week with activities, such as a new translated cafe menu, games and waiata. This was the 42nd Māori Language Week since its inception in 1975 and we encouraged all of our UOW whānau to give te reo Māori a go! Ākina te reo!

Recently the University Council, the governing body of the University, met on our Wellington campus. It was an opportunity for UOW senior leadership team to meet Council members, the Vice Chancellor, the CFO and the COO. I briefed the Council about work at UOW and our key activity streams, and it was not difficult to tell them proudly of our many successes as a team and to convey that UOW is a key contributor to the University's success. I spoke about our values summarised here as a diverse community of scholars who aim to change the world for the better, speak truth to power, and promote equity.

Since this is the last newsletter for the year, may I thank you all for your commitment to those values and for your contribution to a successful 2017.

Ngā mihi nui

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



## Monitoring the brain at the bedside – MBIE Endeavour grant

Associate Professor Tzeng and his team received an Endeavour Grant from the Ministry of Business, Innovation and Employment (MBIE) to develop a non-invasive and cost-effective device to diagnose and treat stroke and other brain injuries. They will research and develop the device to make it safer, cheaper, and quicker for doctors to diagnose and treat these brain injuries. Brain tissue is exceptionally vulnerable to ischaemia (lack of oxygen), so early detection and targeted therapy are crucial to improving survival rates across a wide range of conditions. Current technologies for detecting a lack of oxygen to the brain are invasive or need costly imaging equipment which limits their use.

The new work will build on previous research that showed the concept, based on portable magnetic resonance technology, can detect changes in levels of blood oxygen. If successful it would provide doctors with a full picture of brain injury processes to enable targeted treatments.

"We have a vision of comprehensive brain monitoring at the 'point-of-care'. Our goal now is to design new sensors that can detect a wider range of brain injury biomarkers, such as tissue diffusion and perfusion," says Associate Professor Tzeng

The device will be designed and built here in New Zealand, in partnership with health professionals and the NZ biotechnology industry to make the device accessible worldwide.



Associate Professor Tzeng

# Research on new non-invasive prenatal screening

Dr Sara Filoche is doing important research on a new pregnancy test that screens for fetal chromosomal abnormalities, such as Down syndrome. Called NIPT (non-invasive prenatal testing) it analyses fetal DNA present in maternal blood for abnormalities of specific chromosomes. NIPT has a low false positive rate (1%–3%) which is a major advantage because it could potentially lead to a significant reduction in unnecessary invasive diagnostic procedures. Costing around \$500, NIPT has been available privately in New Zealand for the last four years, but is not publicly funded or regulated. Samples are sent overseas for analysis.

“NIPT is not just a blood test, and women, their partners and whanau need be able to make a free and fully-informed choice about whether they want to have the screening or not. We have a lot of work to do in this space,” Dr Filoche says.

“We’ve surveyed obstetric providers, and many would like more support, training and funding to offer this technology. Some won’t offer NIPT until it is funded. We are mindful of the status quo in prenatal screening, and we have been exploring whether increased use of NIPT may actually widen the inequity we have in New Zealand in accessing prenatal screening services. NIPT could potentially be provided in primary care.”

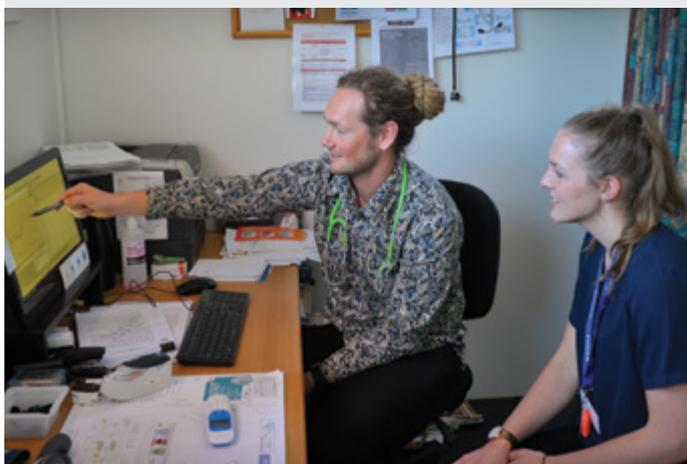
With funding from Lotteries Health Research and Istar Ltd, Dr Filoche and co-investigators are currently looking at online discussion sites to see how women are counselling each other around NIPT. They are planning work to explore how women, partners and whānau are making choices to undergo prenatal screening, given that overseas evidence indicates that only half of women who undergo prenatal screening are enabled to make an informed choice.



## New study shows General Practices at health training capacity

A comprehensive survey in the lower North Island and South Island has revealed that general practices, although crucial for teaching our future health professionals, are at training capacity. The major stocktake of general practices led by Professor Sue Pullon and Dr Samantha Murton of the Department of Primary Care and General Practice, was published in the *New Zealand Medical Journal*, and done alongside a comparable survey in the upper North Island by the University of Auckland.

They found that most general practices in the region are already involved in training doctors, nurses and other health care professionals, and there is little space at present for increasing numbers of trainees in practices.



Dr Jed Hocart-Saunders (De Lautour Medical Centre) and Millie Keown (Dietetic student, University of Otago).

More about these studies can be found on our newpage.  
[otago.ac.nz/wellington/news/otago033018.html](http://otago.ac.nz/wellington/news/otago033018.html)

## Helping healthcare practitioners to work with language interpreters

Communicating effectively with patients is crucial for health care workers in busy healthcare settings particularly as more and more people in New Zealand speak different languages. Working well with language interpreters is vital to ensure good health outcomes. Now, primary care health researchers Jo Hilder, Dr Maria Stubbe and Dr Ben Gray, have developed an online training module for healthcare workers working with language interpreters. Access the module here:

[otago.ac.nz/wellington/e-learning/arch/story\\_html5.html](http://otago.ac.nz/wellington/e-learning/arch/story_html5.html)



From left to right: Dr Maria Stubbe, Dr Ben Gray and Jo Hilder.

## Big data' study shows high impact of childhood respiratory illnesses on primary care practices

Another study led by Professor Tony Dowell using 'big data' found that childhood respiratory illnesses, especially during the first two years of life, have a big impact on New Zealand primary care general practice (GP) workloads.



# New Centre for Translational Physiology launched in Wellington

The Centre for Translational Physiology (CTP) was officially opened by the University's Vice Chancellor Professor Harlene Hayne on 1 August. The CTP will enhance collaborative research between scientists and clinical researchers, using a truly unique set of facilities to address large clinical issues.



Dean Sunny Collings and Hon Paul Goldsmith (then Science and Tertiary Education Minister) at the opening in August.



Wellington campus Māori Liaison Adviser Toa Waaka leads a Māori blessing of the Centre for Translational Physiology prior to the official launch.

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## Making science fun for schools

Recently we hosted several groups of students from Maoribank primary school in Upper Hutt and Samuel Marsden collegiate school in Whitby. These visits follow on from work led by Dr Max Berry for the MBIE-funded Curious Minds project.

The students are doing special courses in science and they visited the CTP lab to find out how much fun and how useful science can be both at school and in their future careers. The curiosity and enthusiasm shown by all the students was inspiring and rewarding. Thanks to all the teachers, parents and researchers who worked hard to make the day possible.



# Research shorts

## Towards Smokefree Aotearoa 2025

Several recent studies from the Department of Public Health have focused on progress towards Smokefree Aotearoa 2025. Are we going to get there? One study led by Frederieke Sanne van der Deen used computer simulation modelling to show major ways to reduce smoking, and called for these bold measures to be considered by the NZ Government. And a **major report (ASAP 2025)** launched in August at Parliament found New Zealand is falling far short of reaching its Smokefree 2025 goal. The researchers urged the Government to take a series of actions to get to Smokefree Aotearoa by 2025.

Other public health research studies have shown:

- Local outdoor smokefree action is rapidly growing around New Zealand
- Too many NZ playgrounds lack smokefree signs
- Thousands of NZ children continue to be exposed to second-hand smoke in cars
- NZ's Quitline service is a highly cost-effective way to improve health and saves the health system money.

Read more about all these studies on our [news releases](#) page on the website.



## Cities and housing

Leaking and mouldy homes may lead to the development of a first attack of asthma in young children living in them, Dr Caroline Shorter of the Medicine Department has found in a major study in Wellington.

Wellington City Council is leading the way in New Zealand by partnering with the Housing and Health team to launch a voluntary Rental Warrant of Fitness for minimum housing standards in Wellington, Mayor Justin Lester announced recently.

A new book by Professor Philippa Howden-Chapman and team sets out important ideas for helping New Zealand cities resolve the challenges of providing quality, affordable housing, designing healthy transport systems and dealing with climate change.



Dr Caroline Shorter



Professor Philippa Howden-Chapman



## Kickstart 2018 with a Public Health Summer School course

The 2018 Public Health Summer School in February will offer over 30 courses, mostly 1 or 2 days, with 18 new courses confirmed. Next year's event is expected to be the biggest yet, attracting hundreds of people from all over New Zealand and the world and bringing together global and regional collaborators on topical public health issues.

The 2018 school opens with a symposium marking 100 years since the 1918 Influenza pandemic. A panel of experts will explore lessons for modern pandemic planning. Two further symposia will focus on the health of Indigenous peoples across New Zealand, Australia and the Pacific, one on cancer control and the other on suicide prevention.

During last year's Summer School we 'walked the talk', demonstrating our commitment to environmental sustainability, healthy nutrition and physical activity with things like guided lunchtime walks. So kick start 2018 and update yourself on the latest thinking in public health. View the full programme at [otago.ac.nz/uowsummerschool](http://otago.ac.nz/uowsummerschool).

## Congratulations



Prof Brett Delahunt



Assoc Prof Rob Siebers

The NZ Institute of Medical Laboratory Science (NZIMLS), Council of the NZIMLS has awarded an Honorary Fellowship to Professor Brett Delahunt for his significant contribution to pathology and to the medical laboratory science profession. Fellowship of the NZIMLS is the profession's highest qualification.

Associate Professor Rob Siebers has been elected as a Board Director of the World Association of Medical Editors (WAME), a voluntary association of editors of peer-reviewed medical/biomedical journals to foster international cooperation among and education of journal editors. WAME has approximately 1,900 members representing more than 1,000 journals from 92 countries.

This issue highlights just some of our recent research and news at UOW.

For more detail on these stories or updates on news and research, check our website

[otago.ac.nz/wellington](http://otago.ac.nz/wellington)

and follow us on

**Twitter @otagowellington**

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