



CHRISTCHURCH AUTUMN 2016

University of Otago, Christchurch Newsletter

Dean's welcome

I am very pleased to confirm that Professor David Murdoch will be the new Dean of the Christchurch campus. He will take up the position from September 2016, when I retire.

Professor Murdoch is currently Head of our Pathology Department. He also works for the Canterbury District Health Board as a microbiologist.

Professor Murdoch studied medicine at the University of Otago and went on to specialise in infectious diseases. He has had an active research career and been involved in some of the largest and most influential international and local infectious disease studies.

I am thrilled Professor Murdoch has accepted the position. He will make an excellent Dean, and further enhance our international reputation as a centre for health research and education. As he has held key leadership positions within the Canterbury District Health Board, he will be ideally placed to further enhance our partnership agreement and working relationships with that organisation.

This edition contains a story about another of our leaders, Professor Gary Hooper. He is Head of the Orthopaedic Surgery and Musculoskeletal Medicine Department. The story focuses on the success of a programme Professor Hooper helped develop in partnership with the Canterbury District Health Board that assists obese patients lose weight before surgery.

In less than 10 years as Head of Department, Professor Hooper has also been key to growth in other clinical trials and to developing regenerative medicine/bioengineering research through his support for Associate Professor Tim Woodfield.

The previous Head of Department was Professor Alastair Rothwell, who continues to oversee the New Zealand Joint Registry – a record of all joint replacements in this country – and teach. Professor Rothwell is in his 50th year of teaching medical students.

Peter Joyce

Graduate entry nurses begin study

The first intake of nursing students in our new twoyear graduate-entry Master of Nursing Science degree have begun their study.

Centre for Postgraduate Nursing Studies director, Dr Philippa Seaton, says this exciting new programme provides a pathway for students to build on their previous undergraduate education to become nurses, preparing them for work in a range of healthcare settings.

Students undertake this professional Master's degree through an intensive two-year programme specifically designed to bring together clinical experience and integrated academic learning, and research skills and experience. It prepares graduates to contribute to the complex healthcare environment of today and in the future. The programme is accredited by the Nursing Council of New Zealand so successful students can become registered as nurses and have a Master's qualification.

Students will undertake supported clinical practice experiences at various locations across the South Island in a range of health care settings including community and family/whanau health, acute care, mental health, and aged care. Before these placements they spent time in our Clinical Simulation Centre, where they can practise medical scenarios in a safe learning environment before facing them in a real health setting.



Master students developing clinical skills in the University of Otago, Christchurch, Simulation Centre.

Probiotics possible tonsillitis treatment

Recurring tonsillitis causes pain for children and stress for their families.

Paediatrician Tony Walls is testing whether probiotics could be a solution to this problem.

Children waiting to have their tonsils removed will get a daily probiotic lozenge for up to three months. The world-first clinical trial will involve patients from Christchurch and Wellington.

Dr Walls says he hopes the supplement will stop some children needing surgery and reduce waiting times for others.

If the trial is successful, a University of Otago company (called BLIS Technologies) would market the lozenges. They are already available to buy over-the-counter from pharmacies, under the name BLIS K12. This clinical trial would provide scientific evidence on whether the lozenge is effective.

The probiotic innovation began with a University of Otago discovery, and subsequent small trial. Dr Walls, a researcher at the University's Christchurch campus, has worked on the project since its beginning.

He says that if the probiotics prove effective in treating tonsillitis, they would be tested in children with recurrent ear infections.



Dr Tony Walls

International teaching award

A desire to improve patient care motivated Professor Tim Wilkinson to become involved in the training of medical students more than 20 years ago.

His dedication and innovation in the field was recognised recently when he received Australasia's highest honour for medical education.

Professor Tim Wilkinson heads training across the University's three medical schools in Dunedin, Christchurch, and Wellington. He is also a specialist gerontologist.

The Australian and New Zealand Association for Health Professional Educators (ANZAHPE) award recognised his leadership role and outstanding work in curriculum development and medical training research.

Professor Ben Canny is Vice-President of the ANZAHPE. He says Professor Wilkinson's award recognises his "incredible work" as an inspirational health education leader.

Professor Wilkinson worked for more than 20 years as a geriatrician and teacher of medical students before a move to develop medical curriculum. He says he is honoured to be in a position to shape the next generation of doctors.

Professor Tim Wilkinson

"You treat one patient, you help them. You teach students to better treat and interact with patients, you help a larger group. You influence what students are learning, you can make a big difference to many more patients in hospitals and the community."

Vitamin C in intensive care

A Christchurch researcher is doing New Zealand's first study of vitamin C's potential as a treatment for intensive care patients with sepsis.

Dr Anitra Carr is doing the clinically-relevant work with support from the Health Research Council (HRC) as a Sir Charles Hercus Health Research Fellow.

"I am grateful for the opportunity to do research that will have a positive impact on the outcomes of critically ill people and potentially even save lives."

Dr Carr says sepsis is the main cause of death in intensive care patients and rates are increasing. Sepsis patients often develop cardiac dysfunction and dangerously low blood pressure (known as septic shock).

Dr Carr's hypothesis is that cardiac dysfunction, and resulting drug treatments, could be avoided if patients had appropriate vitamin C levels. When sepsis patients experience cardiac problems, they are often given drugs to stimulate the cardiovascular system. Dr Carr says vitamin C is potentially involved in a similar natural process, and if levels were high enough patients might not need as much medication.

Dr Carr will carry out a clinical trial in Christchurch where people with sepsis are given the vitamin to see if this intervention results



the positive biological effects of vitamin C translate into an improvement in patient outcome, which has been reported in a smaller study overseas. Her study will also compare vitamin C levels with severity of illness and whether this contributes to progression of sepsis.

Changing attitudes to alcohol? ! New professor urges caution

"In the space of a few decades, Government-led reform has brought about a drop in rates of people smoking and a turnaround in society's attitude. Now is the time that similar reforms occur with alcohol to reduce the enormous harm alcohol is causing in New Zealand."

Professor Doug Sellman

Professor Sellman is director of the National Addiction Centre. He is also a medical spokesperson for Alcohol Action NZ.

The group formed in 2008 in response to what they saw as an unhealthy and dangerous drinking culture in New Zealand. They aim to bring about evidence-based alcohol reforms through publicising scientific evidence and influencing public opinion.

Professor Sellman says attitudes towards alcohol are changing. He uses the example of his golf club where clearly more members now drink low alcohol beer. Few did before. This change is likely due to the lowering of the limit for driving, one of few alcohol law reforms to date, he says.

Alcohol Action's key message continues to be that law makers should adopt major recommendations from a Law Commission review of liquor laws. It has distilled these recommendations into the '5+ Solution'.

- 2. Raise the purchase age
- 3. Reduce alcohol accessibility
- 5. Increase drink-driving counter-measures

in prescribing

General practitioner and researcher Dee Mangin has been promoted to Professor.

Professor Mangin worked as a GP in Christchurch for many years. She is currently the director of Primary Care Research Group at the University of Otago's Christchurch campus. She also works in Canada at McMaster University as a Chair in Family Medicine.

Professor Mangin gave one of this year's Public Health Lectures in recognition of her promotion. In her lecture, she advocated for the need for a fresh approach to prescribing, particularly among the elderly.

She says drug trials typically look at how well a drug works in people, who are often young or middle-aged, with just one condition. This does not reflect the real world of general practice where often elderly patients have multiple conditions. She advocates more research be done on the effects of interactions between medication, and on the effects of ceasing them.

You can watch the lecture at: www.otago.ac.nz/chch-podcasts



Professor Dee Mangin

Banks Peninsula marae special place for medical students

The University of Otago has financially contributed to the building of a new wharekai and teaching rooms at Ōnuku marae on the Banks Peninsula.

The new teaching rooms will be used for medical students' orientation to Christchurch and Hauora Māori teaching. Postgraduate students will also learn there.

The financial contribution to the wharekai follows a decade of students visiting the marae in their first fortnight of study in Christchurch. In the past, students have slept in the wharenui and learned in a marquee erected on marae grounds.

Students come to Christchurch from Dunedin in their fourth year of medical training.

Associate Professor Suzanne Pitama of the University of Otago, Christchurch's Māori/Indigenous Health Institute says it has a strong relationship with the Banks Peninsula marae and a memorandum of understanding.

"The time at Ōnuku marae allows students who have been in Dunedin a chance to orient themselves to being in Canterbury and a safe place to learn their role in the health system as people who can make a difference to health inequalities."

In April, a special powhiri and acknowledgement of funders was held in the marae, 80 minutes from Christchurch.

Associate Professor Pitama says the site is very special, and one of three places in the South Island where the Treaty of Waitangi was signed.



Weight loss programme easing joint pain

A programme to help obese hip and knee patients lose weight before surgery has resulted in better post-surgical outcomes and improved health.

Patients taking part in the Early Dietetic Intervention (EDI) programme have regular sessions with a dietician before and after surgery, and set individual weight loss goals.

The programme was developed by the Canterbury District Health Board's orthopaedic unit in partnership with University of Otago, Christchurch, surgeon Professor Gary Hooper. Dietician Emma Lloyd was hired to work specifically on the programme.

The dedicated effort acknowledged growing rates of morbidly obese and obese patients referred for hip and knee surgery. Extra weight puts increased pressure on joints and post-surgical infections are more common.

Since its introduction in 2008, more than 900 patients have taken part. A study on the programme by Professor Hooper found it helped

patients achieve significant weight loss, translating into improved joint function and reduced need for surgery.

A year after their surgery, 70 per cent of patients achieved or maintained their goal weight loss. Combined, they lost more than 6300kgs. Almost 10% of patients avoided surgery because of their weight loss. Participants also had fewer diabetes, arthritis and hypertension symptoms.

Professor Hooper says dietician Emma Lloyd is to be congratulated on the results of this programme.

"Other studies looking at weight loss prior to surgery show poor results with an inability to maintain weight loss. I believe this programme's structure, with an emphasis on family and peer support, has made the difference. Emma Lloyd has been able to engage these patients and they have responded by achieving these impressive results. Not only have a considerable number of patients avoided major surgery but many have improved their general physical well-being so that surgery could be performed with fewer risks."

Watch our 2016 public health lectures online

otago.ac.nz/chch-podcasts

- · Resilience in everyday life.
- · Schizophrenia genetics.
- · A good-humoured heart.
- · When good medicine is bad for your health.
- · Brain imaging in Parkinson's disease.
- One Health: a global approach to infectious disease.
- · Will eating cake give me cancer?
- Engineering customised care.