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SAPERE AUDE
*Te Whare Wānanga o Otāgo*
NEW ZEALAND

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When I was selected as the Vice-Chancellor in 2011, a considerable fuss was made about my gender. Every interviewer and every reporter was clear to point out that I was the first woman to lead the University of Otago. This intense focus on my gender surprised me for a number of reasons. One reason was that my 19-year career at Otago had been completely gender blind. No one had ever tried to temper my aspirations because I was a woman and no one had given me any special privileges either. The other reason that I was surprised was that there were a number of other things about me that no one bothered to mention – for example, I am the first psychologist to hold this position and I am also the first American. I think it is now clear that these aspects of my background have had a much larger influence on the way in which I try to lead this fine University than the fact that I am a woman.

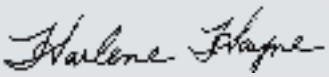
But there are other, lesser known, things about my past that shape everything I do here. For example, I did not come from an academically elite household. In fact, like many other Otago staff members, I was the first person in my family to attend university. Although my parents always dreamed that I would earn a degree, they had neither the experience nor the funds to make that dream a reality. I was extremely fortunate to receive a scholarship that covered the cost of my undergraduate education that paved the way for so many other opportunities. In essence, the fact that I am the Vice-Chancellor at the University of Otago is, literally, due to the kindness of strangers.

Not many days go by that I don't reflect on the privilege of my education and on the daily obligation that comes with that privilege. Here at Otago we recognise that our students, like me, owe a huge debt of gratitude for their world-class education – a large chunk of which is funded by the New Zealand taxpayers. In this issue of the *Otago Magazine* you will read about our new Volunteer Centre, UniCrew, which was born out of the necessity to organise the large number of our students who have taken on the challenge of giving back to the community that has already given them so much.

In this issue you will also read about another generation of Otago students and the way in which they fulfilled their obligations to the wider community. In 1914, the 5th-year medical students at Otago petitioned the University to bring their final examinations forward from January to August allowing them to volunteer as medical officers for the New Zealand armed forces. These young medical students joined their senior colleagues, including Major Charles Hercus and Lieutenant-Colonel Louis Barnett, on the shores of Gallipoli, some of them paying the ultimate price for their service to their country.

I cannot imagine what it would have been like to be a leader at Otago at the time of World War I. Each year I proudly participate in the Anzac Day service that is organised by OUSA and each year I have to admit that I would have struggled making a decision that paved the way for so many of our students to go to war. In the end, perhaps, I would have plucked up the courage and not stood in the way of the students' dedication to their country, but I am eternally grateful that the decision was not mine to make. I am certain that it weighed heavily on those who had to make it.

Taken together, the stories in this issue of the *Otago Magazine* remind us all that an appreciation of the obligation that comes with privilege has been part of the ethos of Otago since the time the University was founded. These stories also give us the opportunity to reflect on the historical change in the way our students have embraced their obligations. I am sure that we can all agree that the change has been in the right direction.



**Professor Harlene Hayne**
Vice-Chancellor, University of Otago

# Lest we forget

One hundred years ago a patriotic New Zealand answered the call to serve King and Empire and followed Britain into what was to become known as World War I. Over the following four years some 100,000 New Zealand troops were sent overseas, 18,800 were killed and 40,000 were wounded. Professor Tom Brooking discusses the impact this had on New Zealand and the importance of remembering their stories.

As the country prepares centenary events to mark the outbreak of World War I, Professor Tom Brooking (Department of History) says the term "lest we forget" now relates to more than just observing anniversaries. Capturing stories from the descendants of those who experienced war may help explain the legacy of this seminal, yet little understood, event in New Zealand's history.

Brooking is involved with a Dunedin City Council committee organising events and exhibitions to show the war's effect on communities in Otago and Southland.

"The events must both reflect the tragedy and scale of the loss of life, and be relevant so current generations gain insight into the realities of war – the impact on those who went, on the home front and on post-war society."

In September, the 1914 embarkation of Otago Infantry Battalion troops for training in Egypt will be re-enacted and Christopher Pugsley, senior lecturer in war studies at the Royal Military Academy Sandhurst, will give a lecture on the invocation of troops around New Zealand. Successive exhibitions between 2015 and 2018 at Toitū Otago Settlers Museum will mark important events in which the Anzac forces played a key role.

Although now viewed in light of the tragedy and loss associated with the conflict, Brooking says patriotism and fervour combined to create an almost jubilant mood when New Zealand entered the conflict in late 1914, with "perhaps more than 80 per cent of people supporting the war".

Explaining this excitement 100 years on is complex.

"Most recent migrants were from Anglo-Celtic countries and 'New Zealanders' in the early 1900s were British subjects who often referred to Britain as Home with a capital 'H', even if they and their forebears had been born here."

Although New Zealand had been granted dominion status in 1907, an imperialistic political mindset prevailed at the outbreak of war.

The widespread desire to serve King and Empire was reflected in the high rates of volunteers: about 38 per cent of eligible men joined the New

Zealand Expeditionary Forces and other armed services compared with 39 per cent of Australians and 37 per cent of British.

Despite a lack of modern equipment, New Zealand was relatively well prepared for hostilities: 30,000 troops were war-ready in 1914, most of whom had taken part in school cadet programmes (introduced in 1877) and compulsory military training (introduced in 1909). After 1910, British General Godley had overseen national training and, although he had a mixed reputation as a wartime commander, he had organised the army and prepared for deployment scenarios such as the occupation of German Samoa, which was New Zealand's first act of war in August 1914.

Brooking thinks most New Zealanders were keen to enter the war for "sentimental and pragmatic" reasons. "If we wanted continued access to the greatest trading block the world had ever seen and the lucrative London market we would have to earn our place," Brooking explains.

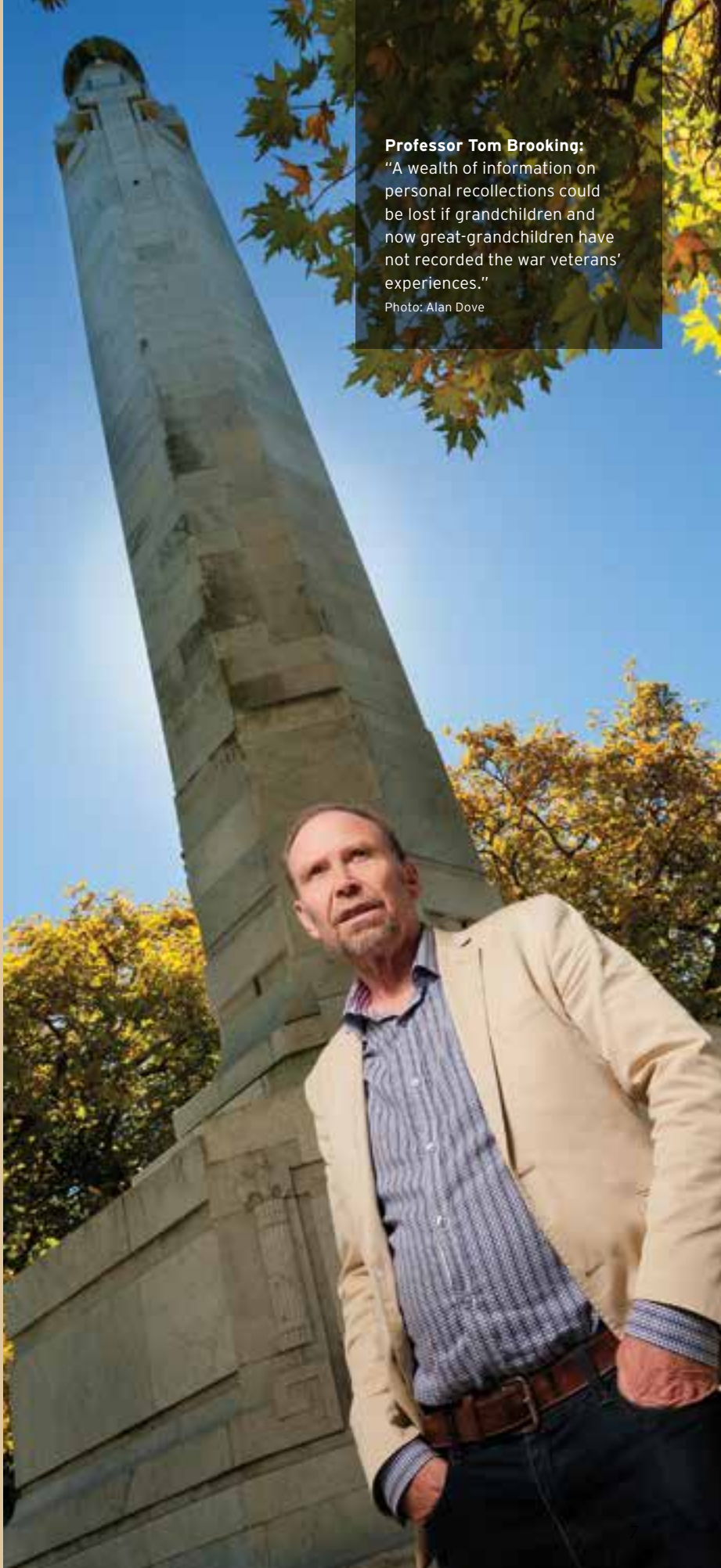
New Zealand's economy was boosted after the British introduced the war commandeer system, which guaranteed prices of produce at about 50 per cent above market rates. Exports buoyed the economy and tax did not increase to the same extent as it did in Britain.

With the exception of small pacifist denominations, most churches supported the war. Some first-wave feminists and the socialist parties were other minorities that voiced strong opposition.

The tale of Brighton farmer Archibald Baxter – father of poet James K. Baxter – highlights the treatment of the few conscientious objectors. Despite imprisonment at Trentham Military Camp, transportation to France and brutal treatment, Baxter's resolve was undiminished.

The failure of the Gallipoli campaign, publication of casualty lists and return of wounded saw an element of "quiet disillusionment" develop. Against the backdrop of majority support, a few regional newspapers began to voice criticism of the war.

In 1916 conscription was introduced to maintain troop levels. Australia rejected



**Professor Tom Brooking:** "A wealth of information on personal recollections could be lost if grandchildren and now great-grandchildren have not recorded the war veterans' experiences."
Photo: Alan Dove

"… when the troops returned they often could not, or would not, relate their experiences – it was so hellish and otherworldly in relation to the civilian life they could not explain it."

conscription by a slim margin in two public referenda after the Battle of the Somme, but New Zealand had introduced it before the battle, in which 1,500 were killed and many wounded.

By war's end 18,800 of 100,000 New Zealand troops sent overseas had been killed and 40,000 wounded.

"Some argue we were already New Zealanders by the end of the Boer War and the war consolidated this. We need to get away from the notion that the nation was born on the bloody slopes of Gallipoli – that is too simplistic. Also, one tenth of the population went to war, what about the other 90 per cent? In many ways we were more imperialistic after the war.

"Before the war leaders such as Richard Seddon were nationalist first, then imperialist. Later leaders, such as William Massey, shifted the balance to imperialist nationalist."

Trade links were also strengthened in the inter-war period as Britain "tightened-up" its Empire by introducing initiatives such as agricultural research centres to enhance food production.

The country's move towards the political centre-left in the wake of the worldwide depression in the 1930s and the publication of several hard-hitting books – such as Robin Hyde's 1931 novel *Passport to Hell* and Baxter's *We Will Not Cease* – also prompted a re-evaluation of imperial allegiance and the impact of the war.

Brooking says the experiences of Premier Richard Seddon's three sons show how the fortunes of war could smile, or otherwise, on those who served. Richard (junior) was a Boer War veteran who was killed in France in 1918. The second son, Thomas, returned after being decorated for bravery and served as a long-standing Member of Parliament. Seddon's youngest son, Stuart, spent the rest of his life in psychiatric care as a result of trauma experienced at war.

"They are roughly representative – about a fifth of those who served were killed or seriously wounded, a fifth had serious health problems and the remainder would have had a range of experiences, from awful to not too bad."

The social cost of the war remains relatively obscure and, while some postgraduate research has examined how the war affected rural centres and Dunedin, there has been a lack of systematic research or assessment of the broader impact of war and its casualties on communities in Otago.

Brooking says the impact of the war on the home front, for those who did not fight, is also little understood.

"A wealth of information on personal recollections could be lost if grandchildren and now great-grandchildren have not recorded the war veterans' experiences.

"Their stories may be contained within families, but when the troops returned they often could not, or would not, relate their experiences – it was so hellish and otherworldly in relation to the civilian life they could not explain it. The Returned Services Association [formed in 1916] was an important outlet, but many did not share their experiences.

"Post-war, there was a need to move on. However, the proliferation of war memorials throughout the country – more than 450 are listed on the national register of war memorials – reflects the profound effect not being able to repatriate those casualties had on subsequent generations. It indicates communal grieving marked in the most elaborate ways."

Several publications in the 1960s and documentaries such as *Gallipoli: The New Zealand Story*, in which 26 survivors of the campaign all aged in their 80s and 90s talked candidly about their experiences, were vital in reintroducing the public to the realities of the conflict.

"The 'baby-boomers', those born just after World War II, grew up in a very martial society and a reaction to that came in the 1960s, specifically in the form of opposition to the Vietnam War. In the late 1970s there was very little interest in World War I.

"Then, in the 1990s, numbers attending Anzac services increased dramatically. I think the realisation that something extraordinary had happened coincided with affordable travel to the previous theatres of war."

Gallipoli remains the focal point for Anzac involvement in the war, even though the majority of casualties occurred in Europe: 2,752 New Zealanders were killed in Gallipoli, whereas more than 14,000 died on the Western Front and 500 in Sinai.

While there are memorials in several of the University's residential colleges, in the Registry building and on the Leith Bridge, Brooking believes a more prominent "yet subtle" memorial on campus may lead to greater recognition of the conflict.

"Many young people attend services because of interest in the human cost and the great tragedy of so many people losing their lives, rather than the greater narratives of nationhood or Empire. That is why national and local commemorative events will emphasise the human aspect, and why future efforts of remembrance are so important."

**SAM STEVENS**

# University at war

Above: New Zealand's first plastic surgery unit, Walton-on-Thames 1917 with pioneering surgeon **Henry Percy Pickerill** seated between nurses in the front row. Harvey Brown Papers, MS 3094/017. Hocken Collections *Uare Taoka o Hākena*, University of Otago. S14-532a.

University of Otago students and staff were quick to answer the "call of Empire". During the war, 573 would don "the King's uniform" but, tragically, nearly a fifth of them would not return.

Soon after New Zealand's entry to World War I was announced on 5 August 1914, Prime Minister William Massey cabled the British Government saying simply "all we have is at your disposal". This patriotic pronouncement resonated with many nationwide and, within days, 21 final-year medical students had informed the University they were "willing, if qualified, to place their services at the disposal of the New Zealand Government as medical officers for the Expeditionary Force".

Their exams were brought forward and the volunteers joined the New Zealand Medical Corp (NZMC). Some felt a sense of urgency, swayed, in part, by an editorial in a local newspaper which suggested the war would last three months as the global economy could not sustain the conflict for longer.

Later, students from all years volunteered and many served during the ill-fated Gallipoli campaign of 1915. At

least two students were killed in action, with another dying in a shipboard accident on the way to war.

After Gallipoli many of the students completed their training at Otago and several re-enlisted to serve on the Western Front in France. One such student, Frederick Montgomery Spencer (OBE, Military Cross, pictured below right), interrupted his studies to serve as a NZMC sergeant in Gallipoli. After completing medical training he served with distinction in France.

Another Otago Medical School graduate, Lieutenant-Colonel J. Hardie Neil, trained and organised the Third New Zealand Field Ambulance before commanding the unit in France. He was awarded the DSO for conspicuous gallantry during operations at Bapaume and Bancourt in mid-1918 and was one of two New Zealand soldiers to gain the Belgian Croix de Guerre.

At least three medical school volunteers would share the fate of former Otago graduate and Croix de Guerre recipient Charles Begg: after a highly distinguished war career, Begg died of influenza in 1919.

In his 1915 report to government, University of Otago Chancellor Rev. Andrew Cameron noted that three staff and at least 100 students were "wearing their King's uniform" with "small detachments constantly leaving to join the reinforcements".

From February 1915, the names of all University teachers, graduates and undergraduates on active service were printed in the *Calendar*. The names of those killed were also printed and letters of sympathy sent to their families.

The following year, Cameron reported the University's involvement in the war with "mingled pride and sorrow" – 270 students, a University Council member and six members of the teaching staff were enlisted.

The toll of war on student numbers was increasingly apparent. Professor James Parks, Dean of the School of Mines, said attendance had suffered because the "men to take up mining engineering as a profession are just the men to answer the call of the Empire".

Pre-war the school was "flourishing" with 31 students, but by 1918 only 12 students were enrolled and senior students were "non-existent". Although a handful of students had resumed studies by 1919, for the first time in 30 years no diplomas in mining engineering were awarded.

Additionally, mining Professor D.B. Waters was briefly Commanding Officer of the New Zealand Tunnelling Company, a unit that is most often associated with the extensive tunnelling and countermining operations during the Battle of Arras.

By January 1916 the reality and cost of a long war was becoming apparent: at least 18 students had been killed and many more wounded. Later that year the University made a formal commitment to

1915: The New Zealand dressing tent, at Walker's Ridge, Gallipoli.

Returned medical students on the SS *Saturnia*: (Back row) W.T. Glasgow, L.H. Booth. (Middle row) A.W.T. O'Sullivan, S.T. Parker. (Front row) R.L. Christie, F.M. Spencer, G.P. Fitzgerald.

training soldiers, establishing the Officer Training Corp. By 1918, more than 500 University students were at war, along with 17 members of staff.

The medical school Dean, Professor Ferguson, rightly foresaw a looming shortage of doctors, reporting that, "in spite of repeated representations to Cabinet", he had not secured exemption for second-year students whose class had been "much depleted by the action of the ballot".

Of 40 students in 1916, only about 12 remained. In late 1918 Cabinet addressed these concerns, amending the Military Service Act to exempt medical students who had passed intermediate examinations from military service.

On the home front, University staff also engaged with war issues through public lectures. Economics Professor Dr H. D. Bedford lectured on the necessity of higher taxation during wartime and the inevitability of a shortage of material and a higher cost of living.

Some of the most lasting contributions to war and peacetime medicine were developed by University of Otago staff such as Dental School head Henry Percy Pickerill. Pickerill was an innovator among the early pioneers who used bone, skin and fat grafting, and jaw wiring techniques to treat facial injuries. After being seconded to the NZMC to treat facial and jaw injuries at No 2 New Zealand General Hospital at Walton-on-Thames he oversaw treatment in the New Zealand Section at the Queen's Hospital, Sidcup.

His unit transferred to Dunedin Hospital in 1919 and he continued long-term care for many wounded men as surgeon in charge of the facial and jaw department. He was made an OBE in 1919 and a CBE in 1923.

Pickerill also helped establish general dental services for those training, campaigned for commissioned dental officers on troop ships, and lobbied for increased provisions for dentists attached to the expeditionary forces. His collection of patient records, now housed at the Hocken Collections in Dunedin, are some of the only surviving World War I medical records.

Similarly, Otago Medical School graduate James Renfrew White's wartime experiences as an orthopaedic surgeon in France and London underpinned a long health-care career as a surgeon and writer, and involvement with the Department of Orthopaedic and Traumatic Surgery at the medical school and Dunedin Public Hospital.

In March 1918, before hostilities had ceased, Chancellor Cameron said the University's post-war initiatives would focus on growth, rather than just recovery.

"If the community is sincere in its desire that educational progress shall be one of the fruits of the lessons taught by the conditions born of the war, and if … the measure of the progress of a State is the reflection of its pursuance of high

C.section of the New Zealand Medical Corps constructing a bomb-proof hospital dug-out: Private G. Barnett, Sergeant T.H. Denniston (with shovel) and Sergeant L.G. Bell (filling sand bags).

Gunner J.D. Hutchison, with R.L. Christie (seated).

Photos: *Otago University Review*, Vol. XXIX No.1 June 1915. Hocken Collections *Uare Taoka o Hākena*, University of Otago. S14-534a.

"Some of our students have won coveted distinctions and have thereby brought honour to their University; others have achieved the highest of all honours by the sacrifice of their lives. It will be the University's sacred duty to perpetuate the memory of these fallen soldiers, that their names may ever be honoured and that future generations of students may be inspired by their bright example to do their duty, counting not the cost."

– University Chancellor Rev. Andrew Cameron, 1916.

national ideals, then its interest in the development of our university colleges should be of a lively and practical nature."

This vision was realised: 950 students were enrolled in 1919, eclipsing pre-war enrolment numbers by more than 300 students. The University's "prodigious" growth caused a "serious lack of space" and saw land acquired for several new buildings and additional staff appointed.

Funds from the £65,023 Hospital Ship Fund were gifted to the University to build the Maheno and Marama Drill Hall for the military training of medical students. The building, opened in October 1919, was named after two World War I hospital ships.

The University's Memorial Walk was officially opened at a 1928 service that recognised all who served, including the 64 University students who gained military awards. A commemorative plaque was unveiled on the Leith Bridge near the current Staff Club.

The plaque and subsequent Armistice Day ceremonies have honoured a commitment Cameron expressed as early as 1916.

"Some of our students have won coveted distinctions and have thereby brought honour to their University; others have achieved the highest of all honours by the sacrifice of their lives. It will be the University's sacred duty to perpetuate the memory of these fallen soldiers, that their names may ever be honoured and that future generations of students may be inspired by their bright example to do their duty, counting not the cost."

**SAM STEVENS**

Excerpts from *Lines Written on Gallipoli*, by Gunner J. D. Hutchison, Howitzer Battery, Tent C III Zeitoun, Cairo.

They grew in beauty side by side,
They filled one tent with "skite";
Their voices mingled as they yapped
O'er Cairo's wine at night.

Their talk was of the Colonel's pot,
Of Tewsley's Roman nose,
Of Sergeants, "Spirochaetes," and sand,
And Egypt's other woes.

And some would talk of Clavicles,
And some of quail and deer,
And some of "good old football,"
And some of Strachan's beer!

They were indeed a happy band
With talk and laughter free;
But now the're scattered far and wide,
By ocean, land, and sea.

But there will be a glorious spree
When this d—— war is o'er,
And we have met in peace again
Upon New Zealand's shore.

We'll meet in Sweetings' up-stairs room,
And fairly shake the wall
With singing "Here we are again!"
And shouting "On the ball!"

And then the talk will be once more
Of Egypt, Anzac, shells,
Of snipers, shrapnel, trenches,
Of dead men——and their smells!

Of bully-beef and biscuits hard,
Of Kaiser Bill and Cain;
And then once more we'll raise the yell
Of "Fill 'em up again!"

Tent C III, in the Ambulance lines in Zeitoun, contained during its career thirteen 'Varsity men.

*Otago University Review*, October 1915.

# Serving veterans

Otago's Health of Veterans, Serving Personnel and their Families Research Theme is raising the profile of, and providing a more co-ordinated approach to, the health-care needs of our military veterans.

As the centenary of the start of World War I approaches, now is the time to focus on the health of our contemporary veterans, says Associate Professor of Occupational and Environmental Medicine David McBride.

McBride is the director of the University of Otago's Health of Veterans, Serving Personnel and their Families Research Theme, which brings together Otago researchers who have an interest in issues that affect veterans.

The theme's steering committee includes Professor David Baxter (Dean of Physiotherapy), Professor John Broughton (Preventive and Social Medicine, Director of the Ngāi Tahu Māori Health Research Unit), Associate Professor Brian Cox (Director of the Hugh Adam Cancer Epidemiology Unit), Associate Professor Darryl Tong (Oral Diagnostic and Surgical Sciences) and formerly included Dr Karen Brounéus (Centre for Peace and Conflict Studies).

"The way that New Zealand took part in the Great War is regarded, by some, as a national coming of age," says McBride. "The research theme came about partly because the timing was right, with the Anzac centenary coming up."

Prior to the establishment of the theme, no one was really looking at the health of veterans and Veteran Affairs New Zealand was not commissioning research, he says. Researchers were involved with the military, but there was no overview or co-ordination.

"The initial aims were to get some research off the ground, bring people together and raise the profile of military veterans' health care. We've certainly done that.

"One of our major aims was to develop collaborative links, especially with CAMVH – the Centre for Australian Military and Veterans' Health – and the Canadian Institute for Military and Veterans' Health Research [CIMVHR]. Last year CIMVHR had an international symposium for the first time and we were invited."

The University already had a Memorandum of Understanding (MOU) with the Centre for Military and Veterans' Health at the University of Queensland and has since developed another with the Uniformed Services University of the Health Sciences (USUHS) in Washington.

In 2011, Otago signed a MOU with the New Zealand Defence Force, making the University a preferred provider of research services for the military.

"That kind of formal relationship is important when working with the military. If they need information or policy advice, for example, it can lead to research opportunities."

Having an army background has helped when it comes to understanding how the military works and what soldiers are facing, says McBride. He is a Lieutenant Colonel in the Royal New Zealand Army Medical Corps and had been a reservist in the British Army since 1973. He served with the New Zealand Army in East Timor in 2000 and 2001, and in Afghanistan in 2005 and 2011.

"Being on operational service tends to give you a different perspective. If we put people in harm's way, we should minimise the risks as much as we can. There's enough risk from improvised explosive devices and ballistic injuries without suffering diseases and other illnesses and conditions that are preventable. We don't want Agent Orange to happen again."

A key challenge is to get commanders interested in "doing it better", especially as occupational health and safety has been viewed in the past as something that stops people from doing things, says McBride.

"Commanders are responsible for the health, safety and welfare of troops. We're asking them to think about the immediate consequences of hazards, but also about the long-term impacts. There is health information coming through, but commanders need advisors to help interpret it."

New Zealand also has a responsibility to its international partners, he says. "New Zealand needs to pull its weight

**Associate Professor Lieutenant Colonel David McBride**: "We still have to be more certain about the environments in which we're deploying and what the risks are. We're getting a lot better at that, which is where research can inform practice."

Photo: Alan Dove

in commissioning research – to contribute to knowledge. We need to be good corporate citizens of the wider international community."

One of the major pieces of research to have already come from the research theme is "The Mortality and Cancer Experience of New Zealand Vietnam War Veterans Cohort Study", which showed that New Zealand and Australian soldiers who served in the same location in Vietnam had an increased rate of leukemia and head and neck cancer.

"The Vietnam veterans' study was carried out in close association with the veterans and we are using it as a model. The veterans are very keen that we learn from their experiences with adverse exposures and that it does not happen again.

"We still have to be more certain about the environments in which we're deploying and what the risks are. We're getting a lot better at that, which is where research can inform practice."

Another project is looking at otoacoustic emissions technology to assess firearms impulse noise and to detect early noise-induced hearing loss.

"There is also ongoing research into biomechanics, which is all to do with the mechanics of load bearing. There is a high level of lower limb injuries, such as rolled ankles, in the military. It's somewhere that we really must apply prevention.

"We ask, 'How is this intervention going to benefit a soldier, sailor, airman etc.?' If it's not going to, why do it?"

Gathering input from a range of people is an important part of the process, says McBride. The theme holds an annual colloquium – an "informal gathering" for academic discussion.

"I think that we have been very successful, in the years that we have been running these, in engaging a wide audience that includes serving personnel and families along with the veterans themselves. They know the problems that need to be solved."

A major difficulty of studying veterans' health is identifying the veterans. The Vietnam study was made possible because an artillery officer, Con Flinkenberg, did not throw out pay records from the 1970s and they could later be used to identify veterans.

McBride is currently working on a research proposal to establish an "Anzac cohort" that would identify veterans and find out if they have particular health problems.

"More contemporary operations have been in peace-keeping or enforcing, and the troops are classified as veterans by the Defence Force – they go on a potentially hazardous operational deployment. But they don't think of themselves as veterans.

"The Defence Force also doesn't know how many of their personnel identify as being Māori. They don't see any need because of the strong cultural heritage, so there is no ethnicity indicator in the records. We know that Māori have poorer health in general, but not so in the military. To find out why, we would have to go out and ask the standard census questions."

With the research theme now in its third and final year, McBride is looking to the future and the possibility of creating a research centre for veterans' health at the University of Otago.

"We can achieve quite a lot in three years: during the first two years we were getting out into the defence community and sowing the seeds of ideas, and these are now starting to grow. People are seeing the benefits of engaging with the University community."

There are many areas that need further research, he says, such as the post-conflict re-integration of servicemen. The military is also not immune to the problems facing society in general, such as substance abuse, family violence and mental health.

"Mental health is not as visible as physical health within the defence force. Shell shock in World War I was not recognised and in World War II mental injuries were not dealt with well at all. People carried the scars to their graves.

"In the First World War they used to talk about 'a lack of moral fibre' as being a weakness in the individual. We now know much more about post-traumatic stress disorder. We need to find better ways to identify it, treat it but, most importantly, prevent it."

McBride believes a veterans' health research centre could serve as an "interface" between the military and the University.

"Other universities are involved with the military and there's quite a lot of ad-hoc research on military topics, but no co-ordinated approach to it. I believe a centre would give Otago a strategic advantage over other universities.

"It is a model that has worked well in Australia and Canada. It would be nice to think that we could do it here."

**LAURA HEWSON**

"New Zealand needs to pull its weight in commissioning research – to contribute to knowledge. We need to be good corporate citizens of the wider international community."

# In principle

Even as a young Otago student, Chris Laidlaw was a man prepared to stand up for what he believed was right. This determination – and a willingness to learn – has guided him through a long, varied and sometimes accidental journey as All Black, Rhodes Scholar, diplomat, politician, writer and broadcaster.

As a student at Otago in the 1960s, Chris Laidlaw found himself a pioneer of mixed flatting.

"I shared with a bunch of girls and it worked well. I sourced food from various contacts and they cooked it. It was an arrangement that suited us all."

But it didn't suit the moral standards of the day. Laidlaw recalls a University representative coming to the flat and telling him to leave. Laidlaw stood his ground, asking what jurisdiction the University had to dictate his private life.

"He was frustrated by that and tried very hard to get me to give it up, but I didn't back down. Nothing happened. Legally the University didn't have leg to stand on. Word got round and eventually the floodgates opened. Did it lead to a less moral climate? I don't think so."

It may not have led to a decline in morals, but it did indicate Laidlaw's willingness to stand up for a point of principle. The tendency set him up well for a long and varied career, often fighting injustice, although he didn't set out to be a crusader.

"I never started out with a plan and, in many respects, I have never had a plan ever since. Things have just happened."

Laidlaw grew up in Dunedin, so it seemed logical to attend Otago, where "even at that stage the student lifestyle was regarded as superior to anything found elsewhere".

He studied history and English initially, but majored in geography for his BA and an MA with honours, crediting Professor Ron Lister as an outstanding teacher and mentor. For his master's he researched the economic basis of Stratford in Taranaki.

"I used a highly theoretical central-place analysis, which was all the rage at the time – what makes a place tick economically in terms of its centrality. New Plymouth was growing and I concluded that Stratford was doomed, which was not what they wanted to hear.

"My studies taught me a big lesson that economic theory and reality are all too often very different things."

Laidlaw's studies also taught him time management, which was crucial because of his stellar career as an All Black. In 1962 he'd gone from playing halfback in school rugby directly to the University A side, also playing for Otago, the South Island and New Zealand Universities.

He received training and advice from former All Black halfback Charlie Saxton. "Charlie took me under his wing and kept me on the straight and narrow. I was party oriented in those days and he inspired me to behave rather better. He was one of those mentors that everyone needs."

Laidlaw debuted with the All Blacks on their 1963 tour of Britain and France. Although only 19, he was selected for tests against France and the Barbarians, and his performances sealed his rugby history. But he was still a student, which meant trying to combine sport and academia.

"Of course, rugby players didn't do anywhere near as much training in those days as they do now, so we had more time. And the combination of physical and mental challenges was a good one. But there was still a lot of rationalisation and corner cutting.

"I learned from exceptionally good teachers such as [Professors] William Morrell and Angus Ross. You could talk to them and get sound advice, and they taught me the joy of learning. I was very lucky in that regard."

But the All Blacks were a powerful draw. "Tours were not every year, but they were longer and spread more widely. I'm extra grateful to Otago because they indulged me, allowing me to take exams out of the country. I sat a few papers in London and Cardiff at various times.

"It wasn't easy and my marks were not as good as I would have hoped, but I got my MA done relatively free of rugby commitments."

The All Blacks' 1970 tour to South Africa jolted his social conscience.

**Chris Laidlaw:** "I never started out with a plan and, in many respects, I have never had a plan ever since. Things have just happened." Photo: NZ Herald

"Principles are evolutionary. I went because I believed that it was better for us to be there with a multiracial team on the field, regardless of what the South Africans were doing with apartheid. And conversations I had there led me to believe that the next South African team to tour in 1973 would be a mixed one – but they didn't deliver on that."

Laidlaw played 57 tests with the All Blacks, scoring 48 points, but he was by no means finished with study. In 1969 he went up to Merton College, Oxford, to read social anthropology after gaining a Rhodes Scholarship.

"I had a good interview and I got it. I was pretty chuffed. I'd assumed I'd pick up a lectureship somewhere and become an academic, but instead the Rhodes Scholarship opened up all kinds of doors. It changed my life completely. It injected ambition, which might not have happened otherwise."

After his years at Otago, Oxford was a shock. "It was a completely different environment from Otago, particularly for foreigners, who were made to feel like outsiders. I was lonely at first and wondered why I was doing this.

"But it was easier on Rhodes scholars because we all had the same challenges and got together as a community. I met people I have stayed in touch with ever since. I even met Bill Clinton and got to know him. He was a real partygoer, but a brilliant networker even then. Everyone picked him as going to go far."

Despite difficulties in finding a supervisor – and despite finding senior academics better at offering drinks than advice – Laidlaw emerged with an MLitt for his analysis of race-conditioned patterns of settlement in Fiji.

He accepted a place at the University of Lyon because he was offered free entry if he would coach the local rugby team. It seemed like a good idea at the time and the newly-married Laidlaw moved to France to study and learn the language.

But because he was an unpaid amateur, things didn't work out financially, as Laidlaw admitted on a visit to New Zealand's High Commission in London. Deputy High Commissioner

"Egalitarianism is something in this country that we have always thought of as our point of difference, but we are selling it short and more. The new underclass is showing signs of despair and anger. It is the greatest danger this country faces …"

and ex-Rhodes scholar Denis McLean advised him to join the Department of Foreign Affairs and offered to smooth the way.

Soon Laidlaw was back in Wellington, starting at the bottom and working his way up. His experience of the world worked to his advantage, with postings to Fiji and France, and even an opportunity to advise Norman Kirk on whether or not to allow a South African rugby team to tour.

Laidlaw realised he had been misled about apartheid when he was a player and was definite in saying no. "It had become clear to me that the only way to fight apartheid was to deny contact. It was a personal journey of discovery for me and I'm glad I finally made a stand."

Over the years Laidlaw worked with the Organisation for Economic Co-operation and Development and the International Energy Agency, and then served as assistant to Commonwealth Secretary-General Sonny Ramphal – "the most brilliant person I ever met" – for several years in London.

In 1984 he advised David Lange on foreign policy and then took a post as New Zealand's first resident High Commissioner to Harare, representing New Zealand's interests throughout Africa.

"We were repairing relations with African countries that were suspicious of New Zealand because of what had happened with South Africa. It was a highlight of my career, a most unusual and challenging role, and very fulfilling."

On his return to New Zealand, Laidlaw was appointed Race Relations Conciliator and then Human Rights Commissioner. "My experiences in South Africa had brought home to me the searing reality of the awful denial of rights that had occurred. That, and working with Sonny Ramphal in Commonwealth countries, had made me very interested in rights and the injustice of denying those rights."

Then Laidlaw entered formal politics – a move he now regrets. "The seat for Wellington Central was dangled in front of me, but becoming an MP was a silly thing to do.

"I discovered I'm not a party political animal. In just over a year I was ushered to the Parliamentary door and deeply grateful to go. It was a wake-up call that this was not what I was supposed to be doing. Being an opposition backbencher is about as bad a job as you can have because almost everything about it is negative, trying to lay banana skins under ministers' feet."

He moved to head the World Wildlife Fund in New Zealand before joining the Wellington Regional Council.

"The WWF was my conservation education. I realised that so much of what we are doing is not sustainable and now I'm applying that knowledge with the Wellington Regional Council, looking at ways we can shift the public consciousness in the right direction.

"This aspect of local government is an area where we can get things done. It's very practical and I still get a huge buzz out of it. Right now I enjoy life and I'm having more fun than I have had in years."

For most of his life Laidlaw has been making a difference – through his career, his books, his print articles, his sports commentating, and the Sunday morning radio programme from which he has recently retired after 12 years.

"I said when I started with radio that I'd do it for a decade, so it was time to leave. It's also hard to express personal views on National Radio, and I want to keep asking awkward questions and commenting on issues that interest me.

"Right now I'm looking particularly at inequality. Egalitarianism is something in this country that we have always thought of as our point of difference, but we are selling it short and more. There really hasn't been a good examination of this. The new underclass is showing signs of despair and anger. It is the greatest danger this country faces and we need more people shouting to be heard, and I can do that."

**NIGEL ZEGA**

# Cresting the waves… and plumbing the depths

Acquired through the Leading Thinkers development initiative, the *RV Polaris II* is proving to be an invaluable research platform for Otago scientists.

The *RV Polaris II* at Ocean Beach, Stewart Island.

"The Auckland Islands and the New Zealand sub-Antarctic are right under that sweet spot. So, if you want to look for change and understand change, that's the sensitive spot. We could never have done that work without the *Polaris*."

"We said at the start this was going to transform the way we work – and it's true – it has."

It's a succinct summation, but Professor Gary Wilson can back it up with many examples of research University of Otago scientists would have never been able to tackle without the *RV Polaris II*.

The 21-metre refitted former fishing boat was purchased seven years ago through the Leading Thinkers Initiative and now provides a vital platform for a wide range of marine and environmental science, from the quiet waters of Otago Harbour to the remote seas around New Zealand's sub-Antarctic islands.

"It doesn't matter whether we're trying to image the sea floor, image below the sea floor or collect samples from the sea floor or the water column, the boat can support it.

"You can take this whole research facility to where you need it, whether it's Fiordland, whether it's Stewart Island, or whether it's the Auckland Islands or Campbell Island," Wilson explains.

"It's research that the University never used to do – in fact, it's research that was never done because you couldn't get there. Once you're there you need to be able to do the research and so the *Polaris* provides all of that."

Wilson says one of the vessel's strengths is its large back deck which he describes as being its research powerhouse.

"You can launch remotely-operated cameras and vehicles off it, put the rosette sampler out to pull up water from whatever depth, or use coring equipment. Anything you do on a big ship you can do on the *Polaris*, which is pretty cool."

The vessel can tow nets to sample plankton, dredge samples from the sea floor as far down as 1,000 metres and collect core samples from the sea floor. It can also carry out low-intensity seismic surveys.

Once sample material has been retrieved, researchers can then perform basic analyses in the lab and secure the materials in fridges and freezers so they can be taken back to the University. They can even put a separate "clean lab" on the back deck of the boat so samples can be brought in for chemical analysis without being contaminated.

"It's a small boat, but it is very cost-effective. It can transit from place to place, but once you get to a safe haven to anchor you can work on the samples you are collecting in real time."

In expedition mode *Polaris II* can take up to 15 people, including four or five crew. It is taken away for about 200 days a year and can be self-sufficient for up to 30 days in one trip.

Wilson has recently come back from a trip to the Auckland Islands where the boat was based for two weeks, working without even an hour of downtime.

The trip focused on the last 20,000 years of Earth history and what it can reveal about climate change.

"Twenty thousand years ago we were in an ice age. Between about 18,000 and 10-12,000 years ago we warmed Earth up and everything adjusted to cope with that," he says. "My interest is in looking to see how the natural Earth's system adjusts as you warm it up – what direction do things move in and what does it look like?"

Wilson says the rate of change varies greatly, so during that time there were periods where the rate of sea-level rise was four centimetres a year or faster and the amount of sea-level rise at that rate was 20 to 30 metres.

"There is nothing linear about it and there is nothing that predictable about how it all unfolds, although with a bit of work we should be able to understand how that all comes about, and that is what this research is all about."

The Auckland Islands are the perfect place to work out how much of the change was influenced by Antarctica.

"Antarctica is kind of the engine we're all interested in. It's got most of the ice. It's the thing that is cold enough that it drives the Equator-to-pole temperature gradient, which is the thing that controls atmospheric circulation.

"There are fronts and boundaries in the system, be it in the ocean or the atmosphere, where one bit of the system from the south comes up and comes into contact with the system from the north. That is where all the action is and is where you can measure things," he says.

"The Auckland Islands and the New Zealand sub-Antarctic are right under that sweet spot. So, if you want to look for change and understand change, that's the sensitive spot. We could never have done that work without the *Polaris*."

Wilson says that even if you were a researcher based in another part of the world, if you were picking the place to work, it would be there.

"Often we grapple as a University with the question: what's special about Dunedin? Well this is special about Dunedin. This part of the world in terms of environmental science is unique.

"It's a good barometer for global systems and a great training ground for students and a great place to do the research on your own doorstep so we should make more of it."

**MARK WRIGHT**

The *RV Polaris II* was funded through the Leading Thinkers Initiative, with donations from the Otago Community Trust, Mace Charitable Foundation Trust, J & L Callis Charitable Trust, Eion & Jan Edgar Charitable Trust.

To support research at Otago please visit
*http://alumni.otago.ac.nz*
email *development@otago.ac.nz*
or telephone +64 3 479 5246

## Dr Will Rayment
MARINE SCIENCE

*Polaris II* provides an excellent platform for Rayment's research on southern right whales and, for the last four years, he has led winter expeditions to their primary calving ground, the Auckland Islands.

It takes about 40 hours to get there, and Rayment says *Polaris* and her crew have proved very capable in wild, Southern Ocean conditions. Once there the vessel acts as a floating base for their research and is able to carry up to three tenders from which they conduct their work.

"*Polaris* is a huge asset to the University – she has opened up research opportunities in the sub-Antarctic islands which otherwise would not have been possible. Lying at anchor in Port Ross, tucked up in your bunk below deck on *Polaris* listening to the calls of southern right whales is a truly magical experience."

## Associate Professor Andrew Gorman
GEOLOGY

Gorman uses the *Polaris II* for collecting seismic-imaging data to create pictures of sea floor strata in the same way that medical imaging makes pictures of the inside of a body. These images help in a range of ways, from improving understanding of active faults on the sea floor to characterising sediments deposited during ancient glacial periods to better understand past climate changes.

"Our coast and continental shelf contain numerous dynamic features that are very much affected by ongoing processes linked to climate, oceanic circulation and tectonics. For example, just 30 kms from the mouth of Otago Harbour lie the tops of several world-class submarine canyons that act as conduits carrying sediments – derived in the central part of the South Island and carried to the coast by rivers – into deeper water."

## Professor Keith Hunter
CHEMISTRY

For the last 13 years, Hunter's research group has been running a regular – about bi-monthly – transect across the Otago Shelf, initially using *Munida* and now its replacement, *Polaris II*.

"We measure aspects of the oceanic carbon dioxide system, including pH and $CO_2$ partial pressure. This is a long-term study designed to see if uptake of $CO_2$ by the ocean in this region can be directly measured. The short answer is that, yes, it can. The rate of pH change and $CO_2$ uptake is experimentally indistinguishable from similar measurements made in the northern hemisphere."

As well as this regular sampling exercise, most of the trips include other research by the group, particularly around the behaviour of biologically important trace metals such as iron, zinc and cadmium.

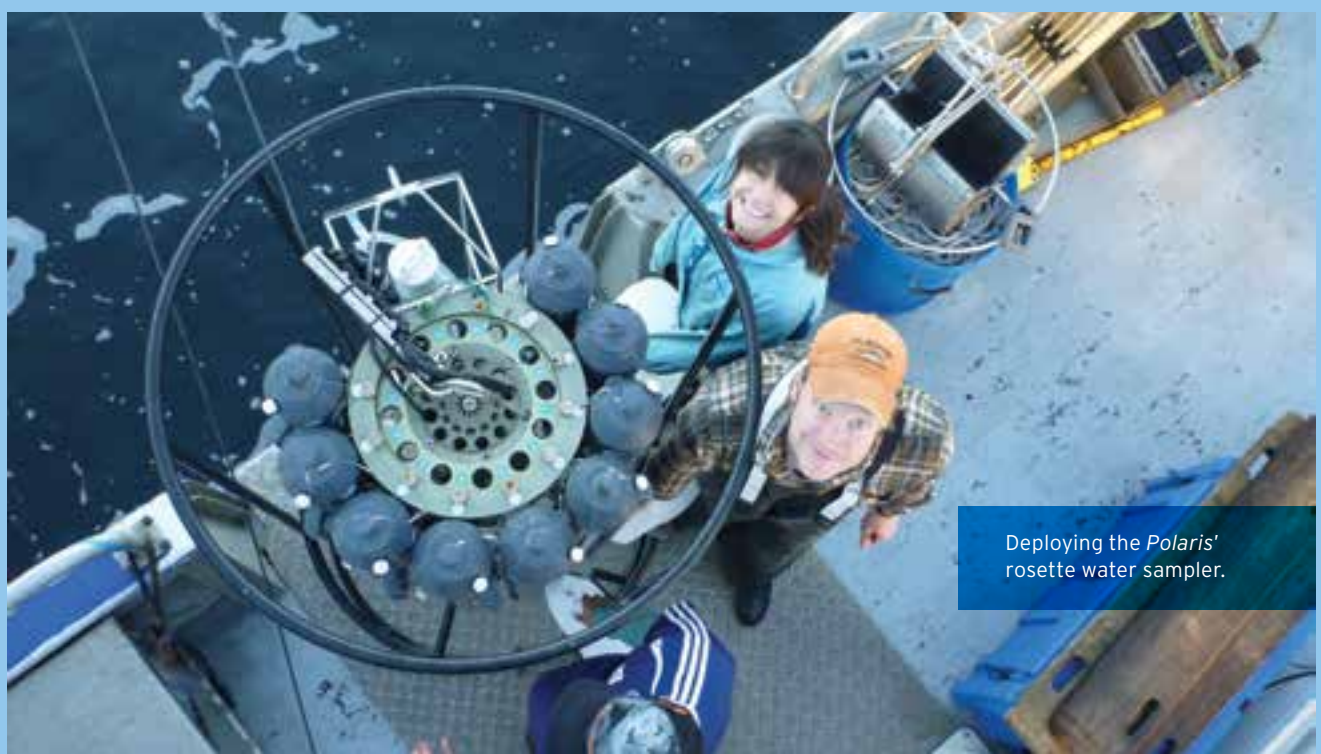
## Emily Tidey
SURVEYING

The School of Surveying uses the *Polaris II* for near-shore student learning exercises and research voyages further offshore. Tidey says final-year surveying students gather sea-bed depth and intensity data, as well as navigation and sampling exercises.

This year the *Polaris* has already collected Benthos C3D data in the Auckland Islands, as well as providing a base for hydrographic surveying operations from a smaller vessel.

"This data will be used for habitat mapping and process modelling – exciting hydrographic research work that is just beginning at the School of Surveying.

"Being able to travel far from Dunedin, with accommodation, adaptable equipment and crew, makes the vessel ideal for many types of University research. Working at sea is an interdisciplinary exercise and a comfortable working environment greatly aids this."



Deploying the *Polaris*' rosette water sampler.

# A southern man

From the the pomp of ceremonial events to the nitty-gritty of finance and Council meetings, John Ward relishes his role as University of Otago Chancellor.

University of Otago Chancellor John Ward is thought to be the first Chancellor appointed from outside the province in the University's 145-year history: nevertheless, he is very much a man of the south.

Raised and educated in Invercargill, Ward gained a BCom at Otago before, like so many other graduates, broadening his horizons by working overseas in London, New York and Johannesburg.

On his return to New Zealand in 1980 he headed south again to catch up on family, but soon realised the opportunities the Otago/Southland region had to offer and took on an accounting practice partnership. In the intervening three decades he has embraced the chance to be part of the region's commercial and academic fabric.

"There can be significant benefits in living in a smaller city. Sometimes I am staggered by the debt that people take on to buy first homes in northern cities. Regional centres provide substantial lifestyle and commercial opportunities. Of course, these aspects are just part of the fabric of life, but they are key components of the mix and worthy of serious consideration."

Ward's own CV is proof of that belief, listing key directorships and chairmanships in numerous high-profile national and local organisations. In 2001 he stepped aside from his substantial practice at Ward Wilson Ltd to concentrate on a range of projects and interests, including becoming the 18th Chancellor of the University of Otago in 2009 after serving two years as Pro-Chancellor and four years as a Council member.

Ward has developed a wide range of external appointments that keep him busy, such as chairing the board of SBS Bank – another 145-year-old southern institution – and he also chairs entities such as centurion retailer H&J Smith Group and the tourism icon, Bungy New Zealand Ltd, established by AJ Hackett and Henry van Asch.

While being Chancellor has its ceremonial aspects – such as presiding over some 12 graduation ceremonies each year for around 3,500 students – Ward has a very inclusive role which includes chairing the University Council, the governing body of the University of Otago, as well as the Finance and Budget Committee.

"The University has a turnover of more than $600 million with assets of almost $1.5 billion and, whilst we currently have reasonable surpluses on an annual basis, they are required to fund capital expenditure and internal development within the University. For example, we have construction projects worth more than $500 million on our Priority Development Plan."

Ward also chairs Otago Innovation Ltd, a wholly-owned subsidiary that is charged with the responsibility of commercialising and seeking commercial opportunities for some of the intellectual property (IP) and research that emanates from the University.

It is an area that he finds particularly exciting and satisfying. "We've been going now for 12 years and, whilst we've always known it would take considerable time and resources to get it established, we've had significant successes in recent years and promising opportunities are being worked on," he says.

"There is a close working relationship with the Research and Enterprise Division of the University and Otago Innovation Limited. Both parties are committed to creating commercial opportunities from the research and IP that are developed within the University."

Another of Ward's roles revolves around alumni associations, both in New Zealand and overseas, with a particular emphasis on Malaysia, Australia, UK

**John Ward:** "We are responsible to all of our stakeholders, including government, but universities must be protected in a way that preserves independence, autonomy and academic freedom."
Photo: Alan Dove

and US. Attendees at these functions are so appreciative of their time at the University of Otago.

He is keen to acknowledge those donors and alumni who have contributed so much to the University and specific projects. "Increasingly, many of our alumni recognise that the opportunities that have arisen through their working lives are directly attributable to having had an education at the University of Otago.

"There's also the social component acquired from enjoying Otago's unique campus lifestyle and environment, and the fact that this aspect has enabled them to create and maintain significant personal relationships that have served them well after graduating."

Ward says the contribution that graduates can now make, on a tax-effective basis, too, should not be underestimated. "Eight years ago the University introduced the Leading Thinkers Initiative which was a phenomenal success as a result of central Government matching internal funding from donors to the extent of $25 million, creating a $50 million fund.

"That fund has been a significant boost to the University and some of the research emanating from that now has global presence. Regular annual contributions are greatly appreciated and valued, too."

He is also quick to acknowledge the role of teamwork in the success of the University and enjoys a close working relationship with current Vice-Chancellor Professor Harlene Hayne, as he did with her predecessor Professor Sir David Skegg. He also has immense respect for the contribution to the University made by the other Vice-Chancellor of his time, Dr Graeme Fogelberg.

"The University is a complex model. It has in excess of 3,800 employees over several campuses and teaches close to 19,000 full-time-equivalent students, representing more than 100 countries from around the world."

Ward also recognises there are issues to be addressed. He chairs the New Zealand Chancellors'/Vice-Chancellors' Group which discusses various issues impacting on the delivery of education. Currently, discussions are being held with the Tertiary Education Minister regarding the proposed streamlining and downsizing of all university councils.

"From my perspective, I certainly don't see the current system as flawed. If it was we would have pushed for change some time ago. We support the representation model and I am hopeful that we can reach a compromise on numbers.

"Intellectual freedom, however, cannot be compromised. We are responsible to all of our stakeholders, including government, but universities must be protected in a way that preserves independence, autonomy and academic freedom.

"All Council members are there for the greater good and the contributions from Council members have been a significant factor in the success of the University over many years."

A recent change to the governance model has been the move away from a Court of Convocation voting mechanism where low voter turnout prevailed at a significant cost.

"Council felt a better way to handle this aspect would be to seek out alumni who have the interest of the University of Otago at heart and who have appropriate skill sets. We feel that is a better way of having the alumni represented in a more pragmatic manner."

But Ward is quick to counter concerns that such a move could make Council too business orientated.

"Clearly, it is a substantial business and you have to have commercial people around the table, but we will be seeking people who can make a contribution in other areas, too. The financial operations are not the only aspects of University affairs that we ponder over."

Looking ahead, Ward can see plenty of challenges and opportunities for Otago. "Our research continually attracts headlines and brings benefits to sectors such as health and the sciences. Our Māori and Pacific attainment rates and numbers continue to progress. Graduates are eagerly sought after as employees.

"We are gradually improving and adapting our research and work spaces yet still retaining the unique campus environment. Funding is always an issue, but the positives are many, the negatives few," he says.

"I am not sure how I ended up in the Chancellor's role, but I relish the opportunities that it provides me with, the relationships that I have with many academic and general staff, and the students I meet on a regular basis. It is a very rewarding position."

**MARK WRIGHT**

"All Council members are there for the greater good and the contributions from Council members have been a significant factor in the success of the University over many years."

# Giving back

Knox College students are happy volunteers at George Street Normal School.
Photo: Graham Warman

A volunteer army of, potentially, thousands is being mobilised following the opening of the University Volunteering Centre (UVC) in late 2013.

The concepts of student altruism and giving back to the community feature prominently in the University of Otago's new *Strategic Direction to 2020*.

"This is regarded as an important part of what the Otago student experience should be and is a part of the town-gown relationship the University has with the wider community," says Director of Student Services David Richardson.

He says many students and staff were already involved in voluntary work, but it often lacked co-ordination.

"We found that many of the people in the community simply couldn't handle the volumes of requests to volunteer they had from students. They also didn't understand the student work cycle which meant students could only be available at certain times of the year.

"It was very clear that co-ordination was necessary."

The new centre provides a centralised hub for students and staff to find out about volunteering, as well as a contact point for the community. One of the key steps has been the appointment of Sze-En Lau as the co-ordinator. In addition to degrees in zoology and volunteer tourism, Lau has considerable experience in the volunteering sector and has been working to develop relationships with other volunteer groups and organisations to help strengthen Dunedin's volunteer network.

In her first week in the job, in early October, she co-ordinated a team of 80 student and staff volunteers to lend a hand at the Special Olympics' 8th National Summer Games.

"I received some enthusiastic feedback from students who said that it was a great opportunity for them to get involved with part of the community they otherwise wouldn't necessarily have the chance to meet."

The brand "UniCrew" has been developed to represent the teams of volunteers and, during Orientation, more than 250 new volunteers signed up to join. In addition, five residential colleges collectively engaged 216 of their residents in volunteering activities during O-week, helping 18 different local community organisations. And the UVC worked closely with the Cancer Society and the OUSA's Cancer Core club to deliver the University of Otago Relay for Life in April.

"Our vision is to see volunteering as part of mainstream University culture so that volunteering becomes something you naturally do when you come to Otago," says Lau.

To find out more about the UVC please visit: *www.otago.ac.nz/volunteer*

# What is it with sugar

Sugar has become the new diet "buzzword". Human Nutrition research fellow Dr Lisa Te Morenga discusses the issues.

Sugar, it seems, is the latest on-trend food topic. Scientists and the news media have been loudly proclaiming the dangers of sugar consumption and presently there seems to be a never-ending supply of journal articles, news stories and TV shows reporting the dangers of our excessive sugar consumption. Even the prestigious science magazine, *Nature*, has been publishing on the topic. A number of personalities, scientists included, have become quite evangelical in their crusade against sugar, calling for the public to be told "the toxic truth about sugar": that is, sugar may be as addictive as tobacco and alcohol, causing terrible danger to our livers and brains, and it should be regulated in the same sort of way.

Meanwhile, it seems that the lay public is already quite aware that eating too much sugar is not a good idea and, quite fairly, wonders why scientists are being paid to research something that is blindingly obvious.

I was thrilled when our University of Otago-based systematic review and meta-analysis examining the effects of sugar consumption on body weight was published in the prestigious *British Medical Journal* last year. This work was commissioned by the World Health Organization to inform the new recommendations on dietary sugar intakes which were released for public consultation in February. The review continues to be widely reported in the world's media and has, so far, gathered a healthy number of scientific citations. In New Zealand our work was reported on the Stuff media website with the dramatic headline "Scientists confirm sugar is a diet evil". The public's response, however, was quite humbling: "What's next? 'Man lands on the moon'" and "No s*** Sherlock" were fairly typical comments.

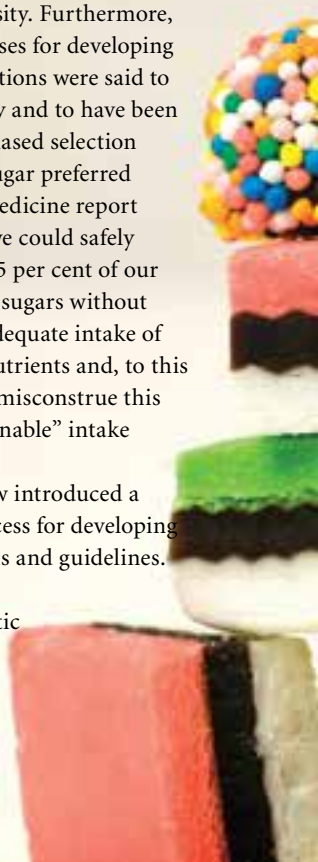
So what is it about sugar that is keeping it in the news?

Well, possible toxicity dangers aside, the notion that excessive sugar consumption contributes to increased risk of dental caries, obesity and obesity-related diseases is not universally accepted. Not surprisingly, the sugar and food manufacturing industries (i.e. Big Sugar) are not so keen to see sugar unfairly maligned. Mirroring the well-described tactics of Big Tobacco, Big Sugar has invested considerable resources to convince the public, health professionals and governments that sugar has an important role in a healthy, everyday diet and that there is no justification for recommending that sugar intakes should be limited.

Big Sugar has been quick to criticise the evidence put forward by the emerging anti-sugar lobby – and, to be honest, it's relatively easy to criticise. There is a surprising lack of high quality, long-term human intervention studies examining the effects of sugars on disease and risk factors for disease. The toxicity claims for sugar are largely based on ecological association studies (for example, correlation studies linking increasing sugar intakes over time with increasing rates of obesity), animal feeding studies and human studies examining the effects of extreme intakes of sugars that bear little relationship to the diets of most people. High quality independent research is still very much needed to verify claims that sugar increases health risks.

Public health recommendations cannot be based on anecdotal evidence, or animal studies. In 2003 WHO released a new population recommendation for sugar intakes, stating that free sugars should comprise less than 10 per cent of total energy intake. This was based on data linking sugar intake with dental caries and the fact that free sugars simply add extra energy to diets without other nutritional benefits. However, the recommendations met with solid opposition from Big Sugar, which attacked the quality of the science underpinning them. There was limited evidence, they argued, to link sugar intakes with obesity. Furthermore, the WHO processes for developing the recommendations were said to lack transparency and to have been developed by a biased selection of experts. Big Sugar preferred an Institute of Medicine report suggesting that we could safely consume up to 25 per cent of our energy from free sugars without compromising adequate intake of other essential nutrients and, to this day, continue to misconstrue this figure as a "reasonable" intake limit for sugar.

WHO has now introduced a more robust process for developing recommendations and guidelines. This process requires systematic reviews of the evidence (with



meta-analyses, if possible) and involves a systematic evaluation of the quality of the evidence on which a recommendation is based, hence our research: an objective review of the evidence from all published human trials and cohort studies which examined the effects of sugars on body weight. Though we confirmed what the public already knew, we provided the most convincing evidence, to date, that intake of free sugars is a determinant (but not the only determinant) of body weight in free-living people consuming relatively normal diets.

Sugary foods and drinks are highly palatable and it's easy to consume too much of them, which can ultimately lead to weight gain. Since free sugars add unnecessary extra calories to our diets without providing other nutritional benefits, they could be removed from our diets without harm. Not surprisingly, Big Sugar is still not convinced that sugar is a problem, although the evidence and population dietary guidelines recommending reduction in the intake of free sugars are getting harder to dismiss.

To me, there is no doubt that sugary foods and drinks are too readily available, too heavily promoted and excessively consumed. It is becoming increasingly clear that excessive intake of sugar is linked to obesity and related diseases, and that Big Sugar is fighting a losing battle. We do need to look at ways to reduce population intakes of free sugars, but this needs to be done carefully to avoid consumers swapping sugar-laden junk for non-sugar junk. Profit-driven food manufacturers will readily provide new food solutions to fill that gap in our diets.

But is sugar toxic and should we ban it? I personally don't think so – or at least the evidence isn't sufficient to have me rethinking my comfortable relationship with sweet treats yet. And, anyway, our celebrations would be so less interesting without, at least, a little bit of sugar.

**Dr Lisa Te Morenga:** "Though we confirmed what the public already knew, we provided the most convincing evidence, to date, that intake of free sugars is a determinant (but not the only determinant) of body weight in free-living people consuming relatively normal diets."
Photo: Alan Dove

# Collaborative success

The University of Otago has played a key role in an innovative collaboration between pharmaceutical giant Bayer and three New Zealand universities, resulting in the development of new treatments for diseases such as mastitis in dairy cows.

A research group established by Bayer together with scientists from Otago and Massey Universities (and subsequently Auckland University) are working collaboratively to research and develop new treatment solutions for diseases and other challenges which limit dairy productivity.

Led by Bayer's New Zealand-based APAC Development Centre, with input from the company's head office in Germany and its regional centre in Singapore, the aim was to identify an area of need in the market, bring the universities together and then work on developing products to meet market demand. The company is investing more than $1 million a year in the group's work, initially focusing on the problem of mastitis and now exploring new developments in reproductive health.

The University of Otago has been involved from the start of the collaboration and has played an integral role in helping develop novel formulations of antibiotics which better target mastitis infection in dairy cows – and for longer – resulting in higher cure rates, and less waste of milk and revenue.

Bayer's APAC Development Centre head, veterinarian Dr Richard Emslie, says bringing together expertise from different universities has worked well.

"Mastitis is a huge problem, not only in New Zealand where the disease costs $280 million a year in lost milk production, but globally where losses have been put at $US35 billion.

"While Bayer is doing intensive research into mastitis, it makes sense for us to work with local New Zealand university research centres where we can utilise a wide base of knowledge and expertise.

"The universities also get to work on the development of new products that the market needs and have potential to be sold worldwide through Bayer's international distribution channels – it really is a win-win situation."

Otago's input into the research programme has been led by Professor Ian Tucker (School of Pharmacy) and Dr Olaf Bork (School of Pharmacy/Centre for Bioengineering and Nanomedicine).

Tucker says the mastitis research has been a truly collaborative effort, comprising Otago expertise in drug delivery, Massey's knowledge in animal husbandry and trials, Auckland's chemistry knowledge and Bayer's development, manufacturing and marketing skills.

Acting CEO of the University's commercialisation company, Otago Innovation Ltd, Pete Hodgson, says that the success of the project shows the strength of practical science and innovation at the University of Otago, and the benefits of working closely with industry from an early stage to bring research developments to the market.

"This research group set up by Bayer is a great example of what Otago Innovation is trying to achieve – leveraging the University's research knowledge via a competent industry partner to create valuable products and services. The end result of this great collaboration has been closer relationships between university researchers throughout the country and business with clear beneficial commercial outcomes for all parties – and for the country.

"This is research that will make a difference and we're very pleased with the progress made working with Bayer. We're also delighted by the fact that these new animal health products will make a big difference to the early prevention and control of mastitis, improving milk production in a vital industry for the New Zealand economy," says Hodgson.

Mastitis is arguably the biggest production-limiting challenge faced by dairy farmers and also has a big impact on animal welfare. Traditional antibiotic therapies have limited cure rates which, to some degree, result from inadequate concentrations of drug being reached at the infection sites within the udder.

Modern formulation and analytic technology allows the development of more advanced drug delivery to achieve higher concentrations of "active" at the

**Professor Ian Tucker** and **Dr Olaf Bork** are leading Otago's collaboration into the development of better treatments for mastitis in dairy cows, helping to reduce the waste of milk and money.

Photo: Graham Warman

infection sites, for longer, thus achieving higher cure rates. In addition, this enables the reduction of milk withhold times, thus reducing revenue loss through discarded milk.

With such hurdles to overcome, Emslie says a multidisciplined approach is required, which is why the three New Zealand universities are involved. Each research partner has a different expertise that can be brought to the table – formulation, drug delivery, medicinal chemistry, dairy research and industry/market knowledge.

Bork says he is excited about the results so far and praises the collaborative approach to innovation. Emslie agrees and says the collaboration aligns with the Government's interest in promoting relationships between industry and universities.

"Bayer has always had ongoing relationships with universities all over the world and we are delighted with the success of the research group here in New Zealand."

"We're delighted by the fact that these new animal health products will make a big difference to the early prevention and control of mastitis, improving milk production in a vital industry for the New Zealand economy."

## Research focuses on delivery of bioactives

Affectionately known as "the FDB", the University of Otago's Formulation and Delivery of Bioactives Research Theme provides structure and focus for research which addresses the challenges of delivering bioactives most effectively to their targets – for example, to bacteria in the udder of a cow.

Bioactives are compounds which act on any living thing and include vaccines, drugs, genes, pesticides, cells and other materials (e.g. even perfumes).

The theme is convened by Professor Ian Tucker (School of Pharmacy) and includes scientists from a number of related departments, including Physiology, Anatomy, Pharmacology and Toxicology, Microbiology and Immunology.

In its 17 years, the theme has run 16 international conferences drawing scientists, industry people and students together to share their bioactive-delivery problems and to discuss cutting-edge solutions provided by some 50 international keynote speakers, in addition to New Zealand scientists and PhD students. This has been a stimulus to formulation and delivery research in New Zealand and given Otago an international reputation in the field. For example, the FDB often combines with the New Zealand Chapter of the CRS (Controlled Release Society), a US-based international association devoted to delivery science and technology of which Tucker is the current president.

In 2008, the theme's 10th conference was devoted in large part to formulation and delivery strategies for drugs and vaccines for companion animals (dogs, cats), livestock (cows, deer, etc.) and wildlife (possums). Bomac/Bayer was a platinum sponsor for that conference, recognising its importance to research in this field and to their relationship with Otago.

# Deep fried capture

**Next time you tuck into some takeaways, maybe have a think about how informed your choice was.**

Dr Trent Smith (Department of Economics) and Professor Attila Tasnádi, from Corvinus University of Budapest, have developed an economic model of "deep capture", which they have demonstrated by applying it to the food industry's response to obesity.

They explain that "deep capture" is the phenomenon in which industry uses public relations to influence legislators, regulators, the media, celebrities and even academic researchers.

Smith and Tasnádi argue that when industrialised countries began to show startling obesity rates, the fast food industry opted not to improve nutritional quality, but to use "deep capture" to manipulate public perceptions about the causes of the obesity epidemic.

They contend that the industry was able to do this because consumers do not have detailed information about food science or the exact nutritional content of the particular meals they eat.

"There is this very simple idea that you let producers compete and you let consumers choose and everything should work out well," Smith says. "We are saying that if there is enough power on the industry side, they can change that equilibrium."

Smith recounts that the last time he ate takeaways was about five years ago, as an experiment in which he consumed different types of fast food and recorded blood sugar levels that were synonymous with diabetes.

Smith and Tasnádi's research has been published in a recent issue of the *American Journal of Agricultural Economics*.

**Dr Trent Smith:** "We are saying that if there is enough power on the industry side, they can change that equilibrium."

# Bugs and bowel cancer

**New Zealand has the highest rate of bowel cancer in the world, yet we don't know why bowel cancer develops in most cases.**

A small number of people have a predisposing condition such as an inherited genetic disorder, but for over 90 per cent of patients the cause of the cancer is unknown.

Professor Frank Frizelle says researchers have historically focused on inherited aspects of bowel cancer. With a number of cancers, including cervical, anal, throat and gastric cancer, bacteria and virus are the cause. Frizelle and his team suspect this may also be the case with bowel cancer and are looking to see if this is the case.

Frizelle is one of the country's foremost bowel cancer surgeons. He heads the Department of Surgery at the University of Otago, Christchurch and is also a dedicated researcher. He was recently awarded a Gold Medal for Research from the University of Otago, Christchurch for his long and productive research career.

Another of Frizelle's current research projects is looking at outcomes of patients with bowel cancer in terms of survival and quality of life. He and his team are studying data on bowel and colon cancer surgical patients from Canterbury and comparing their outcomes with patients in Sydney, Melbourne, Leeds and London.

"We have more cases of cancer here than any of the other sites (in the study) – we see so much bowel cancer. We are really trying to work out what is behind this and how to get the best outcomes for patients."

Bowel cancer researchers: Back row (from left): Professor Frank Frizelle, Dr Jacqui Keenan, Dr Bruce Dobbs. Seated (from left): Dr Chris Wakeman, Associate Professor Tim Eglinton, Rebecca Pascoe.

# Curiosity killed the cetacean

**Could our curiosity end up being as lethal as harpoons and nets for whales and dolphins?**

Professor James Higham (Tourism) has co-edited and contributed to a major publication that critically examines the sustainability of whale-watching.

Higham notes that global whale-watching has developed into a $2.1 billion a year industry and that cetaceans (whales, dolphins and porpoises) interact with 13 million whale-watchers each year.

"In many parts of the world the rapid growth of the industry has raced ahead of the development of policy and planning frameworks to regulate and manage whale-watching," Higham says.

Co-editor, Associate Professor Lars Bejder (Murdoch University), says his research confirms that, if not well managed, there can be biologically significant consequences for exposed populations. "Repeated disturbance by boat traffic can severely disrupt cetaceans in the wild," warns the former University of Otago research student.

Higham is critical of high volume whale-watching operations in places such as the Azores, where mass tourism is simply assumed to be sustainable when contrasted with its history of whale hunting.

He cites dolphin-watching at Shark Bay in Australia and whale- and dolphin-watching at Kaikoura as "offering insights into the sustainable management of human interaction with cetaceans. Unlike in many other parts of the world, the volume of visitors is carefully monitored and managed at Shark Bay and Kaikoura."

The 388 page hardcover book (*Whale-watching: Sustainable Tourism and Ecological Management*, Cambridge University Press, March 2014) brings together the work of international experts and includes contributions from several current or former University of Otago students.

**Professor James Higham:** "In many parts of the world the rapid growth of the industry has raced ahead of the development of policy and planning frameworks to regulate and manage whale-watching."

# Vive la différence

**Open grassland with a scattering of trees is called savanna, a classification that makes sense of similar biogeographical areas, but recent research shows that focusing on these similarities won't produce useful models for predicting the impacts of climate change.**

Professor Steven Higgins (Botany) and colleagues have analysed data from more than 2,000 sites in savannas in South America, Australia and Africa. In a paper published in *Science*, they show that although four main impact factors – moisture availability, fire, soil type and temperature – shape all savannas, the impact of these factors is not uniform across all, and that these savannas all behave in their own distinctive ways.

"This shows we can no longer assume that similar looking vegetation will respond in the same way to climate change," Higgins says. "This, in turn, means we have to rethink how we represent the world's vegetation in models used to predict climate change impacts."

Currently scientists use structurally similar vegetation units, called biomes, to model potential climate change impacts.

"We are now in the process of developing new models that reflect the role of evolutionary history in shaping why, for example, Australian and African savannas behave so differently despite some apparent similarities.

"An analogy can be made with weather predictions," he says. "The better a climate model can describe the current conditions the further into the future it can forecast. We believe that the better we can describe how evolutionary history got us to our current situation, the better we will be able to forecast future vegetation."

**Professor Steven Higgins:** "... we have to rethink how we represent the world's vegetation in models used to predict climate change impacts."

# Songs of war

**What did soldiers sing in the trenches during World War I? Not what you might think, according to Dr Rob Burns, Associate Professor of Music.**

"The popularity of the newly available gramophone gave soldiers of all ranks access to the contemporary music of the day and, contrary to popular belief, *Tipperary* and *Pack Up Your Troubles* were not the mainstays of the trench repertoire. Both songs were only popular in the early part of the war."

Burns will deliver a paper entitled "When This Bloody War Is Over: new perspectives on the World War One folk music canon" in August at the Music of War 1914-18 conference for the Oxford Centre of Research at the British Library, in London.

"Many traditional British folk songs contain lyrics concerning the subject of warfare," he says.

"These songs often have interchangeable lyrics that can be varied depending on a particular war, a current monarch or an individual hero. There are comparatively few, however, composed specifically about World War I."

By studying songs sung during the First World War, we can learn how new "folk songs", drawing on historical elements of the time, might create a new World War I folk canon, says Burns.

"I maintain that many of the songs sung in trenches, despite their origins in early 20th century popular music, will have become 'folk songs' by default in years to come, a result of the emotive nostalgia that the memory of the war still invokes a century later."

**Associate Professor Rob Burns:** "I maintain that many of the songs sung in trenches ... will have become 'folk songs' by default in years to come."

# Cold comfort

**Lives could be saved if people were trained in surviving sudden immersion in cold water.**

Eighty-one people drowned in New Zealand last year – a record low, but still one of the highest rates for developed countries – and about 60 per cent died because of the effects of sudden cold-water immersion.

Associate Professor Chris Button (School of Physical Education, Sport and Exercise Sciences) has led a research project on behalf of Water Safety New Zealand, measuring the difference that training makes to the responses of inexperienced swimmers suddenly finding themselves in cold water.

"Most drownings don't occur because of hypothermia. Instead, they occur in the first few minutes because people are gasping, hyperventilating and panicking."

Button says that, remarkably, the repeated experience of being in cold water, combined with mental skills training, within only one week can drastically improve people's ability to control hyperventilation, hold their breath under water and tread water.

Based on the research, Button and colleagues, Dr Jim Cotter and Professor Ken Hodge, believe that getting used to cold water, combined with skills training, should be a part of learn-to-swim courses.

The research "volunteers" had to be paid to take three-minute plunges in water as cold as 10°C twice a day for a week in the aquatic flume at the School of Physical Education.

The research results have been presented to various interested groups, including Water Safety New Zealand, Surf Life Saving New Zealand and the New Zealand Police, and published in the journal, *Aviation, Space and Environmental Medicine*.

**Associate Professor Chris Button:** Research indicates that getting used to cold water, combined with skills training, should be a part of learn-to-swim courses.

# Aiding development

**International aid to Kosovo and Albania has had mixed results when it comes to promoting development, says Politics PhD student Luca J. Uberti.**

"Aid is a geopolitical affair," says Uberti. "Kosovo and Albania receive a disproportionate amount considering their status as lower-middle-income countries. This has created an economy and culture of external dependence, which has shifted resources away from productive enterprise and towards rent-seeking activities."

Uberti's thesis focuses on the economic effects of the free-market and good-governance reforms promoted by the donor community in the two countries, which have a mixed record of economic performance, he says.

"Firstly, growth rates have been quite erratic. Secondly, they are heavily dependent on aid and rely on remittance payments from migrant workers to plug a gaping trade deficit."

Uberti has spent three years in Kosovo and Albania and will return for further fieldwork this year. "A key tenet of the mainstream development paradigm is that the state should not intervene directly in the economy – the market will take care of itself. But it is simply utopian to think that the large-scale investments needed for development will ensue naturally in countries with undeveloped capital markets and weak institutions."

Uberti's thesis also focuses on questions of corruption and clientelism. "Clientelism is a corrupt type of relationship where those in power hand out resources to people lower down the social hierarchy who provide or mobilise political support in return. The evidence I have gathered suggests that good-governance reforms have actually failed to mitigate the problem of clientelism in either Kosovo or Albania."

**Luca Uberti:** "It is simply utopian to think that the large-scale investments needed for development will ensue naturally in countries with undeveloped capital markets and weak institutions."

# Looking back for the future

**A University of Otago, Wellington study of the 1918-1919 influenza pandemic could help future pandemic planning.**

The New Zealand military did not escape the 1918-19 influenza pandemic, with an estimated 930 pandemic-attributable deaths among military personnel, representing 5.1 per cent of all New Zealand military deaths from World War I.

To help understand the risk factors for death from pandemic influenza, Otago researchers conducted a case-control study using individuals situated in the northern hemisphere during the pandemic period (218 cases and 221 controls). They found some of the risk factors that had been identified in other studies such as young age (specifically 25-29 years) and having a chronic health problem such as tuberculosis.

But more novel findings for the risk of pandemic death included a relatively early year of military deployment (e.g. 1914 and 1915) and having a larger chest size.

Lead researcher Dr Jennifer Summers says the finding around larger chest size fits with anecdotal observations at the time relating to larger individual size and increased risk of complication or death during 1918.

"There has also been evidence from the more recent 2009 influenza pandemic in terms of large body size and increased risk of hospitalisation," Summers says.

One of the study co-authors, Associate Professor Nick Wilson, notes that this type of information can inform pandemic planning. "This is because an overwhelmed health system might need to prioritise limited resources to those groups who are most at risk of hospitalisation and death."

The study was published in the international journal *Influenza and Other Respiratory Viruses*.

**Dr Jennifer Summers:** "There has also been evidence from the more recent 2009 influenza pandemic in terms of large body size and increased risk of hospitalisation."

# Sound teaching method

**Some University of Otago students are in the dark – literally – when it comes to learning.**

Dr Karyn Paringatai (Te Tumu: School of Māori, Pacific and Indigenous Studies) has summoned a traditional Māori teaching method to help students in her Introduction to Māori Performing Arts course.

Paringatai explains that only a few of the 40 to 50 students who take the course each year speak Māori and more than a half of the class are international students, which has meant that learning Māori songs has been slow and pronunciation laboured.

"I thought there must be a better way of doing this."

She found the answer in a pre-European Māori method of teaching used in the whare wānanga (institutions of esoteric learning), where teaching would continue into the dark winter evenings.

Instead of reading the words from a page or projected onto a wall, Paringatai's students experience total immersion – in darkness in a windowless room with the lights turned off, and with Paringatai or tutors saying the words and the students repeating what they hear.

"The darkness allows the students to focus on the words and their pronunciation. The first song we teach used to take students about four to five weeks to learn off by heart and their pronunciation was poor. They now learn the song within two hours and their pronunciation is much better."

Paringatai says that the students are amazed at their rapid progress, gain confidence, have more time to put into their performance skills and achieve higher grades.

**Dr Karyn Paringatai:** "The darkness allows the students to focus on the words and their pronunciation... They now learn the song within two hours and their pronunciation is much better."

# Patent incentives

**New Zealand politicians, policy-makers and scientists talk of the need for a more innovative economy. In a Marsden-funded project, Dr Steffen Lippert (Economics) and colleagues have concluded that one way to encourage this would be to tighten patent requirements.**

Focusing on the increasingly important role that venture capital plays in the innovation process, they looked at the incentives for venture capitalists to fund financially-constrained entrepreneurs and how these incentives are affected by the design of the intellectual property system.

Lippert says they developed a model of venture capitalists' behaviour as they select and support high-potential entrepreneurial ventures. An important part of this is information acquisition and signalling – how do entrepreneurs get the information to judge whether a venture is worth investing in, and how do they then signal to already-established companies that this venture is worth buying?

He says the intellectual property system plays a key role in this latter stage as venture capitalists use patents to signal the value of an innovation to prospective buyers.

The model shows that a tightening of patenting requirements by patent offices (such as increasing the thresholds for judging novelty, non-obviousness and usefulness) increases the pool of early-stage (unpatented) ideas. This also decreases the number and breadth of patented claims needed to separate highly valuable innovations from less valuable ones, meaning that the venture capitalist can use a good quality patent as a signal to buyers.

"In short: tightening patent requirements would make venture capitalists more likely to back entrepreneurs and increase entrepreneurial incentives to innovate."

**Dr Steffen Lippert:** "Tightening patent requirements would make venture capitalists more likely to back entrepreneurs and increase entrepreneurial incentives to innovate."

# Waste not

**Red wine is supposed to be good for us, in moderation, but so, too, could be the stalks, skins and seeds the wineries throw away.**

Dr Greg Walker (School of Pharmacy) and two students, Avis Kao and Lei Xia, are researching the use of wine-waste extracts in the fight against bacteria. They are working in collaboration with Dr Michelle McConnell (Microbiology and Immunology) and Dr Alaa Bekhit (Food Science).

Walker explains that wine waste is full of compounds known as polyphenols that have high antibacterial and antifungal qualities. He says New Zealand wine waste is particularly high in these polyphenols, probably as a way of grape vines protecting themselves from the high levels of ultraviolet light.

The research aims to determine whether it is possible, using a process called electrospinning, to incorporate these polyphenols into nanofibre textiles woven from polymers made from natural products such as corn protein. The polyphenols would then be slowly released from the textile to prevent bacterial growth.

The team has identified medical dressings and meat wraps among potential uses.

"You could leave it in the body and it would degrade, or you could use it as a wound dressing that could later be removed," Kao says.

"If we could put a piece of wine-waste wrap around a leg of lamb and increase its shelf life by a week, that would be massive," Walker enthuses.

Xia points out that New Zealand wineries produce tens of thousands of tonnes of wine waste each year.

**Dr Greg Walker** and **Avis Kao:** "If we could put a piece of wine-waste wrap around a leg of lamb and increase its shelf life by a week, that would be massive."

# Mammoth decisions

**Should we bring back extinct species and, if so, which ones?**

Such questions used to fall within the realm of science fiction but, now that they are entering the world of science fact, they are occupying the minds of scientists such as University of Otago Professor Philip Seddon (Zoology).

Seddon has co-authored an article on "de-extinction" in the ecological journal, *Trends in Ecology and Evolution*.

He says technological advances have raised the controversial prospect of resurrecting extinct species. Researchers have already managed to clone a recently extinct type of European mountain goat from tissue, using an egg cell of a domestic goat, which also acted as a surrogate mother, although the kid died within a few minutes of birth.

Seddon argues that "de-extinction" ought to be more than a technical exercise.

"If you want to resurrect a species, then you don't want it just sitting around in a laboratory or a zoo. It should be for some ecological gain – putting a species back into a suitable habitat to do the kind of things that it used to do.

"The selection of potential de-extinction candidates must therefore consider the feasibility and risks associated with their re-introduction. There is a risk that your re-introduced animal won't survive, but there is also a risk that it does things that you don't intend within that ecosystem."

If we could bring back only one species, Seddon would choose one of the smaller species of New Zealand's moa.

**Professor Philip Seddon:** "If you want to resurrect a species ... it should be for some ecological gain."


**Dr Greg Macleod:** "Otago was the only university that was offering many of the things that I wanted to study."
Photo: Graham Warman

# Doctor in the stadium

With four degrees and a couple of postgraduate diplomas from the University of Otago, Greg Macleod has landed his dream job – as team doctor for the Highlanders.

It seems almost inevitable in hindsight that Dr Greg Macleod would turn his passions for sport and health sciences into a career.

The Highlanders Super Rugby team doctor was a champion rower in his birth country of South Africa: he was an age-group rowing champion for five years, was awarded Springbok colours for rowing and represented South Africa at the world junior rowing championships. The avid sports fan also played first XV schoolboy rugby. "I went to King Edward VII School in Johannesburg, where rugby is a big part of the school life."

Macleod studied human movement sciences at the University of Pretoria before emigrating to New Zealand in 1998. (He followed his family here after his father secured a job as a Ministry of Agriculture veterinarian in Thames.) The 20-yearold immediately embarked on serious full-time study at the University of Otago, where he completed four degrees (in physical education, science, physiotherapy, and medicine and surgery) and a couple of postgraduate diplomas (in sports medicine and child health) over the next 13 years.

"Its reputation and status was a big part of it," Macleod explains, "and Otago was the only university that was offering many of the things that I wanted to study."

He cites anatomy as his favourite subject. "It's a fascinating subject for me. There is so much to know and knowing it well gives you confidence in your job. There was one lecturer in anatomy, Dr Latika Samalia, who was so passionate about teaching and I think that rubbed off on a lot of people."

Macleod says he also values the things he learned that went beyond knowledge of the subjects. "I certainly acquired some of the skills that stand you in good stead in life: communication skills, the ability to relate to people and to understand their point of view, and to think about things critically when you make a decision."

For most of his time studying at Otago, Macleod was a housemaster at Dunedin's John McGlashan College, responsible for the residential care of more than 100 adolescent boarders each year. The workaholic also simultaneously worked part-time in various, often overlapping, jobs, including tutor, physiotherapist, health promoter, and medic in the Royal New Zealand Army Medical Corps.

A further part-time role served as a good training ground for the job of Highlanders' team doctor. Macleod was the strength and conditioning coach for the North Otago and Otago rugby teams as well as an assistant to the Highlanders.

Volunteer work with Special Olympics' athletes and being a part of the medical staff for Masters' Games in Dunedin further whetted his appetite for sports medicine. So, too, did a three-month sports medicine elective in Barcelona, where he worked with a professional basketball team in the European League, JCB Badalona.

Macleod worked as a house surgeon at Dunedin Hospital for two years before joining the Highlanders as the full-time team doctor in 2012.

He says the majority of his work involves thinking ahead. "After a game we are treating the injuries that players have picked up, but we are also trying to forecast where the person is going to be in a week or two's time and what we

"It's amazing how many times in sports medicine a lot of the stuff you are dealing with isn't strictly sports injuries. If a player gets a cold, it is going to keep him out of training and playing just as much as an injury."

have to do in terms of rehab to get them stronger so that it doesn't happen again. When we go to South Africa, we need to think ahead about what we need there. We don't have the same level of support as we do here."

At 36, Macleod is three years younger than the oldest Highlanders' player, Brad Thorn, and not much older than a few of the other players.

"That has its challenges and its benefits. In hospitals, you sometimes get older patients saying, 'Are you really a doctor? Gosh, you don't look old enough.' The plus side is that it helps you relate to the players from a 'stage-of-life' point of view and forge a level of rapport with them – particularly those with families of their own, who must also spend days and weeks away from them while playing games away from home."

Macleod says the most common ailment he treats isn't directly related to rugby. "Probably coughs and colds, to be honest. It's amazing how many times in sports medicine a lot of the stuff you are dealing with isn't strictly sports injuries. If a player gets a cold, it is going to keep him out of training and playing just as much as an injury. We obviously also get lots of common sports injuries – particularly shoulder and ankle injuries. Concussion is another one we pay special attention to."

Occasionally the non-rugby conditions are by far the most serious. Macleod had to break the news to Highlanders' winger Buxton Popoali'i that his heart condition meant an end to the 24-year-old's blossoming rugby career.

"It was heartbreaking. I didn't know whether to be disappointed or relieved about it. I was bitterly disappointed for Buxton and felt like the bad guy for breaking the news but, at the end of the day, if he had kept on playing it could have been fatal."

Although he was born and raised in South Africa, Macleod says there is no question of divided loyalties when the Highlanders are playing South African franchise teams. "Not at all. Where you come from and where you feel your home is, are different things. The Highlanders have been a big part of my life. It's my team. It's Highlanders all the way."

In the medium term, Macleod aspires to emulate one of his sports medicine mentors, Professor Dave Gerrard (Dunedin School of Medicine) and serve as the team doctor with a New Zealand Commonwealth Games' or Olympic Games' team.

Meantime, work and family continue to keep him super busy. His wife, Dr Emily Macleod, is a lecturer in psychological medicine at Otago; they have a two-year-old son, Freddy, and another son on the way. Outside of work and family, Macleod has an affection for classic cars, motorbikes and collecting fountain pens.

**IAN DOUGHERTY**

# UniNews

## Otago to host Centres of Research Excellence

**The University of Otago is to host a new Centre of Research Excellence (CoRE) and to co-host another new CoRE.**

Otago has been chosen by the Tertiary Education Commission to host the Dodd-Walls Centre for Photonic and Quantum Technologies, with Associate Professor David Hutchinson (Department of Physics) as director, and to co-host Brain Research New Zealand – Rangahau Roro Aotearoa with the University of Auckland. Professor Cliff Abraham (Department of Psychology) will be in a co-director role with Auckland University's Distinguished Professor Richard Faull.

Vice-Chancellor Professor Harlene Hayne says this is a clear indication of the University's research standing.

"Otago has many research strengths in a diverse range of fields and this strength has been underscored by the CoRE announcement," she says.

"What is particularly exciting is that we have been entrusted with key leadership roles in two very different areas – photonics and quantum science, and brain health. Both of these CoREs will bring us into closer working relationships with other New Zealand universities and research institutes, and the sharing of ideas and energy across the sector will be of great benefit to the country."

Deputy Vice-Chancellor (Research and Enterprise) Professor Richard Blaikie says Otago's involvement in these centres will boost research at the University.

"These CoREs are an exciting opportunity to develop and build on our existing collaborations. This will also allow us to develop our own research capacity, as well as nurture the next generation of scientists.

"They involve groundbreaking areas of science which provide scope, not only for studies that generate fundamental knowledge, but also translational research that is of wider benefit to our economy and society, and that enhances New Zealanders' health and well-being."

Professor Blaikie emphasises that, as well as these hosting and directing roles, Otago researchers are also fulfilling vital roles as collaborators and co-researchers for several centres hosted by other institutions.

## Lottery grants for Otago health researchers

**University of Otago health research projects have attracted more than $1.9 million in funding from the Lottery Grants Board.**

Researchers from the Dunedin, Christchurch and Wellington campuses have received 24 translational research grants, seven equipment grants and two PhD scholarships. Otago's translational projects range from investigating how the bacteria that cause listeria spread in the body to studying severe housing deprivation.

## *Nature* rankings confirm research excellence

**Otago has again ranked first among New Zealand research institutions for papers published in the prestigious journal *Nature* and its 17 related primary research journals.**

The 2013 *Nature* Publishing Index Asia-Pacific measures the output of research articles published in the 18 *Nature*-branded journals over the calendar year to provide a snapshot of research in the Asia-Pacific region in 2013.

Otago came in at 67th, rising from 87th place in 2012, when it also topped the country's institutions. The index also reveals that the University enjoys the highest New Zealand ranking over the 2009-2013 period, coming in at 61st.

## Otago becomes a major Highlanders' sponsor

**The University of Otago is now one of the major sponsors of the Highlanders Super Rugby team, a move aimed at capitalising on the rugby franchise's significant marketing exposure. Although this is a first for a New Zealand university, such sponsorships are not uncommon in the US and Australia.**

As part of the sponsorship, the University's name now appears on the back of the Highlanders' jerseys and on the medics' bibs. During home games the University logo is painted on the Forsyth Barr Stadium playing surface and also appears on sideline digital signage. University videos play during intervals and players are becoming involved in academic initiatives and University events.

Vice-Chancellor Professor Harlene Hayne says this agreement gives the University an opportunity to increase its visibility to markets across New Zealand and overseas. "We are New Zealand's oldest and finest University, but we are also, sometimes, it's shyest. The location of our main campus in Dunedin is beautiful, but we sometimes run the risk of being overlooked because the University isn't located in one of the larger cities."

She says the decision to sponsor the Highlanders' franchise was based on a number of strong synergies, with the team representing provinces south of the Waitaki, incuding both Otago and Southland.

"When you look at the high-level skills that have been used to develop professional rugby success – the expertise in medical, physiotherapy, marketing and business areas, the science in clothing and nutrition – a lot of these skills have come from students, graduates, researchers and teachers from the University of Otago."


Vice-Chancellor Professor Harlene Hayne and Highlanders' players Craig Millar and Ben Smith.
Photo: Sharron Bennett

Just as many of the most prestigious universities in the world have strong sports programmes, she hopes the support of the Highlanders' franchise and associated benefits will draw more of the "best and brightest" to study at Otago. "The University of Otago already has a long and proud history of nurturing some of the best Highlanders' players – and future All Blacks – as they studied for their degrees at Otago while pursuing their rugby careers."

Another important consideration in the sponsorship decision was the stadium itself and the need for the Otago and Southland community, of which the University is a part, to support it.

"This stadium is not only a part of the Dunedin community, it is also a part of the University of Otago community – together, we need to work to make it succeed. Since its completion, we have used the stadium for University events, including student Orientation. The stadium grounds provide a safe environment for student activities and they are only a short walk from the flats in North Dunedin and our residential colleges.

"There are very real opportunities that make this sponsorship such a great fit for our University. Not only are our students one of the most colourful and passionate fan-bases of the Super Rugby competition in New Zealand, it is also very important that the University leads from the front.

"We need to use our collective voices and our collective influence to remind New Zealand – and the rest of the world – that Dunedin is a place of endless opportunity. The Highlanders are a part of our vibrant community and we look forward to our growing partnership with them."

## Te Rangi Hiroa College opened

**A newly-opened University of Otago student accommodation facility has been named Te Rangi Hiroa College in honour of the late Otago medical school graduate, who was also known as Sir Peter Buck, recognising the strong bond between the University and his whānau and tribal connections.**

Guests at the opening of Te Rangi Hiroa College.

The opening of the 127-student college was attended by 130 distinguished guests, including 40 members of Te Rangi Hiroa's Taranaki whānau and his tribe, Ngati Mutunga, representatives from Ngāi Tahu, the University's Vice-Chancellor Professor Harlene Hayne, and distinguished alumni of Otago, including former graduate, and prominent Māori leader Professor Sir Mason Durie.

## Global resource scarcity under spotlight

**An impressive line-up of national and international speakers will grapple with global resource scarcity at this year's University of Otago Foreign Policy School, to be held at St Margaret's College from Friday 27 June until Sunday 29 June.**

Now in its 49th year, the 2014 Otago Foreign Policy School is titled "Global Resource Scarcity: Catalyst for Conflict or Collaboration?". It will focus on issues including global phosphorus security, rare earth metals, the water footprint of hydraulic fracturing, the politics of scarcity, China's quest for natural resources in the South Pacific, deep-sea mining, and business risks and opportunities related to water scarcity.

## Science challenge role for Otago

**Otago's keystone role within the first of the Government's multimillion dollar science challenges is likely to open up new and exciting opportunities for researchers and students.**

Otago will team up with an alliance comprising the University of Auckland, Massey University, and Crown Research Institutes AgResearch and Plant and Food Research, to deliver cutting-edge, multidisciplinary research to help New Zealand companies take advantage of global demand for foods with health benefits.

This 10-year challenge is approved with funding of $30.6 million, subject to finalisation of contract conditions. A review at the end of five years means another $53.2 million becomes available for a second five-year period.

## Teaching awards celebrate excellence

**This year's University of Otago Teaching Excellence Awards were presented to five high-achieving lecturers who keep the real world very much in mind when taking their students on journeys deeper into their subject.**

The 2014 awards consist of two kaupapa Māori awards, which have gone to the Māori/Indigenous Health Institute's (MIHI) Dr Suzanne Pitama and Te Tumu's Dr Karyn Paringatai; and three general awards, received by Dr Ros Whiting (Accountancy and Finance), Dr Lynnette Jones (School of Physical Education, Sport and Exercise Sciences) and Dr Timothy Cooper (Theology).

## Solid financial result

**The University achieved a solid result for the 2013 financial year, with an operating surplus of $36.5 million.**

This was largely due to three one-off items: agreement with insurers on the final costs of repairs to the University's earthquake-damaged buildings in Christchurch; an increase in the market value of the University's holding in biotechnology company Pacific Edge Limited; and an unexpected reduction in the estimated cost of future liabilities for staff retiring gratuities, long-service and sick leave.

Chief Operating Officer John Patrick says the financial position of the University continues to be strong, with equity now totalling just over $1.2 billion and no external debt. "The excellent result for 2013, even after allowing for the one-off items described above, is testament to the prudent financial management of a University community committed to excellent outcomes."

## Myanmar university collaboration expands

**An international partnership forged between the University of Otago and University of Medicine (1) in Myanmar (also known as Burma) in late 2012 is moving ahead in several directions, including research into the genetics of tuberculosis drug resistance.**

The two institutions signed a first-of-its-kind agreement between a New Zealand and a Myanmar university to collaborate on research, training and capacity-building in areas initially including infectious disease and medical microbiology.

## Appointments

Dr **Samir Samman** as Professor of Human Nutrition and Head of Department. Professor Samman comes to Otago from the University of Sydney, where he was a lecturer and researcher in Human Nutrition in the School of Molecular Bioscience.

**Janice Galloway** as the inaugural University of Otago Scottish Writers Fellow. The acclaimed Scottish novelist, who is at Otago for three months, is one of the most accomplished writers in the United Kingdom. Her debut novel, *The Trick is to Keep Breathing* (1989), won the 1990 MIND/Allen Lane Book of the Year Award and she has won a string of subsequent awards.

Dr **Sarah Stein** as the new Director of Distance Learning at Otago. Dr Stein was previously a senior lecturer in higher education in the Higher Education Development Centre at Otago.

**Sharon van Turnhou**t as the University's new Chief Financial Officer. Ms van Turnhout is an Otago graduate who recently returned from working in London. She succeeds Grant McKenzie who has taken up the position of Group Chief Financial Officer at the Dunedin City Council.

**Karyn Thomson** as the new Director of Student Services, replacing retiring director David Richardson.

**Melissa Lethaby** as manager of Disability Information & Support.

Professor **Robin Gauld** (Preventive and Social Medicine) has been named the 2014 NZ-UK Link Foundation Visiting Professor. He will be based at the School of Advanced Study (SAS), University of London, from September to December.

## Awards/Achievements

Emeritus Professor **Tony Molteno** (Surgical Sciences) was awarded the International Society of Glaucoma Surgery medal of outstanding achievement in glaucoma at the society's recent congress in Singapore.

Professor **Craig Rodger** (Physics) and Associate Professor **Sarah Young** (Pathology) received Fulbright New Zealand Scholar Awards this year. Professor Rodger will use the travelling scholarship to go to the University of Iowa in 2015 to research the loss of electrons from the Van Allen radiation belt into the atmosphere, while Associate Professor Young is going to the Mayo Clinic in Rochester, Minnesota and to Texas Children's Hospital Baylor College of Medicine, Houston, to work on development of a vaccine and immune therapies for colorectal cancer.

**Benjamin Ayto**, who is studying for a conjoint LLB/BA degree at the University of Otago, has received a Robertson Scholarship to study at Duke University in the United States.

## Honorary Doctorates

At the University's May graduation ceremonies Emeritus Professor Sir **Alan Mark** (Botany) received an Honorary Degree of Doctor of Science and Justice **Christine French** an Honorary Degree of Doctor of Laws.

## Obituary

Emeritus Professor **Barbara Heslop** (88). A former Professor of Surgery at Otago Medical School, Professor Heslop was known for her influential studies of immunology and transplantation, her strong advocacy for research and excellence in teaching.

Teaching Excellence Awards recipients: Dr Timothy Cooper, Dr Suzanne Pitama, Dr Karyn Paringatai, Dr Ros Whiting and Dr Lynnette Jones. Photo: Sharron Bennett

# University celebrates distinguished alumni

The outstanding achievements of Otago alumni are to be celebrated by the University with the introduction of the Distinguished Alumni Awards.

Since the University was founded nearly 150 years ago, Otago alumni have been making their mark in many spheres, contributing to society and the well-being of communities in their local area and beyond.

University Chancellor John Ward says many of these individuals have gone on to become widely recognised, both nationally and internationally, for their exceptional and sustained achievements.

"It is these individuals that the University wishes to recognise with the establishment of the Distinguished Alumni Awards. We are very proud of our alumni and we wish to celebrate their outstanding work and their successes.

"While many of our alumni acknowledge that their Otago education has provided a platform on which they have been able to build their success, the Distinguished Alumni Awards now offer the University an opportunity to celebrate those alumni whose work has helped to shape our world."

"We are very proud of our alumni and we wish to celebrate their outstanding work and their successes."

– University of Otago Chancellor John Ward

To be considered for the award, candidates must hold a degree or diploma from the University of Otago and have a history of outstanding achievement that has brought significant benefits to their profession and/or to any aspect of the physical, social, cultural, sporting, environmental and economic well-being of the community, either locally, nationally or globally. No more than five alumni will be recognised each year.

Alumni, current or former staff and friends of the University will be invited to nominate individuals for the awards, to be considered by a Distinguished Alumni Award selection panel, appointed by the Chancellor.

The University plans to honour award recipients at a University alumni event in their country of residence. More information on the awards and the nomination process will be available soon on the University website: *alumni.otago.ac.nz/otagos-people/distinguished-alumni-awards*

## University of Otago Medal for Outstanding Alumni Service

Since 2003, the University has recognised the meritorious service of its alumni volunteers with the Otago Medal for Outstanding Alumni Service, honouring sustained and extraordinary contributions to the advancement of the University.

The number of living holders of the University of Otago Medal for Outstanding Alumni Service at any one time is limited to 15.

To date, eight Otago alumni have been awarded the medal. All have contributed over a period of years to building stronger links in their regions between alumni and the University. The result has been the creation of active alumni networks through which members derive social, professional and educational benefits from their connections with each other and the University.

Outstanding Alumni Service Medal winners (and the year the medal was awarded):

2012 Tan Sri Dato Dr Hj Ahmad Azizuddin bin Hj Zainal Abidin
2010 Murray Frederick Brennan
2008 Alister William Robertson
2008 Alexander Paul Beresford
2008 Neville Clifford Bain
2007 Trevor Bruce Moyle
2004 Wong Cham Mew
2003 John Maxwell Gwyn Zinzan.

# Supporting Otago

The Alumni Undergraduate Disabilities Scholarship was established in 2012 to celebrate the 20 years of formalised support at the University of Otago for students with impairments.

These scholarships, made possible by the gifting of funds by alumni and friends of the University of Otago, are offered to students who have demonstrated academic ability and who can show financial need arising from a disability.

This year's recipients are finding the scholarship to be of immense help in pursuing their chosen paths at Otago.

Bridget Moral, who is studying Neuroscience, says that receiving the scholarship was a happy moment. Her family, she says, "were over the moon; my mum especially". With high medical costs to meet, the scholarship has provided financial relief, enabling Bridget to attend University.

**Bridget Moral:** "I really liked that we got to go to small events and meet new people."

Coming to Dunedin from New Plymouth and not knowing many people, she says her introduction to Otago as a scholarship student was very positive. "I really liked that we got to go to small events and meet new people."

Taking a range of papers for her Neuroscience degree, she finds her studies interesting and is yet to decide whether she will pursue honours or follow the medical path.

Monique Mulholland, a Health Sciences First Year student, says that when she received her scholarship, "I was ecstatic. I was so happy that all my hard work at college had paid off. I am immensely grateful to the benefactors of the scholarship who are making my dreams all that more attainable."

Monique believes that the scholarship's greatest benefit for her has been helping to pay some of her fees for St Margaret's College. "Without this wonderful gift, I would not be able to experience the ultimate first-year experience. The scholarship has also helped me academically – even though the year is just beginning – simply because, for me, it means that I know there are people out there who believe I can succeed and that really helps, especially when you are doing a course such as Health Sciences First Year, which can be very stressful."

**Monique Mulholland:** "I am immensely grateful to the benefactors of the scholarship who are making my dreams all that more attainable."

Monique's goal for this year is to gain entry into Medicine. Other options she is considering include Anatomy or – like Bridget – a degree in Neuroscience.

For both Bridget and Monique, the scholarship introduced them to the services provided by Disability Information and Support.

"Since I have begun University, I have realised all the little things that they do to make a more smooth transition," says Monique. "For example, they have ensured that all my lectures and labs are fully accessible for me, including where my exams may be – so I am extremely grateful for their wonderful support."

## Shaping the future together

### 2014 Annual Appeal

Scholarships are one of two initiatives being supported by the 2014 Annual Appeal. Every year hundreds of gifted Year-13 students apply for scholarships at the University of Otago. For some, this provides their only chance to overcome barriers to attending university. But, unfortunately, many miss out.

You can help. By giving today's talented young people the opportunity to obtain a world-class Otago education you are investing in their future and in the future of New Zealand.

The second initiative to be supported by this year's Annual Appeal is the Women and Children's Health Research Centre, based at the University of Otago, Wellington. Researchers are dedicated to improving the health of New Zealand women and their babies, with a particular focus on reproductive health through pregnancy, labour and the early years of a child's life.

More information about the centre was featured in the last issue of the *University of Otago Magazine* (Issue 37, February 2014): *otago.ac.nz/otagomagazine*

For more information about the 2014 Annual Appeal and other fundraising initiatives, please go to *alumni.otago.ac.nz/supportotago* , email *development@otago.ac.nz* or phone +64 3 479 5246.

# Q&A

WITH

## Tamsin Cooper

Designer **Tamsin Cooper** in her studio. Photo: Amie Richardson

Otago alumna Tamsin Cooper has achieved a lot since graduating with a BA in Theatre Studies. At around the age of 21, she set up and managed Planet Media – an OUSA company providing promotional and media opportunities in the student market, including Radio One and *Critic*. She has been an arts advisor at the Dunedin City Council, as well as the DCC's business advisor for film, fashion and tertiary education, promoting Dunedin as a place to study. She also co-presented the 13-part television series *Hearts in Crafts*, a New Zealand crafts show made for TVNZ 7 and TVNZ Heartland.

However, it is as a fashion designer that she is best known, producing a range of luxury clothing and accessories, incorporating vintage styles, hand embroidery and beautiful silks. 2013 marked 10 years since her label was first launched in Arrowtown; it was also the 60th anniversary of the Royal New Zealand Ballet. To celebrate this occasion, Tamsin was commissioned to design an "Anniversary" collection, both inspired by the ballet company and worn by its dancers when it was debuted at Dunedin's 2013 ID Fashion Week. This year Tamsin accompanied the ballet company's tour to the US, creating clothing and accessories to be worn by the dancers at an opening night event in New York.

**How has your Otago degree helped shape your life and career path?**

Massively. My degree and training in Theatre Studies have had a huge influence in my life and business. I've used skills from my degree in public speaking, presenting the TV show *Hearts in Crafts*, working with media and networking successfully in business.

My love of theatre continually inspires my creative process. Elements of theatre are woven in to all of my fashion collections, from style references to use of colour and themes. I also see drama as the absolute key to bringing my designs to life on the catwalk and to keeping my audience on the edge of their seats.

**What are some the best memories of your University days?**

The Capping Shows were a great time – I was in a Centennial Show with a group of theatre peers. We were a tad naughty post-show to say the least! There was a double bed on the Regent Theatre stage and we dared each other to stay in the double bed overnight. Cleaners came through in the middle of the night with torches and found us, so we were forced to exit the stage.

Going to Otago was a highlight in my life. I felt like I was obtaining the best degree possible in a subject I was passionate about. It was a very formative time, and I'm proud to call myself an Otago graduate – in fact I wish I could do it all over again.

**You're on the committee for the Allen Hall Theatre reunion …**

Yes, Allen Hall is turning 100 years old. It's a privilege being involved and I'm thrilled to be seeing so many fellow Theatre Studies alumni doing so well. Two hundred plus alumni have already said they're coming. Highlights of the reunion weekend will include pop up plays, and a red carpet party, with paparazzi. Roger Hall has given us a special play to perform in honour of the centenary.

**Memories of your residential college?**

I loved Selwyn. It was a fantastic, formative time and I made many wonderful friendships. Of course, we got up to all sorts – probably none I should

mention! One of the tamer tricks was the annual "naming ceremony" – every year half a dozen Selwynites were "christened" nicknames. I was named "Abel", as in "Abel Tasman"… ask no more!

**Memories of your graduation?**

It felt like a significant day in my life, an important achievement to mark. I still have my sun-bleached degree framed on the wall above me in the office of my new boutique. I was one of the first seven students to graduate with a major in Theatre Studies. Before 1996, students could only minor in it. We had a special small ceremony in Allen Hall Theatre and I was moved to know I was in the first group of a very special degree.

**Personal and career highlights so far?**

I feel honoured to have a close relationship with the Royal New Zealand Ballet. Last year at ID Fashion Week, my theatre degree came strongly into play. I created a catwalk show to celebrate the 60th anniversary of the Royal New Zealand Ballet and my 10th anniversary, incorporating Royal New Zealand Ballet ballerinas who danced en pointe down the catwalk, led by Miranda Adams, with the associate concert master of the Auckland Philharmonic Orchestra playing Tchaikovsky live on her violin. The show received rave reviews.

My qualifications heavily influence my creative process and business. This year at ID Fashion Week I was also inspired by theatre and my recent trip to new York with the Royal New Zealand Ballet – my debut collection of luxury men's suit jackets was launched by the Royal New Zealand Ballet's Loughlan Prior and peers, who performed a piece especially choreographed by Loughlan for the catwalk, accompanied by models and assisted by Otago rugby players. The music for the collection was composed by New York DJ, Morgan T. Stuart.

**What are your plans for the future?**

Exciting things are in the wind, including many more collaborations.

Tamsin Cooper with members of the Royal New Zealand Ballet at the 2014 ID Fashion Show.
Photo: Chris Sullivan

# Town & Gown

## Otago Foreign Policy School

Leading scholars, professionals and policy-makers will debate the issue of Global Resource Scarcity: Catalyst for conflict or collaboration? Alumni are welcome. 27-29 June, St Margaret's College. Register at *otago.ac.nz/otagofps*

## New Zealand International Science Festival

Experience the wonder of science – from anatomy to zoology and everything in between – with hands-on activities, entertaining shows and amazing displays.

Saturday 5 July and Sunday 6 July, St David's Theatre Complex, University of Otago. Free entry. For more information, please visit *www.scifest.org.nz*

## Fish and Ships: Marine Science Day

An all-ages day of marine marvels, "fintastic" displays and "sharktacular" activities. Find out what is making waves in the ocean world, test your own marine knowledge, meet marine researchers and shark experts and tickle your tastebuds with seaweed. 11am to 4pm, Sunday 13 July, Fryatt Street, Harbour Basin, Dunedin.

# Reunions + Events

**Beijing:** The Local, 2 April 2014

Charles Rowe and Joyce Zhang.

Wendy Wang and Eric Zhang.

**Dunedin:** The Link, University of Otago, 5 March 2014

Dr Ian Chapman, Professor Harlene Hayne.

Dr Anna Thompson, Professor James Higham.

**Hong Kong:** Luxe Manor, Kowloon, 27 March 2014

Jasmine Yeung and her father, Mr Yeung.

Esther Lo and Bonnie Cheung.

**Kuala Lumpur:** Menara, KL Tower, 25 March 2014

Stuart McLauchlan, Nadia Lim, Chew Seng Kok and Philip Kearney.

Allen Leong, Ng Kar Mei and Richard Tiah.

**Shanghai:** The Edge Restaurant, Hongkou District, 29 March 2014

Junjie Pan and his mother.

Paul LePetit and Yi Ding.

**Singapore:** Imperial Restaurant, Riverview Hotel, 18 March 2014

Zoher Motiwalla, Alison Finigan, Philip Kearney, Gopal Varutharaju.

**Kota Kinabalu:** Le Meridien Hotel, 19 March 2014

Mr Lee, Kamal Quadra, Eng Weng Hong, Alison Finigan, Rahimah Quadra, Professor Ismail Ghazally.

# Alumni events 2014

| | |
|---|---|
| Auckland – Māori event: 26 June | |
| Invercargill: | 28 August |
| London: | 30 October |
| US East Coast: | November tbc |
| Toronto: | November tbc |
| US West Coast: | November tbc |
| Edmonton: | November tbc |

# Upcoming celebrations and reunions

Te Roopu Whai Putake (the Māori Law Students' Association)
21st birthday reunion
Dunedin, 22-23 August, 2014

Cumberland College
25th anniversary
Dunedin, 23-24 August, 2014

Department of Botany
90th anniversary celebrations
Dunedin, 11-13 September, 2014

Allen Hall Theatre
centenary reunion
Dunedin, 12-14 September, 2014

MB ChB Class of 1979 reunion
Auckland, 11-12 October, 2014

MB ChB Class of 1974 reunion
Queenstown, 17-19 October, 2014

BDS Class of 1974 reunion
2014 – dates tbc

MB ChB Class of 1966 reunion
Dunedin, 19-21 March, 2015

MB ChB Class of 1964 reunion
Dunedin and Central Otago,
8-11 April, 2015

Māori Studies/Te Tumu
25th anniversary celebrations
Dunedin, 28-31 May, 2015

Carrington College
70th anniversary reunion
Dunedin, 20-22 November, 2015

Studholme College centenary
celebrations and reunion
Dunedin, 27-29 November, 2015

For more information please visit the Alumni & Friends website ***alumni.otago.ac.nz/Events***
email *functions.alumni@otago.ac.nz*
or *reunions.alumni@otago.ac.nz*
or phone +64 3 479 4516.

## Stay current for Otago communications

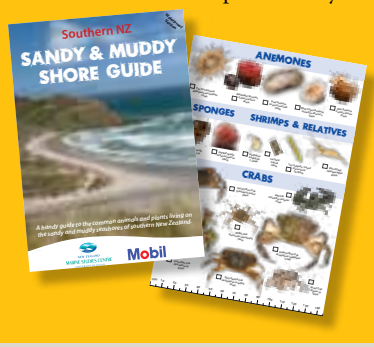
- To update or change your postal address
- Receive email notifications (instead of post)
- Receive one "household" copy of the *Magazine*

Email ***database.alumni@otago.ac.nz***

## SHORE GUIDE **GIVEAWAY**

The New Zealand Marine Studies Centre has recently launched the ***Sandy & Muddy Shore Guide***, continuing its popular series of guides to identifying the diversity of life found on our shores. Northern and southern New Zealand versions are available.

The guides are are a valuable resource for anyone interested in exploring New Zealand's shoreline and particularly for those wanting to join the Marine Metre Squared (Mm2) "citizen science" project. Participants monitor a 1m x 1m square patch of their local shore every season, counting the animals and plants, and recording this information on a data sheet that can be uploaded to the Mm2 website, ***mm2.net.nz***




The Development and Alumni Relations Office is giving away sets of these waterproof shore guides to 20 alumni. To enter the draw, please email ***alumni@otago.ac.nz*** with the subject line "Shore Guide". Please state whether you would like the northern or southern New Zealand sets.

**Thank you to the New Zealand Marine Studies Centre.**
***otago.ac.nz/marinestudies***

# Alumni benefits

### Library membership

With an alumni library card you can use the University libraries for reading, writing, research and relaxation.

### Reunion organisation

Do you need help organising your class/college/flat/University sport reunion? Contact ***reunions.alumni@otago.ac.nz***

### Contact alumni

Get back in touch with lost friends, flatmates and colleagues from your student days by emailing ***alumni@otago.ac.nz***

### Executive Residence

Stay in the heart of campus at the University's Executive Residence at an exclusive alumni rate. Telephone 0800 685 685 or go to ***otago.ac.nz/execres***


## Creature Comforts

*New Zealanders and their pets – An Illustrated History*

**By Nancy Swarbrick**

New Zealand has one of the highest rates of pet ownership in the world – in 2011, 68 per cent of all Kiwi households had at least one pet: almost half had a cat and nearly a third had a dog. Yet, until now, no book has explored how pets came to be such an integral part of the New Zealand way of life.

*Creature Comforts* does just this. By chronicling the major events and ideas that have shaped pet keeping in New Zealand, this book explains the strong relationship we have with our animal friends and how this has changed over time. It looks at the social impact of fanciers' organisations, the moral influence of the SPCA and other animal welfare groups, the educational role of calf clubs, and the questions raised by animal rights activists. Along the way, it also tells the stories of some memorable companion animals.

The book is beautifully illustrated and includes many previously unpublished historical images.

## The White Clock

*New Poems*

**By Owen Marshall**

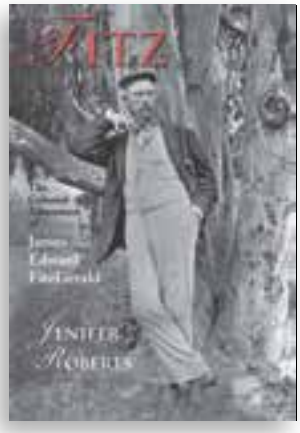
Delving both into "the worlds of the mind" and "where he happens to be", Owen Marshall brings us poetry that is steeped in the classics, history and literature, and yet is alive with the vivid particulars of damp duffle-coats and hot-air balloons, beer and bicycles, willows and skylarks, kauri gum and limestone tunnels.

Marshall's work, taut with aphorisms, mining the philosophical, is nevertheless understated and wry.

It is as likely to explore the nature of enduring love and the sacrifices made to adhere to a personal morality, as it is to delight in the image of a small child's animal élan on a trampoline.

With a crisply erudite vocabulary, yet a direct and lucid manner, Marshall takes us from Gorbio to Nelson, from Turkey to St Bathans, from Richard III to resentful schoolboys on detention, from intimate endearments to a portrait of the disillusioned guy in the pub cover band.

His dry, even acerbic, humour and verbal control effect a keen-eyed watch on any melancholia and despair that grow out of staring too long into the fire of human folly.




## FITZ

*The Colonial Adventures of James Edward FitzGerald*

**By Jenifer Roberts**

This tells the story of James Edward FitzGerald, whose energy and enthusiasm contributed so much to the early history of Christchurch.

Orator, writer, politician and journalist, he was the first Canterbury pilgrim to set foot in New Zealand, first superintendent of the province of Canterbury, first leader of the general government and founder of the *Press* newspaper.

From his early years in the Anglo-Irish gentry of England to his old age as auditor-general of the colony, *FITZ* is a gripping biography that reads like a novel, breathing new life into the extraordinary man who played a major role in public life through 50 years of New Zealand history.

The author, Jenifer Roberts, is an English historian and direct descendant of FitzGerald. With access to sources previously inaccessible to researchers, she provides new information about one of our most outstanding colonists and his equally talented wife.

Together, they personified the pioneer spirit of 19th-century New Zealand, a spirit re-invoked today as the people of Christchurch rebuild their city.


## Edwin's Egg

*& other poetic novellas*

**By Cilla McQueen**

*Edwin's Egg & other poetic novellas* by Cilla McQueen is a poetry-prose-image creation in which eight interlinked short story-poems combine with a series of obliquely evocative images sourced from the Alexander Turnbull Library.

Created during McQueen's term as New Zealand Poet Laureate (2009–11), the work was initially known as *Serial* and ran on the Poet Laureate blog. Three times a week over a period of 17 months new instalments were posted – a process reminiscent of how early novels, such as those of Dickens, were serialised.

In what became a most fruitful collaboration with the Alexander Turnbull Library, McQueen then spliced each instalment with photographs from the library's archives.

*Edwin's Egg* is a wonderfully maverick work "exploring a space between prose and poetry", refusing to conform to either genre and exploiting the qualities of both. The text and inter-relationship with the images creates a verbal-visual field rich with humour, serendipity, a touch of Bluff Dada and more than a shade of disquiet.

This book is published in association with the Alexander Turnbull Library.

For further information: Otago University Press
*www.otago.ac.nz/press*
*university.press@otago.ac.nz*

# Books by Otago alumni

**The Postfeminist Biopic: Narrating the Lives of Plath, Kahlo, Woolf and Austen**, by Bronwyn Polaschek, Palgrave Macmillan.

**Por Pors Cookbook**, by Carolyn King, self-published, November 2013.

**Family Care and Social Capital: Transitions in Informal Care**, by Patrick Barrett, Beatrice Hale, Mary Butler, Springer, July 2013.

**The Complete Works of John Milton, Vol. 8**: De Doctrina Christiana, Vol.1, edited by John K. Hale and J. Donald Cullington, Oxford University Press.

**The Complete Works of John Milton, Vol. 8**: De Doctrina Christiana, Vol.2, edited by John K. Hale and J. Donald Cullington, Oxford University Press.

**Native-Speaker Status in the Translation Services Market: Marketing and Price-Setting Strategies of Translation Agencies**, by Daniel Sebesta, Lambert Academic Publishing, July 2013.

**Taxing Air: Facts and Fallacies about Climate Change**, by Bob Carter and John Spooner, with Bill Kininmonth, Martine Feil, Stewart Franks, Brian Leyland, Kelpie Press, July 2013.

**Biogeography of Australasia: A Molecular Analysis**, by Michael Heads, Cambridge University Press.

**Churchill: The Supreme Survivor**, by A. W. Beasley, Mercer Books, October 2013.

### Alumni:

If you have recently published a book email **mag.editor@otago.ac.nz**

# Peeps of life

John Halliday Scott (1851-1914) is best known these days for his contribution to the University of Otago as a founding Professor of Anatomy and Physiology and Dean of the Medical School.

President of the Otago Institute for a period, his gift as a watercolourist was also recognised during his lifetime and has continued to be acknowledged at exhibitions over the last 30 years at the Dunedin Public Art Gallery and Hocken. That he found time in his busy life to pursue an interest in photography has remained obscure, but can be brought to light now largely thanks to the estate left by his eldest daughter, Marion.

Scott joined the Dunedin Photographic Society (DPS) in 1892, two years after the society's inception. Already a prominent member of the Otago Art Society, he and art society president William Mathew Hodgkins had led a movement to combine the activities of the two organisations and ended up joining the photographers on their own terms.

A selection of Scott's photographs is on exhibition at the Hocken Library alongside the work of some of his associates, providing an insight into the activities of the amateur group of photographers. Each month, members of the society produced studies on a given subject such as harbour scenes, the figure, interiors, architecture and portraiture, and met to critique each other's work, share knowledge, learn new techniques and discuss any problems encountered.

The society held popular annual exhibitions with the 1894 show drawing nearly 1,000 visitors. Members also organised outings together; an excursion to Otago Heads resulted in Scott and Hodgkins' most significant portraits of the Karetai family.

Scott had a penchant for painting oval or circular-shaped vignettes – like the view through a port hole – and looking through a camera, he continued to frame what he saw into pictorialist images of people and places closest to his heart. Scott's wife, Helen, also took photographs during her short life and at times she must have been the one to close the shutter on her husband and their five children.

The results leave us with peeps of the Scotts' world taken between c.1893-1914: a record of the life and times of a prominent Dunedin man and his family; the environs of the University of Otago and Dunedin Hospital; domestic interiors of several notable homes; glimpses of Māori living around Moeraki; and the Hampden area, where the family went for holidays.

**DR ANNA PETERSEN**
**Photographs Curator,**
**Hocken Collections**

*Marion Scott Playing the Piano*, c.1904, J.H. Scott photograph. Marion Scott Collection, P97-050-524, Hocken Collections *Uare Taoka o Hākena*. S14-031b.

## HOCKEN EXHIBITIONS

**Peeps of Life: Photographs by John Halliday Scott**
11 April – 12 July
**Art Between the Covers: Artists and the Book**
19 July – 25 October

# … the Herbarium?

Carefully documented and stored in row upon row of boxes in a small room – little more than a cupboard – in Otago's Department of Botany is a botanical treasure.

The Otago Regional Herbarium contains more than 70,000 plant specimens, many dating back to the early days of European settlement, and is a resource of national significance.

The Herbarium was founded in the 1950s by then head of department Professor Geoff Baylis, bringing together items from his own personal herbarium and the collection from the Otago Museum. With a strong alpine and southern New Zealand focus, it includes algae, bryophytes (liverworts and mosses), fungi and more than 35,000 vascular plant specimens (ferns, conifers and flowering plants). It also has one of the best lichen collections in the country, many of which are "type" specimens, the first and irreplaceable references for those species.

It incorporates specimens collected by prominent 19th century botanist Thomas Kirk, Otago Museum honorary botanist J. Scott Thompson who undertook extensive botanical expeditions in the Southern Alps in the early 1900s, lichen specialists Dr James Murray and Dr David Galloway, and Emeritus Professor Sir Alan Mark.

Among the many extraordinary specimens are a buttercup collected from Campbell Island in 1874 during a French expedition to watch the transit of Venus, and the first recorded specimen of Cook's Scurvy Grass from the Bounty Islands. Herbarium curator Dr Janice Lord explains that this was found by an Otago student on a voyage to the sub-Antarctic. Now very rare, the grass – *Lepidium oleraceum* – is a member of the cabbage family and was fed in copious quantities by Captain James Cook to his crew as a preventive for scurvy.

Lord says that today the facility is the country's largest university-based herbarium and the second biggest in the South Island – and it continues to grow. It is a working collection, used as a teaching and research resource, and part of an international network of herbaria.

As a fully compliant CITES-registered and Ministry for Primary Industries-approved plant containment facility, the Herbarium can both send and receive specimens to and from other herbaria around New Zealand and the world.

In addition to providing an invaluable historical record, the Herbarium is also a vital resource for the identification of plant species and documenting plant diversity.

"There are still new species being named using DNA extracted from Herbarium material. The collection provides absolute references for the time and place a plant was collected," she says.

"It helps us document the distribution and abundance of plant species and provides insight into the types of plants that we might expect to see under different climatic conditions.

"It is also an important resource for helping us to measure the spread of exotic species – particularly weeds – and for plant ecology."

**KAREN HOGG**

Top: The first recorded specimen of Cook's Scurvy Grass from the Bounty Islands.

Above: Buttercup collected during a 1874 French transit of Venus expedition to Campbell Island.

Photos: Graham Warman

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