UNIVERSITY OF OTAGO JUNE 2011

INSIDE:

Family friend

Dame Alison Holst

PLUS:

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After the Canterbury earthquake last September, most of us breathed a sigh of relief that there were no fatalities and that the damage to property had not been even greater. We had all heard about aftershocks, but I doubt whether many people anticipated their frequency and severity. The magnitude–6.3 earthquake on 22 February killed nearly 200 people and caused massive damage.

Two University of Otago postgraduate students (both from the Dunedin campus) lost their lives in the February earthquake, and at least three of our staff are mourning the deaths of their children. Many hundreds of alumni, parents and friends in the Canterbury region will have experienced grievous loss.

Naturally there has been a major impact on our Christchurch campus, which has been a jewel in the crown of the University of Otago for nearly 40 years (see next page). Our main building in Christchurch was damaged and will not be reopened before August. Some other buildings used by departments in Christchurch have been cordoned off or condemned.

I must salute and thank all the staff at the University of Otago, Christchurch, for their response to this tragic event. Under the irrepressible leadership of their Dean, Professor Peter Joyce, they have taken extraordinary measures to ensure that all undergraduate and postgraduate teaching programmes are being delivered. This is in spite of the fact that many have suffered personal loss at home. Staff in our Property Services Division have also played a key role. The greatest impact has been on research programmes, since many senior researchers and postgraduate students have been unable to use their laboratories. Staff in some departments are working mainly from home.

There is still some uncertainty about the immediate future, with further aftershocks expected, but I am confident that everything will be back on track when the University of Otago, Christchurch celebrates its 40th anniversary next year.



Time passes and this is the 21st foreword I have written for the Magazine. Over the last seven years, I have been surprised how many alumni have read these random emissions – and I thank you for your feedback. One of the most enjoyable aspects of my time as Vice-Chancellor has been contact with graduates of the University at alumni functions and elsewhere. I have met many old friends and made new ones, and I hope that our paths will cross again. In the meantime, I have no doubt that the University of Otago will continue to flourish after Professor Harlene Hayne takes over as Vice-Chancellor in August.

haved Skepg

Professor David Skegg Vice-Chancellor, University of Otago

40 years up

In 2012 the University of Otago, Christchurch marks its 40th anniversary. Kim Thomas canvasses its past and looks to the future.

It is often said that necessity is the mother of invention. This is particularly true of the University of Otago, Christchurch (UOC) as, from a pressing need in the early 1970s to train more doctors, a world-class centre of medical and health science training and inventive research has developed.

In the 1970s there were two places in New Zealand a doctor could train – Auckland University or the University of Otago in Dunedin. The government of the time wanted more doctor's but, as an essential part of a doctors' education was time spent on hospital wards, the recentlyopened Auckland school and Dunedin hospitals were not able to cope with the greater student numbers required.

So, by necessity, the University of Otago looked north to Christchurch and Wellington as potential hospital sites for teaching students in their final three years of clinical training.

Establishing the UOC

It was not only Christchurch's proximity to Dunedin that made it a candidate for a new clinical school. Up-and-coming research groups, attracting international acclaim, gave Christchurch early academic credibility.

The late Donald Beaven had been appointed to a University of Otago position in 1960. He established a medical unit within the hospital system, charged with teaching sixth-year students and instituting medical research. This unit would evolve into the Christchurch Cardioendocrine Research Group, one of the most productive and prestigious contemporary groups.

Another doctor involved in early research in Christchurch was Robin Carrell. In the early 1970s he recruited young science graduates to work in the hospital diagnostic laboratories. A spin-off from this was the development of research into haemoglobin, resulting in papers being published in prestigious journals such as *Nature*. This work formed the embryo of what would become the UOC's Free Radical Research Group.



Professor Robin Carrell

Carrell says Christchurch researchers and doctors had to lobby vigorously to ensure the city was initially chosen ahead of Wellington as the site of a new clinical school.

"We had to make a real case for the clinical school. There was an element of reluctance, completely understandable on the part of [the University of] Otago. There was also a sense of disbelief in the North Island that anything could be happening down south that was vaguely exciting or enterprising."

Christchurch clinical school opens

In February 1973, the first intake of 43 fourth-year medical students enrolled at the then Christchurch Clinical School, with Professor George Rolleston as the inaugural Dean.

One of the first researchers and lecturers was the now Emeritus Professor Eric Espiner, who had worked in Beaven's medical unit. He says that once a decision was made to site the clinical school in Christchurch, development happened at break-neck speed.

"Suddenly there were calls for a new building, plans for new research labs, lecture halls, student facilities and accommodation. New medical staff appointments were required and, equally important, new policies were implemented for appointing current hospital and visiting staff specialists to teaching roles."

It was a hectic, but heady, time for those involved, he says. But the effort was quickly rewarded as places at the new Christchurch Clinical School were



Emeritus Professor Eric Espiner

oversubscribed in its first year.

The curriculum in those days was focused on small-group bedside teaching in the mornings, and comprehensive lectures and clinical demonstrations en masse in the afternoons, Espiner says. However, some years later Dean Professor Alan Clarke changed the curriculum in favour of student self-learning and more apprentice-style attachments with clinical teams.

Educational excellence

In 2011, the University of Otago, Christchurch, has more than 250 medical students in their fourth, fifth and sixth years of training.

The Associate Dean, Medical Education, Professor Tim Wilkinson says the old model of medical education was to provide a base of science in the first three years then focus the remaining three years on clinical experiences.

"This separation of theory and practice was not only inefficient, but undesirable," he says. By comparison, today's medical education is increasingly focused on learning at the "coal face".

"This means students need to go to where the patients are. It is no longer sufficient for our students to be based primarily in hospital wards waiting for patients to come to them. Instead, education needs to occur in the community, in general practices and in outpatient clinics."

Wilkinson believes a major challenge today is ensuring medical practice remains underpinned by strong science.

"Having a strong base of scientists and research-active clinical staff in Christchurch has meant there is never a shortage of world-class experts ready to help reinforce the latest scientific breakthroughs that are relevant to future medical practice.

"Christchurch's combination of a large population base, excellent health service, accessibility and history of scientific innovation makes it a great place for students to learn to become doctors."

The UOC also offers a staggering array of postgraduate programmes, with more than 500 postgraduate students enrolled in 2011. The largest numbers are studying in the areas of nursing, mental health, public health and musculoskeletal medicine with almost 100 undertaking theses, the majority of whom are PhD students. Current Dean Professor Peter Joyce says the UOC has increased its courses to mirror the changing needs of the healthcare sector over the past 40 years.

"We were solely a medical campus, but along the way realised that health care requires a multidisciplinary group of professionals and, slowly, a broader range of courses has evolved. Now postgraduate students are the largest numbers of students on campus."

Joyce says the school has changed its name four times in the past 40 years, reflecting its growing courses and purpose.

"First it was called a 'clinical school', to reflect its primary function of teaching medical students. Then it changed to the Christchurch School of Medicine, to show it was a medical school in its own right, not just a subset of the Otago Medical School. The third change to Christchurch School of Medicine and Health Sciences reflected the growth in postgraduate courses. Finally it has become the University of Otago, Christchurch, as it is a full campus of the University of Otago."



Staff from the University of Otago, Christchurch (the then Christchurch School of Medicine) photographed after a tennis competition in the early 1980s.

Research distinction

Alongside the impressive growth in medical and health science education, the school has built on its proud history of research.

The Distinguished Research Medal is the University of Otago's highest research honour and has been awarded to three Christchurch researchers in the past five years: Professor Christine Winterbourn in 2006 for her work on free radicals; Professor Mark Richards, director of the Christchurch Cardioendocrine Research Group, in 2008 for his work on cardiac health and disease; and Professor David Fergusson in 2010 for more than 30-years' work in developing and building the Christchurch Health and Development Study.

In the latest Performance-Based Research Fund assessment, the UOC was judged to have the highest quality score for research of the four schools of medicine in New Zealand. In addition to Winterbourn, Richards and Fergusson, the UOC boasts many other highly-rated research staff, including Professor Peter Joyce (mental health), Professor Brian Darlow (neonatal paediatrics), Professor David Murdoch and Professor Stephen Chambers (infectious diseases), Professor Evan Begg (clinical pharmacology), Professor Tony Kettle (free-radical research) and Associate Professor Miriam Rademaker (cardioendocrine research).

The Vice-Chancellor Professor David Skegg says the University of Otago, Christchurch is a vital component not only of the Faculty of Medicine, but also of the University as a whole. "The establishment of campuses in Christchurch and Wellington in the 1970s transformed the University of Otago. Both campuses are highly research-intensive, with many postgraduate students. "There has always been a strong sense of collegiality and pride in Christchurch, which no doubt contributed to the rapid development of the School there. While the Medical School derives much from its close relationship with the Canterbury District Health Board, the benefits are mutual. The University of Otago, Christchurch plays a key role in the provision of first class health services to people living in the region."

A bright future

While the 22 February earthquake has greatly affected many UOC buildings, staff and students [see page 8], Joyce is confident of a bright future for the UOC.

"A measure of an organisation's success is its people. We have some very good young staff and that will make us strong in the future.

"We have an excellent research legacy from people such as Eric Espiner and Robin Carrell. It is now up to the new generation of researchers to build and grow it.

"Our staff in medical education, led by our Associate Dean of Medical Education, Professor Tim Wilkinson, are also creating a very innovative future.

"We are also fortunate in having a strong association with the Canterbury District Health Board, with growing evidence it is one of the most effective health boards in the country.

"All of these factors mean that as we rebuild after the earthquake, our future will be bright."



UOC Dean Professor Peter Joyce: "A measure of an organisation's success is its people. We have some very good young staff and that will make us strong in the future."

CELEBRATING ACHIEVEMENTS

In 2012, the educational and scientific achievements of the University of Otago, Christchurch, over the past 40 years will be celebrated.

Celebrations will include:

- A series of social functions (originally planned for next February, but postponed until the spring as Christchurch continues to recover from this year's earthquake)
- Publication of a book covering the school's highlights and its future direction
- The establishment of a fund to support fellowships and scholarships on the Christchurch campus
- A public lecture by an international keynote speaker.

Christchurch Cathedral: For many, an iconic symbol of Christchurch, now devastated by earthquake. Photo: NZPA

A shaken city

For people outside Christchurch, it may be difficult to comprehend the physical and psychological impact of the February 22 earthquake.

Science provides some understanding. Geologists say that during the 6.3 magnitude 'quake, Christchurch residents – and buildings – experienced the world's strongest recorded up-anddown shaking.

Buildings were left behind, in the air, as the ground accelerated downwards beneath them, then fell under their own weight until they impacted on the ground.

It was this force that resulted in the collapse of multi-storey buildings, such as the CTV and Pyne Gould Corporation (PGC) buildings, and the deaths of many within. The bill for rebuilding Christchurch is estimated to reach about \$15 billion.

Personal accounts also help explain the significance of the event.

"For a few seconds I really thought I was going to die. I was thinking about my partner and our daughter and how they would cope without me," says one usually staunch anonymous Cantabrian.

"It felt like the end of the world. Everything was crashing down around us and the rumbling noise was so frightening," says another.

The 'quakes that have rocked Cantebrury since September have created arguably the most trying circumstances in the history of the city and the University of Otago, Christchurch (UOC).

Dean Professor Peter Joyce says the February 22 'quake did some damage to the main UOC building which has been repaired. Stairwells are being strengthened and the majority of staff are hoped to be back in the building by August.

Joyce says staff have had to be resourceful and adapt to the new, trying circumstances.

"A lot of current focus is on getting back to a 'new normal' because the earthquake has greatly affected buildings, staff and students. It has not been easy, but people are making the best of the situation."

He and his departmental staff are working from an old wooden two-storey building on Cashel Street. Medical students are primarily on clinical placements, but some lectures are being held in sports clubrooms.

The Department of Public Health and General Practice was forced to move from its St Elmo's Court building after the September 2010 earthquake. That building was demolished in March and new premises, which were to be available in April, are in the inner city's "red zone" which is inaccessible. Many of these staff are working from home and holding lectures in a suburban bowling club.

Other departments with offices in the hospital, such as Medicine and Paediatrics, are sharing space with their colleagues. Some laboratory-based groups, such as the Free Radical Research Group, have secured space at other sites, but the relocation is still having a major impact on their work.

Most of the IT team are based at Lincoln University and the Centre for Postgraduate Nursing Studies has relocated to a suburban cricket club.

Professor David Murdoch, head of the UOC Deaprtment of Pathology, says the ongoing disruption from the February 'quake is "huge".

"I worry about the lab-based researchers who have been unable to use their equipment for a long time or their equipment doesn't work. They may struggle to meet the expectations of their grants. A lot of them have decided this is the time to write up research or apply for grants, but they have been unable to access the main UOC building for months."

Murdoch says the psychological effects of the 'quake are apparent.

"You see people jump when there are sudden noises. It is a natural reaction to what they have been through, but it is worrying and will probably go on for some time."

But resilience and ingenuity are also apparent.

"Everyone is doing fantastically well," Murdoch says. "They are coping as well as they can under trying circumstances and working together well."

The Dean agrees staff and students have coped extremely well. He has much praise for those who helped get teaching and research activities quickly back into action in the weeks following the 'quake.

"I am very aware, though, that this is going to be a long-term challenge to staff and students, and the re-build of the campus, like the city, may take years rather than weeks."

KIM THOMAS

Friend of the family

"Discovered" while teaching Home Science at the University of Otago, Dame Alison Holst has become New Zealand's favourite cook and is about to publish her 100th book.

Alison Holst's kitchen is a lot like she is: welcoming, unpretentious and packed with practical recipes. At 9am on a Saturday morning there's already a chicken browning in the oven and freshly-baked cake awaiting "consumer" feedback. She appears to have been up for hours.

Alison, as she explains, is revisiting wartime recipes in preparation for an Anzac Day television special, so we discuss the cake's taste, texture, flavour and keeping qualities. I declare it surprisingly delicious – after all, it's been made with no butter, eggs or milk, even if it was made by New Zealand's bestknown, best-selling culinary personality. But it's not quite right yet according to the woman who is never happier than when formulating recipes that even the most humble of cooks and pantries could, between them, muster.

If it wasn't so hackneyed the word "iconic" would most aptly describe the culinary tour de force which is Alison Holst, DNZM, CBE, QSM and Hon DSc.

A graduate of the School of Home Science, she is among Otago's most illustrious alumni, her return as a lecturer in 1961 having led serendipitously to a starring role on television that would seal her a place, first in the living room, and then the heart, of nearly every New Zealander.

Indeed, her remarkable mastery of this emerging medium, coupled with her engaging, accessible style, assured her of an impact on New Zealand kitchens which remains unparalleled even today, in the era of ubiquitous celebrity chefs and competitive cooking shows.

Books, radio, newspaper columns and public cooking demonstrations, both here and overseas, soon followed Alison's rise to stardom, but she never traded up her practical, no-fuss approach.

Throughout her career she has steadfastly focused on nutritious, tasty meals that can be prepared in the average kitchen, by an average cook, using ingredients that aren't overly exotic. It has remained a recipe of enduring appeal to those preparing meals for families up and down the country. Her investiture as a Dame Companion earlier this year for services to the food industry preceded the publication of her 99th cookbook, co-written with her son, Simon. Fittingly her memoir, due out later this year, will be her 100th book. Alison has sold more than 4 million books – at least one for every New Zealander – which surely adds "New Zealand's highest-selling author" to her list of achievements.

Alison Margaret Payne was born in Dunedin in 1938, the eldest in a family of three high-achieving girls. (Sister Patricia would later enjoy an international opera career, while Clare forged a career in food styling and writing in London.)

Thanks to their mother, a nurse, they each received a young lady's education in fine art, music and the domestic arts. From their father, Alison, in particular, inherited a love of walking, reading

"I didn't know what I was doing and no one could help me because they didn't know either. The only thing any book said on the subject was 'don't wear a patterned apron', so I decided I wouldn't wear an apron at all." and an appreciation for landscape. Her passion for family life and the preservation of domestic skills can be traced to her happy childhood in Opoho.

After secondary schooling at Otago Girls' High School, Alison was keen to study architecture or fine arts, but the family couldn't afford it. Home Science at Otago, because it was considered a pathway to teaching, offered a bursary. So, in 1956, she enrolled in the fouryear degree course, little suspecting how the science-based understanding of the properties and nutritional values of ingredients that it gave her would form the foundation of a hugely successful career.

While at university Alison met medical student Peter Holst, whom she would later marry. She attended Auckland College of Education in 1960, where she found the lectures uninspiring, but enjoyed the challenge of holding a class of school students' attention – another skill that would prove useful during her broadcasting and demonstrating days.

During that year she was offered a position as a lecturer in Home Science back at Otago. It was in this role that she developed the in-depth knowledge of recipes that would form the third plank in a unique skill set that would soon make her a household name.

She explains the maths behind this accumulation of knowledge with typical pragmatism: "I had 16 people in a class and there were three classes a week. Let's say it was a class about cooking eggs. First, I'd cook an omelette at the front of the class, and then the students would have to go back to their desks and make an omelette and bring it up for me to mark.

"Then I'd give everyone a different egg recipe which they had to make and bring up to the front, where it would be tasted and discussed. So I got to know 16 recipes intimately; and that was 16 recipes per class; 16 by three classes each week; multiplied by 40 for the year. That's 1,920 recipes per year."

At the same time, Alison taught in Home Science's community extension unit, where "if you weren't interesting the poor women who were on their way home after work would fall asleep". She was discovered here by an NZBC scout on the hunt for a cooking show host who, unlike Galloping Gourmet Graham Kerr, would appeal to the home cook.

His enquiries at both the University and the extension unit led him to the same person. Alison Holst was about to become a star.

Cooking shows may look easy, but they're not, especially when there are no role models or formula to follow.

"I was so nervous!" she recalls. "I didn't know what I was doing and no one could help me because they didn't know either. The only thing any book said on the subject was 'don't wear a patterned apron', so I decided I wouldn't wear an apron at all."

History would be made without an apron, in 15-minute instalments. Alison survived a "test" shoot and began work on the series *Here's How* in 1965.

With no brief or instructions, other than where to put items on the bench, she had to work out what to cook and how to compress the recipes into the time slot. A pumpkin pie required five different, pre-prepared versions to be brought out to progress the recipe from start to finish inside a quarter hour.

Similarly, pioneering planning went into Alison's first book, published the following year.

"I wondered how many pages are in a recipe book? There weren't many around in those days. I had a Sunset book called *Food with a Foreign Flavour*, so I looked at it and thought, 'what a lot of pages to fill!" Alison tested and cooked the recipes at home where the photographer set up a studio in the living room. She claims that if you look closely at the photographs you can see bite marks where Alison and Peter's daughter, Kirsten, had nibbled at the dishes when the photographer wasn't looking. The book sold out straight away and reprinted.

A second book, *Meals for the Family*, was prepared, with Alison and Peter and their two young children enduring a three-hour photo shoot to make the cover photo. It, too, sold out, but when it came time for reprinting the publisher found the photographs had been thrown out, so a new selection was made.

"If you look outside the window on the cover on the second edition you'll see there's a bird cage," says Alison.

"Kirsten had found a sick bird the night before. I had wrapped it up and said to her 'we'll put it in the cage and maybe its mother will come and find it'. Then I forgot about it because I was so busy getting ready. So, on the cover of the second edition, you can see the birdcage with the little lump in the bottom, while on the first edition you can't.

"Later on I told a group of women at a fundraiser this story, and I had booksellers ringing me up saying 'we've got people in here asking for your cookbook with the dead bird on the cover?' It was so funny."

Alison's popularity was such that she sold the country out of fish after demonstrating the filleting and cooking of a sole on one show – an achievement she and son Simon recently repeated with humble sausage meat.

Food producer boards quickly realised her potential to promote their product, at first up and down the country and then further afield.

Alison undertook many promotional tours for the New Zealand Meat Board,

Dame Alison Holst: She has steadfastly focused on nutritious, tasty meals that can be prepared in the average kitchen, by an average cook, using ingredients that aren't overly exotic. Photo: Ken Downie

REELE

"It really upsets me to think someone just throws out a dress because a button's come off it, or when a hem comes undone and someone staples it up. People talk about not knowing how to boil something, but I think in some cases it's true"

demonstrating recipes with New Zealand beef and lamb on television and in public from Singapore and Hong Kong to Toronto and New York.

Nearly 100 books, numerous television shows, radio spots and newspaper columns later, Alison remains just as down-to-earth as she was during the early days of her career. She is also strongly committed to the importance of family.

Friend, journalist and broadcaster Sharon Crosbie recounts how Alison once responded that if she was given \$1 million she would use it to put an oven in every classroom. It's an indication of her passion for the need to provide all children with basic housekeeping skills.

"This is what I always talk about when I'm asked to speak," says Alison. "I give 'the talk', but then I say now let's talk about this, because it's really important.

"It really upsets me to think someone just throws out a dress because a button's come off it, or when a hem comes undone and someone staples it up. People talk about not knowing how to boil something, but I think in some cases it's true –they don't even know what boiling is!

"We need to teach children some basic skills. If you've got grandchildren or nieces or nephews or whatever, write down some of your favourite recipes, take one of those books with clear pages - you can find them at the \$2 shops – and slip them in. Then make them with the child and see if he or she can make them for themselves.

"If you've chosen the right recipe – like muffins or an omelette – they'll probably make those recipes for the rest of their lives. It doesn't have to be complicated."

Crosbie reminds New Zealanders of what she calls "the unsung things" Alison has done which reflect her familyoriented principles, including raising more than \$4 million for Plunket, kindergartens and schools by providing fundraising demonstrations over the years.

"If anyone deserves [DNZM] recognition it's Alison. For years she would go out in the dead of winter to do demonstrations in cold little halls to raise money. No one realises she has done so much of that as well as the much higher profile stuff."

Crosbie has many amusing anecdotes of time spent both in New Zealand and overseas with her friend – Alison is a great traveller – but perhaps most apt is Alison's definition of friendship, which she recounts with warmth.

"Alison's definition of friendship is that you can go into a friend's house and open the fridge to see what's in there, and that it doesn't matter what's in the fridge, whether it has fur on it or is growing a colony of fungus." Crosbie says her own fridge has presented her friend with challenges over the years, but that "Alison is the greatest friend anyone can have". It seems that Alison Holst has been a great friend to all New Zealanders and will continue to be so for many years to come.

REBECCA TANSLEY

Leaving legend

Professor Sir David Skegg steps aside next month as Vice-Chancellor of the University of Otago. He and his colleagues reflect on his tenure.

Professor Sir David Skegg may have led the University of Otago from strength to strength for nearly eight years, but waxing triumphantly of his accomplishments is not his style.

How would he like to be remembered? He would prefer others to answer that. Of his achievements, he is careful to share credit. He compiles a list of highlights of his time as Vice-Chancellor, but acknowledges that he barely has time to think about them.

But talk in terms of how the University has moved forward over these years and his eyes light up with enthusiasm. He is clearly proud of Otago's rise to the top of the country's research rankings and, that in 2010, it secured the largest share of Marsden funding of all New Zealand universities for the sixth consecutive year. He reports on new initiatives - programmes for Māori students wishing to enter health sciences or supporting science students in rural and low-decile schools - for example. He speaks with passion on the architectural vision for the campuses in Dunedin, Christchurch and Wellington. "I particularly like the idea of building along the Leith towards the new stadium, with the Leith itself being developed as a natural feature and providing a riverside walk from the Botanic Garden to the sea."

The achievements of the past seven

years, he would have you believe, are not about him: they're about the University.

It's a reminder that, following something of the tradition of the late Sir Robin Irvine (who held the role for 20 years until 1993), Skegg's rise to the position of Vice-Chancellor was the culmination of a life-long relationship with the University. This is where he gained his undergraduate degree and met his wife, before taking up a Rhodes Scholarship in Oxford.

Otago is also where he has spent the great majority of his professional career, being appointed Chair of Preventive Medicine aged just 32, before becoming richly lettered and honoured as a world authority in his branch of medical science. He was awarded an OBE in 1990 and was knighted in 2009.

He has repeated often that applying to lead Otago was never part of some overarching career plan. "I would never have wanted to be the Vice-Chancellor of any other university," he comments. It had not even particularly occurred to him to apply for this role until his friends and colleagues started putting ideas into his head.

So Skegg has been, above all else, *Otago's* Vice-Chancellor. Indeed, something of Otago's development as a university can be mapped against milestones in Skegg's own career history. As an undergraduate student in the early 1970s, Otago had 4,000 students; when he joined the teaching staff in 1980, this had risen to 6,000. On taking up the position of Vice-Chancellor in 2004, there were around 17,000 students; now there are more than 20,000.

He believes it says something about Otago that, despite its growth, the University has retained its character and still registers so acutely in people's hearts. "Our alumni and visitors love to tell you about their time here."

Professor Alan Musgrave – whose lifespan at the University virtually matches Skegg's, having joined the Department of Philosophy in 1970 – has no doubt the University has flourished under his leadership.

"He came to the position with impeccable academic credentials and he put academic considerations where they belong at a university – at the forefront of everything we do. He embodied a Vice-Chancellor who is its most senior academic leader, not simply an administrative and financial CEO."

Nevertheless, there is no escaping that a large university with nearly 4,000 employees and an annual turnover of more than \$500 million a year takes a fair bit of organisational management.

Skegg admits that the sheer volume of issues one needs to keep abreast of can be dizzying – from professorial appointments (he makes a point of convening all such selection panels), to advising government, to speaking engagements, to attending to local Professor Sir David Skegg:

"I would never have wanted to be the Vice-Chancellor of any other university." Photo: Alan Dove residents' concerns about traffic. And then there are the issues that arise from left field: Clayton Weatherston; the Christchurch earthquakes.

There's a pithy saying one sometimes sees blu-tacked on office walls: "When you alone are an island of calm while all those around you are losing their heads, then chances are you haven't fully grasped the gravity of the situation." It's a sentiment that rings true for Skegg.

"If you think you're on top of all the issues facing you, it's a good sign you're probably not! When I was appointed in November 2003, the University Council said they wanted me to be ready to 'hit the ground running'. I think I will still be running when I hand the baton on to Harlene Hayne in August!"

Given this, has Skegg's determination to also remain active in teaching and research not been an exercise in selfflagellation? Skegg is proud that Otago is unique among New Zealand universities in that all its academic leaders are now involved in research; three even have Marsden grants in their names.

Skegg admits "it's been tough to keep up" and suspects it may not have been possible without his "extremely tolerant and supportive" colleagues whom he knew well before he took up the role. But it's obvious that he loves the spirit of enquiry and camaraderie in the academic world, and that he finds getting back to the department powerfully grounding.

"I remember once – it was around the time of the Undie 500 and all the criticisms we were facing for trying to deal with disruptive students – I went to teach a class of students. I recall looking around and thinking, 'You know, these are a really nice bunch of kids'. It was good for my sense of perspective."

It's useful too, he says, in helping ensure he never loses touch with "life in the trenches". It certainly sent the right message to Musgrave: "He was one of us."

This sense of solidarity became a critical step in achieving what Skegg describes as his first aim – "to build a spirit of collegiality in the University. The success of a university depends on its faculty, more than anything else. I have a conviction that academics won't be creative in their research and teaching if they are constantly worrying about restructuring or weighed down by excessive bureaucracy.

"I am still a great believer in academic departments as the building blocks of a university," he continues. "There are some universities who have tried to do away with them, believing they become 'silos' – a horribly overused term. I prefer to think of them as being like families and, while it's certainly possible to have dysfunctional families, mostly they provide a very supportive environment which does not exclude strong relationships with members of other families."

Dr Craig Marshall – biochemist, union representative and Council member – says he noticed immediately the benefits of being led by someone who'd served time behind a head of department's desk. "Very quickly, a lot of unnecessary paperwork disappeared. Basically, we could do more of what we wanted to do and less of what we didn't." Or, as his close colleague Professor Geoff White, who for five years worked alongside him as the Deputy Vice-Chancellor (Research), puts it: "David understood that the loose collective of academics can be a powerful force, when morale is high."

Musgrave also recalls Skegg as "unfailingly supportive" and reflects on his "immense personal charisma".

"He has an uncanny knack of saying the right thing to the right people. He listens, takes concerns seriously, is firm when he needs to be. No one ever leaves a meeting with David feeling put down or demeaned."

"In a way," says Marshall, "he was a problem for the union in that it became less obvious why you would need to be a member: University staff could take for granted that they would be treated fairly and respectfully."

His communication style – considered, attentive, articulate – is born of genuine humanity, agree Musgrave, Marshall and White. It was also an effective strategy.

"Make no mistake," says Marshall, "if David wanted to achieve a result, he was quite capable of driving strongly towards his outcome. He just did it in a way where no one felt bulldozed in the process. He would do a lot of groundwork and build up the relationship and confidence he needed."

"He came to the position with impeccable academic credentials and he put academic considerations where they belong at a University - at the forefront of everything we do."

Professor Alan Musgrave



At May graduation Moana McNeil (Ngāti Kahungunu/Ngāti Porou), a member of the the kapahaka group Te Kahui Toroa, presents Professor David Skegg with a Kuru Pounamu on behalf of Māori staff and students. Photo: Ian Thomson

Marshall adds that "if David articulated a vision, you knew he already had a strong sense of how he was going to get there." On one hand, this may have geared him towards making "safe" decisions, rather than pushing towards dramatic innovation, thinks Marshall. But it also meant he was regarded as utterly credible.

Indeed, White regards Skegg's legacy as arising from his ability to take the long view. "Universities are long-lived institutions – they last much longer than governments – and the ideas, networks and infrastructure that have built up over many decades all require ongoing investment. Whether it's the campus plan or the personal efforts he put into hand-selecting only the best professorial candidates, David's approach was not about achieving short-term results. Everything was done from the perspective of ensuring the University would be able to sustain itself for generations. For this, I believe the University community owes David a huge debt of gratitude."

NICOLA MUTCH

Like taking a rock out of a river, it seems any void created by removing the Vice-Chancellor's position from Skegg's life will be quickly replaced by a rush of the rest of his life.

His diary is already filling with research commitments, a role chairing a new governmentestablished science board and leading a World Health Organization advisory committee in Geneva on improving reproductive health in developing countries.

"I read a retirement address from a medical professor at Oxford University," says Skegg. "He talked about all his 'buried selves', all those elements of one's personality and interests that you need to suppress because you are too busy to nourish them. After a while, these potential selves become more and more impatient to get out.

"While this has been a fascinating job, it is allconsuming. One just has to curb other interests. I want to read some of those books that I've been buying over the years!"

But much as he may be looking forward to a welldeserved lie-in, Skegg says he looks back warmly on the years he has spent leading the University he loves. He talks of his particular enjoyment developing relationships with Māori and Pacific Islands communities, and is proud to surprise people by pointing out that Otago has a higher proportion of Māori students than the University of Auckland.

And he has found affirming "the exceptional loyalty the University enjoys from its staff and alumni - and even goodwill from New Zealanders in general. At one of our graduations, Professor Malcolm Grant, who is one of the most successful university heads in the UK, made the comment that 'few universities today command the loyalty of staff in the way that Otago does'. I don't know what led him to this conclusion, but I've become convinced that it is an understatement."

Finally, he says, he is delighted to contradict those who warned him when he began his role. "There were people who told me this job would be all about the finances," recalls Skegg. "It's not. Juggling money has been one aspect of the role, but by no means the greatest. It's about people."

Pacific histories

Professor Lisa Matisoo-Smith is studying ancient DNA to track Polynesian origins and migrations across the Pacific.

When Professor Lisa Matisoo-Smith (Anatomy and Structural Biology) needs to explain the complexities of understanding people's origins she can turn to her own story as an example.

"My accent is American, but I was born in Hawaii and grew up in Japan. I have this funny family name, Matisoo, which is Estonian, but I live in New Zealand. Despite my blond hair and blue eyes, my DNA includes a northern Asian marker as a result of Mongol influences across Northern Europe. So, where am I from?" she asks.

"Humans are complex and, if you are going to understand human history, you need to constantly remind yourself of that complexity. The language that someone speaks, their name, the particular genetic marker they carry, where they are born, where they live, where they identify ethnically could be telling you very different stories, but combined it is, indeed, the history of the person.

"That's what I love about biological anthropology – it's looking at all these factors about history, about cultural diversity, about linguistic diversity and how they influence patterns of biological diversity to try to understand human history and how we got to where we are today."

Sifting through those layers of complexity is helping unravel the story of Polynesian origins and migration. But identifying population origins is complex, Matisoo-Smith says. There is rarely a simple explanation.

"The Pacific is an area where there is incredible history going back 50,000 years to when some of the first migrations out of Africa arrived in Australia and New Guinea. Polynesian origins, to some degree, involve the descendants of these earliest migrants.

"But the migration of peoples towards Polynesia is the last great human migration. It happened in the last 3,000 years and may have involved more recent migrants into the Pacific from Asia. Polynesian ancestors didn't reach New Zealand until only 700 years ago."

Matisoo-Smith has always been fascinated with the Pacific and its culture. Her mother studied social anthropology so it was something she learned about while growing up.

However, at UC Berkeley she became immersed in physical anthropology and evolution. At that time a lot of fascinating work was being done on mitochondrial DNA and molecular evolution.

After graduating, Matisoo-Smith wanted to go to Africa to study human evolution, but the political situation meant the doors were firmly closed. Instead, she headed for archaeological sites in Europe where she met the New Zealand man whom she would eventually marry.

That twist of fate led her to undertake postgraduate study in New Zealand,

but she faced issues with Pacific communities about studying human remains.

"I thought we had to figure out a more culturally acceptable way of trying to get at this question of understanding human prehistory and human settlement of the Pacific. That was when I came up with the idea of studying the DNA of the animals that Pacific people carried with them, as an alternative means of tracking human migration."

Matisoo-Smith's PhD looked at *Rattus exulans* or kiore, using genetic variations to track their movement across the Pacific.

Māori colleagues explained to her that the kiore was intentionally carried in colonising canoes as food and was something of a taonga.

"I used the same mitochondrial DNA approach that is used to look at human movement to look at the movement of the rat. By proxy, it was telling us about the movement of the people."

Kiore offered important advantages. Being a different species from the European rat meant there was no interbreeding, so populations living on the islands today are direct descendants of the initial introduced rats.

Matisoo-Smith says that in the process of working with Pacific Island communities she was able to cultivate relationships.

"Slowly attitudes changed, relationships developed, trust developed and pretty soon those communities were saying 'you're using these animals as markers, what about us and looking at our DNA?" It was about that time that she was approached by the Genographic Project, an international project backed by *National Geographic* to follow genetic lines to understand how humans dispersed across the globe.

Someone was needed to head research amongst Pacific communities and, although the five-year project is due to wind up at the end of this year, Matisoo-Smith is hoping for additional funding to continue that work.

Much of this work now involves ancient DNA which, she says, is like having a time machine – a way of looking into the past. They are working on ancient DNA of the Lapita people, named after the distinctively patterned pottery and other artefacts, to get a snapshot of which genes were present at a particular point in time in a particular population and how this relates to what they see today.

When archaeologists first began to uncover these artefacts 50 years ago theories began to emerge of how the Lapita culture was ancestral to later Polynesian cultures.

Matisoo-Smith says when it became possible to examine DNA, the genetic story became incorporated in an archaeological story and a linguistic story, making a nice, neat and simple package about the Neolithic expansion out of Asia of a unified ancestral Polynesian people, language group and culture, thereby missing the complexity of the human story. "What we're realising now is that it is not that simple and that populations don't move like that. Polynesians became Polynesian in Polynesia and that the Lapita package didn't move as this neat little pod. Instead, what we call Pacific biology, culture and language all came together at different points in time and in different places."

There is no doubt that the Lapita peoples are ancestral to Polynesians, but the idea that that was the only influence is rather simplistic, she says. People move all of the time and there were likely to be other, perhaps less obvious, migrations.

"The aim is to study samples through time. We have archaeological remains of the Lapita people arriving in the Pacific 3,000 years ago and we hope to see what their DNA was like – and then what was it like in their descendants 2,000 years ago, and 1,000 years ago, and 500 years ago, and what is it like today."

They will now be able to compare the Lapita DNA with that of the first people to arrive in the various island groups, including New Zealand, and examine the similarities and differences seen in those populations through time.

One of things that makes the Pacific DNA puzzle all that more interesting is the fact that these early Polynesians needed to be excellent voyagers to move themselves, their animals and plants across wide expanses of ocean.

Matisoo-Smith is currently using a Marsden Fund grant to seek hard archaeological and genetic evidence that

"We have archaeological remains of the Lapita people arriving in the Pacific 3,000 years ago and we hope to see what their DNA was like – and then what was it like in their descendants 2,000 years ago, and 1,000 years ago, and 500 years ago, and what is it like today." Pacific people made it to South America. Her research is focused on Isla Mocha, an island located just 30km off the coast of Chile, where human remains with distinctly Polynesian characteristics have been found in the past.

The Marsden grant allowed her team to return to the island late last year to excavate for further archaeological evidence which produced animal bones and further artefacts. They are now awaiting permission from Chilean authorities to carry out DNA analysis in the hope that it will give them another look through the time machine.

"If we find Polynesian DNA markers in 1,300-year-old remains from Mocha then there is no question that Polynesians were there, and that it wasn't South Americans coming out the other way, or it wasn't Chinese voyagers picking something up along the way and dropping it off in the Americas."

Matisoo-Smith says it is most likely those early Polynesian voyagers were the ones making contact.

"The movement of people across the Pacific wouldn't have stopped until it had to. They wouldn't have stopped when they got to the last island – they wouldn't know it was the last island. The last place they could travel to was the Americas – they couldn't travel any further."

There is evidence in two places in the Americas suggesting that Polynesians passed on sewn plank boat technology – the question intriguing her is whether some settled there or whether they just traded, bringing back things like the sweet potato.

"I would be very surprised if some people, or at least their genes, didn't stay. After all, the language of love is universal!"

MARK WRIGHT

Professor Lisa Matisoo-

Smith: "What we call Pacific biology, culture and language all came together at different points in time and in different places." Photo: Alan Dove Location: Otago Museum

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One man's mission

TroppoDoc's founder - and only full-time volunteer - Otago alumnus Dr Derek Allen is dedicated to helping people in need.

If you think one individual can't make a lot of difference to the suffering in the world, think again.

Meet Otago alumnus Dr Derek Allen, founder of TroppoDoc, and the sole full-time member of the smallest nongovernmental organisation in the world.

Much of the time Allen is a oneman aid agency, working in remote and impoverished areas in Indonesia, Vanuatu, Bolivia and West Africa.

TroppoDoc helps eliminate the causes of sickness and disease by providing free medical care, medicines and information about health threats, and by improving water supplies and establishing community-directed health education and training.

If that sounds like a Herculean task, it is, which is why Allen is constantly seeking volunteers to help out.

They don't need to be skilled, as there are plenty of jobs at all levels, from gathering data to construction to medical care, which is why doctors and nurses are high on Allen's wish list.

"Volunteers make a huge difference to our output," says Allen. "In a good year we'll probably get around 20 to 30, staying from as little as a few weeks to much longer.

"But we always need more anchor people like doctors – regular volunteers who could come for a month every two years or so. If I had 40 people who could do this we could run full-time clinics where they are desperately needed around the world."

TroppoDoc covers a lot of ground, with projects from Southeast Asia via South America to Africa, where Allen first gained experience of voluntary work.

He graduated from Otago Medical School in 1982, working in Blenheim and Timaru before qualifying as a general practitioner and joining Voluntary Service Abroad.

Over four years he worked in Botswana, Swaziland, South Africa and Zimbabwe – "an amazing experience both personally and clinically" – before moving to Eastern Europe with a Christian organisation.

"As part of Missions Without Borders I was working in public health in Bosnia, Romania, Albania and the Ukraine. It was a time of a lot of unrest and, over the four years I was there, I saw an awful lot of orphanages."

Allen didn't run out of caring, but, like many long-term volunteers, there came a time when he ran out of money.

He returned to New Zealand for a few years as a locum from the far north to the far south, and then as a surgical and orthopaedic registrar at Middlemore Hospital in Auckland. But the undeveloped world still called and Allen moved to Vanuatu as medical officer in a government hospital on Malekula, covering 15 remote islands.

With a rare combination of experience in some of the poorest places on the planet and having seen how some of the aid agencies worked on the ground, Allen decided to set up his own small-scale operation, unencumbered by national or political affiliations.

TroppoDoc launched in 2002. "We have no paid employees and only one full-time volunteer – me," says Allen. "I started with the aim of focusing entirely on health and patient need, which is not always what you get from some of the larger aid agencies.

"I find myself training doctors, pulling teeth, delivering babies, doing surgery, promoting public health, organising nursing, educating on health and hygiene – I do it all. Sometimes I have a couple of people along with me, but largely I do it on my own.

"You don't have any choice really. You do what you have to to keep people alive."

Every few months Allen gets back to New Zealand where he does the rounds of meeting and greeting to attract funding and volunteers, talking to groups and organisations, often targeting medical undergraduates as he is certified to supervise students' electives.

He knows that, with enough volunteers doing short stints, his vision of running full-time clinics is a practical proposition.

"One of the Vanuatu islands has exactly that system, run entirely by



volunteers from Vancouver in Canada – and there is a three-year waiting list to volunteer. If only we could get that set up from New Zealand."

Allen's expertise saw him one of the first on the ground in Indonesia after the 2004 Boxing Day tsunami. He still works out of Pulau Tello, one of 100 islands in Pulau-Pulau Batu, a remote archipelago in North Sumatra.

Now Allen's name is high on the list of who to call when disaster strikes.

He's involved with the Singaporebased Crisis Relief Society – "they call me if they want work done in the developing world" – and generally goes in to run groups of eight to 10 emergency workers. There's no comfortable desk. Allen is as hands-on as the rest of the team.

Disasters he's attended since 2004 include earthquakes in Kashmir, Padang, Yogyakarta and Haiti, floods in Pakistan and a tsunami in Myanmar. He's also been expanding TroppoDoc across the globe. He recently did a recce trip to investigate why Bolivia had South America's highest rates of infant and maternal mortality.

He found women trying to give birth in thatched huts with dirt floors in freezing temperatures at an altitude of 3,500 metres. Now TroppoDoc is working to support medical services in the area, where there is one nurse to 2,500 people. The high mountains are a dramatic contrast to the steamy tropics of Southeast Asia and the desert conditions of TroppoDoc's operation in Burkina Faso in Southwest Saharan Africa, but, for Allen, it's just one more place where people are in need.

Elsewhere, TroppoDoc projects include building and improving water supplies in schools, health education, assisting with medical clinics and building children's playgrounds.

"I find myself training doctors, pulling teeth, delivering babies, doing surgery, promoting public health, organising nursing, educating on health and hygiene - I do it all. Sometimes I have a couple of people along with me, but largely I do it on my own." With commitments around the world, Allen spends his life on the road. He has no base other than a house in Dunedin he rarely sees and visits to New Zealand are always an eye-opener.

"Every time I come back I get a huge culture shock at how much we take resources for granted, and what we spend and how we spend it. We're not in touch with the needs of the world.

"What we waste is amazing. We're spending millions of dollars a week on betting in New Zealand while there are 9,000 people a day dying from simple preventable problems like diarrhoea, chest infections and malaria. We don't share well." TroppoDoc has no big sponsors and exists on donations, even from schools, churches, Rotary clubs, individuals and small organisations.

Medical supplies are donated from hospitals, pharmacies and leftovers from other aid agencies. But Allen's main need is people. Volunteers are at the heart of TroppoDoc.

"Funding is an issue, but help on the ground is even more of an issue. I'd rather have more volunteers who are enthusiastic to help the poor.

"You don't need any skills at all. Just bring enthusiasm and I can find you a useful job to do that will bring rewards far greater than money." Volunteers pay their own airfares and the small local cost of accommodation and meals.

For Allen the rewards are priceless. At 52 he has no plans to slow down and aims to keep TroppoDoc going as long as he is fit and healthy.

"It's early days, but I'm impatient. If we can get the volunteers there are so many more places in need to go to."

NIGEL ZEGA

For more information about Dr Derek Allen's work see: www.troppodoc.com



A heavy burden

A leader in diabetes research, Professor Jim Mann claims obesity has not only become "boring", but so commonplace as to often go unrecognised.

There are good reasons why the word obesity was added to the title of Edgar National Centre for Diabetes and Obesity Research (ENCDOR) after its establishment in late 2003.

It was the first centre set up under the University of Otago's Leading Thinkers Initiative and its director, Professor Jim Mann, says since then the extent of the obesity epidemic has become apparent.

"Even seven years ago, while I would have said obesity is related to Type 2 diabetes, I probably wouldn't have been talking then about an epidemic. Now every man and woman in the street knows we have an obesity epidemic and that is driving the epidemic of Type 2 diabetes," he says.

"Rates have been increasing dramatically over, probably, only the last 15 years and we have only recognised it in the last seven to 10 years. Something has happened. Lives haven't changed that much since the 1990s, but the epidemic of obesity has gone up.

"It has become apparent that anyone who is interested in Type 2 diabetes must also be interested in obesity – so the name change is as simple as that."

At the same time, Mann says, the exciting realisation of the last 10 years has been that if you do something about obesity and the factors that are associated with it, then it is possible to see a reduction in the risk of diabetes in a relatively short time.

"Take cancer, for example. If you try to make changes in the causes of cancer, it will take years to come through in terms of public health. With regard to diabetes, there is very good evidence that you'll see benefit and risk reduction in two years. And there is good evidence that that risk reduction is not a seven-day wonder – it's retained."

Since it was launched, ENCDOR has attracted nearly \$17 million in research funding and has had 82 papers published in international research journals.

Not surprisingly, the centre's research work has become increasingly obesity-related.

The first major project in that area was Associate Professor Rachel Taylor's APPLE (A Pilot Programme for Lifestyle and Exercise) Study, one of the first community-based studies to show the potential to halt weight gain in children by way of dietary intervention coupled with physical activity.

Taylor's research focus is now moving to even earlier life stages, examining ways of preventing obesity as early as possible in the lifecycle. Other major research highlights have included the development of a close partnership with Ngati Porou Hauora to develop the Ngati and Healthy Prevent Diabetes Project which received a gold award in the Whānau Ora Awards for Māori health initiatives. That project has been expanded to one that takes a wholehealth approach on the East Coast of the North Island.

A recently internationally-recognised piece of research has been the LOAD (Lifestyle Over and Above Drugs in Diabetes) study, published last year in the *British Medical Journal*. It showed that, even when people were on an optimised drug regime, correct dietary practices could produce further significant improvement to their diabetes control.

Mann says, although it is critical to tackle the epidemic at a very young age, we can't ignore it in older people who are affected now.

"If we don't do something about the here and now then we'll be in trouble, not just 20 years down the track, but in increasing trouble as each year goes by. That is why we are equally concerned about studies of that kind in adult life," he says.

Research is now shifting more towards understanding the causes of obesity, particularly the role of sugar.

"There's enough evidence to suggest recommending a reduction in sugar intake, which is what is going up and is probably a key individual driver of obesity," says Mann. "Saturated fat intake seems to be coming down slightly and cholesterol levels are coming down, but obesity is going up. So is the driver something to do with sugars and carbohydrate, as well as energy density in general and portion size and things like that? That is the sort of area we are getting into now – the drivers of obesity.

"It is nothing new, because my PhD was in that area, but it just got forgotten about and left by the wayside because people weren't that interested in obesity. Heart disease and diabetes themselves were much more prominent rather than the causes or drivers."

Mann says the fructose component of sugar is of particular interest because it seems to have an adverse effect on the metabolism, including insulin resistance, and causes problems with insulin sensitivity.

Getting the message through is a challenge and Mann caused a slight stir last year when, in a TV interview, he said "obesity is boring" – a comment he is happy to reiterate.

"Not only is it boring, but there is something that goes in parallel with being boring and that is that people don't recognise it," he says.

"If you ask parents whether their child is overweight they don't actually recognise it because there are so many overweight and obese children that it doesn't seem abnormal.

"I'm sure the same applies to adults. People are in the range of unacceptable bodyweight in terms of their health outcomes, but are not recognised as such because there are so many people that are that way. There is a new norm and it is not a health norm – it's just that people have got used to it." Mann says sorting out the problem cannot be done just by individuals. He advocates tackling it at all levels – international organisations, Government, NGOs such as the National Heart Foundation, industry, and the media, as well as down at the family level.

"Whether it is the policy of the family on how many times you are going to eat at McDonald's, whether it's policy in Government to make food labelling clearer, or whatever. One needs it to be tackled at all those levels.

"You can't implement things without Government support. You need Government to create an environment that is conducive to making the change. You need schools to make decisions that are conducive to making the change."

Mann says that was the catastrophe of the current Government doing away with healthy food guidelines in schools.

"Within days schools were putting back vending machines to sell junk food and sugary drinks because they were making money out of it."

In terms of getting new messages out there he feels the one around sugars is critical.

"There are research questions that can be asked and answered, but I think the message is generally there – it just needs to be made more exciting. But it doesn't have the attraction of a potential cure for cancer.

"The difference is that there are not that many cures for cancer, but we do have the cure for the obesity problem, it just needs to be implemented."

MARK WRIGHT

TRANSLATING RESEARCH

An offshoot of ENCDOR, the Centre for Translational Research in Chronic Diseases (CTRCD) was set up to help get research into practice.

It has done this in a number of ways including two successful symposia, one in Wellington late last year titled "Who Cares About New Zealand's Waistline?" and a follow-up seminar in Dunedin earlier this year called "Who Is Taking Action?"

"Such seminars are very much within our brief," Mann explains. "When the centre was established our vision was 'to make a significant contribution to reducing the global burden of diabetes and obesity through research and dissemination of knowledge'. We have regarded that as a major component of our role."

Another important translational component involves bringing discoveries into practice through their guideline work, both nationally and internationally.

Mann chairs the European Diabetes and Nutrition Guidelines Group, and the Expert Advisory Group on Diabetes and Cardiovascular Disease in New Zealand. He has also served on several other relevant national and international groups including the nutrition advisory group to the World Health Organization.

To make a donation or bequest to the University of Otago, please contact the Office of Development and Alumni Relations. Tel 64 3 479 8834 Email leadingthinkers@otago.ac.nz

Professor Jim Mann:

"We do have the cure for the obesity problem, it just needs to be implemented." Photo: Bill Nichol

"There's enough evidence to suggest recommending a reduction in sugar intake, which is what is going up and is probably a key individual driver of obesity."

Right way forward

An increase in the numbers of right whales around the Auckland Islands is raising speculation that more will soon be returning to the waters of mainland New Zealand. Otago scientists are investigating.

Could New Zealand's sheltered coastline once again provide a sanctuary for endangered southern right whales?

Dr Will Rayment (Marine Science) hopes so. He would like to see the whales recolonising some of the shallow bays where they used to converge to mate and give birth.

These locations were well documented by whalers who hunted them to commercial extinction by 1925, when the population was estimated at fewer than 100.

In 1935 they were protected worldwide, although they were thought to be extinct in New Zealand. Even when a remnant population was discovered in the 1980s, no one knew if they could survive.

But their numbers have increased, and Rayment is hoping to identify which of the whales' old gathering grounds might still be practical for them to return to.

This is part of a three-year study Rayment is carrying out in the Auckland Islands – a mecca for both whales and whale researchers.

A century ago southern right whales gained their name because they were the "right" whales to hunt, partly because they swam slowly and frequented shallow coastal bays rather than the deep ocean.

Now, for the same reasons, they're the right whales to study and the Auckland Islands are the right place to study them.

The remote sub-Antarctic islands once attracted whalers and even an illfated attempt at settlement, but, with the collapse of whaling, they reverted to their lonely isolation in the southern ocean, 460km south of Bluff.

When whales were found to have returned to the bays where once they were slaughtered, researchers began gathering data to see if the population was recovering from its brush with extinction. And, as more southern rights were seen around the New Zealand coast, scientists wondered if they were the same as those seen in the sub-Antarctic.

Rayment had worked with northern right whales in the Atlantic, but that hadn't prepared him for a 2008 trip to the southern ocean, assisting then Otago colleague Dr Simon Childerhouse.

"I was blown away by Port Ross in the Auckland Islands.

"It was amazing. It was chock-a-block full of whales. I'd never seen such a high density of whales in one place. It's a really exciting place to be and all the more special because it is so remote and hard to get to."

After two expeditions, Rayment wanted to continue the work that had begun and successfully applied for funding from the Foundation for Research, Science and Technology.

This winter he is leading the second of three annual voyages to Port Ross, concentrating on building a better picture of the whale population from photographs. Southern rights have patches of cornified skin – callosities – growing on their heads, each forming a unique pattern, making it possible to identify individuals.

Rayment and his colleagues are creating a library of southern rights, which they can check against photographs of whales taken around New Zealand or as far away as Australia.

Earlier research using biopsies to trace populations by their DNA has produced good information. Now photo-ID work can follow a large number of whales over a widespread area.

"Encountering the same individuals over time will enable us to estimate such things as population growth, population size and survival rates," says Rayment.

"We've already got photo-ID matches that support genetic work, concluding that the New Zealand and Auckland Island populations are one and the same.

"We had a really nice example last year where we had one whale seen at Blackhead, south of Dunedin, just two weeks after it was photographed in the Auckland Islands.



"So, if the population is growing around the Auckland Islands and the same whales are being seen around New Zealand, then it's likely that we'll be seeing more animals turning up around the mainland.

"We haven't crunched all the numbers yet, but there seem to be more whales every time we go down. It's really exciting and it leads to the second part of our research, which is thinking about proactive conservation.

"If the whales are returning to the mainland, what can we do to encourage them back? What habitats might still be available to them?"

That raises the question of what happens when whales head back to historical habitats.

Many locations, such as Otago Harbour, have changed to the point where they may no longer be suited to whales. Others may still be suitable, but are now occupied by industries such as mussel farming.

This winter Rayment's research includes getting precise locations for where whales are sighted and developing a clear picture of preferred habitats to see what might still be available in New Zealand.

"Knowing physical characteristics such as sea-bed depth, slope and distance to the coast will help us predict, with more accuracy, where they are likely to want to go – or not go. "We know broadly where the whales used to live because of whaling records, but are these places still practical propositions after years of development, shipping, fishing and aquaculture? Can we find room for whales?"

Where Otago Harbour has changed in use and depth, there are some old haunts that might still suit the whales.

Rayment suggests less developed locations such as the south side of Banks Peninsula, Port Underwood to the south of the Marlborough Sounds, and Preservation Inlet and Te Waewae Bay on the south coast.

"There are already increased sightings around the southern locations," says Rayment. "They're probably realistic candidates for where right whales could prosper again."

But wherever the whales might want to be – and whatever the researchers might want to see – Rayment realises that legislation will require substantial data if a successful argument is to be made for active conservation.

"We'll need to present a case outlining any likely impacts we can find involving returning whales and such things as fishing, shipping, development and tourism.

"At the moment there are so few whales around that there's little or no problem, but if the numbers increase, then local and national government will have to make judgements on what

"If the whales are returning to the mainland, what can we do to encourage them back? What habitats might still be available to them?" impacts might be significant and whether or not there is something to be done to mitigate those impacts.

"So far there hasn't been an issue and we don't want to jump the gun. At this stage we're just gathering information and thinking where recolonisation might happen."

Other Otago research programmes are involved in the Auckland Islands' expeditions. James Scott (Geology) is collecting rare mineral samples while Dr Chris Lalas (Marine Science) is continuing investigations into the winter diet of New Zealand sea lions. Although endangered, sea lions have their largest breeding colonies on the islands.

Lalas is also collaborating with researchers from Massey University on a project to measure levels of hydrocarbon contamination in marine wildlife. Data gathered in the relatively pristine southern ocean can be used as a baseline for comparisons with the mainland.

PhD student Trudi Webster (Marine Science) is also using the islands' isolation to get comparative data – for a collaborative project with US researchers on whale acoustics.

Noise pollution affects whales, as they change their calls in noisy environments such as shipping lanes. The peaceful South Pacific will be contrasted with the busy North Atlantic.

The University's marine research vessel, *Polaris II*, provides the expedition's transport, accommodation and laboratory.

"Polaris is fantastic to work from," says Rayment. "Even in the depths of a sub-Antarctic winter it's nice and warm and dry, and there's enough space for what we want to do. It can also take the two small boats that we work from."

Spending time on the water surrounded by whales is an intimate experience. Dr Will Rayment:

"Encountering the same individuals over time will enable us to estimate such things as population growth, population size and survival rates." Photo: Steve Dawson

"We get to know individual whales," says Rayment. "Most of the differences are subtle, although some are really easy to identify from distinctive callosities or colour patterns."

They also have different characters and patterns of behaviour. Generally, mothers with calves are wary and protective, males are mainly interested in mating and juveniles are curious, which leads to lots of close encounters.

Polaris II and its anchor chain are regularly used as scratching posts and the small boats are sometimes bumped by whales the size of buses.

"They're surprisingly agile – so controlled and flexible – and quite manoeuvrable," says Rayment. "We try not to approach them, but sometimes they come to you and nudge you or lift you out of the water.

"You don't appreciate their size until you see them really close up. They approach you on their own terms and they're checking you out as much as you're checking them out.

"I feel privileged to be able to spend time with such a cool bunch of animals. It's a special experience."

If Rayment has his way, it's an experience that many more New Zealanders could be sharing in the future.

NIGEL ZEGA

Breast cancer contradicts trends

Māori breast cancer rates have increased by 70 per cent over the last two decades compared to a 50 per cent increase for European and "other" women, according to new research from the Department of Public Health (Wellington).

Lead researcher Dr Ruth Cunningham says the reasons for the high rates and steep increase among Māori are still not clear. Internationally breast cancer incidence is usually highest among those with higher incomes.

"One would expect Māori to have lower rates as they give birth earlier, have more children and lower rates of hormone therapy use. All these factors normally reduce rates," she says.

Māori breast cancer rates rose from 123 to 210 per 100,000 women, while rates for European women went up from 114 to 170 over 25 years.

Pacific and Asian women have the lowest incidence of breast cancer in New Zealand, and these rates did not change much over two decades. Asian rates are the lowest, although they are higher than for women in most other Asian countries, suggesting factors such as changing reproductive behaviour may be having an impact on Asian women in New Zealand.

These findings also reflect the international research showing that women in higher socio-economic groups are more likely to

get breast cancer. The difference in incidence by income in New Zealand is 10 per cent and did not change over the research period.

Higher income women have greater risk factors: having children later, less likely to breast feed (although this is changing) and more likely to use hormone therapy.

This research was funded by the Health Research Council and the Ministry of Health.



Dr Ruth Cunningham: The reasons for the high rates and steep increase of breast cancer among Māori are still not clear.

Short, sharp benefits

Physical training using short, sharp, 30-second bouts of exercise is already known to bring some benefits usually associated with endurance training. However, School of Physical Education researchers are examining whether other wide-ranging benefits of training can also be obtained through this approach.

Dr Jim Cotter, physiologist Dr Sam Lucas, research assistant Evelyn Parr, and research students Matthew Graham and Monique Francois are trying to find out more about how the different forms of exercise actually drive the physical adaptations that help with performance, fitness and health.

They replicated the initial studies by having non-athletes do four 30-second bouts of exercise three days a week, versus typical health guidelines of 30-60 minutes a day at least five days a week. In a parallel study, a separate group of volunteers was monitored extensively for metabolic and cardiovascular function for 24-hour periods following sprint versus endurance exercise, including using the arms versus the legs.

"If you have a look at some of the definitive markers of endurance - such as how much carbohydrate you can store in your muscles and how easily can you use fat to fuel exercise you come up with similar figures for 'anaerobic' training versus traditional endurance training," says Cotter. More research is needed and he urges people not to immediately think they should exercise this way. While they found the effects of sprint training on muscle might be impressive, it was less impressive in terms of other fitness benefits that underlie health and performance, such as red blood cell volume, blood pressure and heart rate.



Dr Jim Cotter: "If you have a look at some of the definitive markers of endurance ... you come up with similar figures for 'anaerobic' training versus traditional endurance training."

Italian murder trial still fascinates

It bore all the hallmarks of a classic Italian opera – a war hero rendered impotent by his wounds and his dissatisfied wife, Raffaella, accused of helping her circus acrobat lover to murder him.

When Dr Mark Seymour (History) first encountered the 1878 murder of Captain Giovanni Fadda in an old Italian newspaper he, like many people of the time, became fascinated.

In Rome he examined 3,000 pages of trial records including interviews with about 100 witnesses, mostly peasants from Raffaella Fadda's remote village in southern Italy.

"One of the great problems historians face is that when people are illiterate there's no record of what they think. This trial gave me a window into the thoughts, ideas and mores of a whole group of people that wouldn't otherwise have been recorded."

Seymour says Raffaella never admitted involvement and spent much of the month-long trial sobbing. In complete contrast, her circus acrobat lover played to the court.

"Just as in today's newspapers, some stories take off - they really fascinate the public. So, as an historian, I would argue that we should focus our attention on the stories that resonate at the time. "People wrote books about this trial and lawyers commentated on it in legal journals for years afterwards."

Raffaella was granted a pardon 19 years into her life sentence while her lover's death sentence was commuted to hard labour. Seymour has written three academic articles on the case and is preparing a book aimed to appeal to a wider audience.



Dr Mark Seymour: "I would argue that we should focus our attention on the stories that resonate at the time."

Gap-year experiences

There's a good argument to be made for taking a year off between school and university, according to Otago students who have done just that.

They claim that a gap year has broadened their perspectives, made them more confident and given them the kinds of skills associated with leaving home for the first time and exploring new places.

The result is that they are more mature, more focused on what they really want to study and have learned lessons that would stand them in good stead for the rest of their lives.

The findings come as part of research done by Dr Tara Duncan (Tourism) into the impact of gap-year experiences on young people.

She advertised around the residential colleges for students who had taken time out between school and university, and was surprised at the good response.

"Gap years are increasingly seen as normal things to do, but they're still not common," says Duncan. "The minority who get the opportunity to do them might get financial help from their families, or might have worked and saved towards them.

"But they all unequivocally recommended doing a gap year and said the experience would have a lasting affect on their lives." Duncan discovered that New Zealand and overseas students spent their time out on a mixture of travel, work and study. Some attended educational establishments as exchange students or as staff, and all said travel was a useful component of their year.

Duncan - whose own gap year lasted for three - hopes to use her findings as a pilot for further research.



Dr Tara Duncan: "Gap years are increasingly seen as normal things to do..."

"England's pleasant pastures"

Decisions made without considering long-term consequences are likely to cause problems in the future, as shown by the way the British Empire treated land in New Zealand, according to a new book Seeds of Empire: The Transformation of the New Zealand Environment.

Co-authors and primary investigators Professor Tom Brooking (History) and Professor Eric Pawson (Geography, Canterbury) reconsidered New Zealand's agricultural history with a multidisciplinary team of environmental, agricultural, economic and Māori historians, and historical and biological geographers.

"We asked why early New Zealanders decided to make such a mighty effort to transform the land from forests, swamps and tussock into English-style pasture," says Brooking.

"Then we looked at the consequences of the decision to impose one system across the whole country even though it varies from sub-tropical to sub-Antarctic. Once you commit to something as huge as that it's going to impact for generations."

The book criticises colonial arrogance and unquestioning faith in progress. "The British Empire was built on grasses. To do that here settlers had to suppress biodiversity and we are still experiencing the fall-out from that. Good farming practises sustainability, which can be maintained for thousands of years. "The crucial question decision-makers should be asking is can we keep what we are suggesting going for many generations?

"There's been very little of that in this country. People who are involved with changing the world around them should think more critically about what they are doing and what the long-term economic, sociological and environmental consequences might be, and not just about short-term profit."



Professor Tom Brooking: "We asked why early New Zealanders decided to ... transform the land ... into English-style pasture ..."

Kiwifruit best for vitamin C

People require vitamin C (ascorbate) in all body tissues and organs to be healthy. But, because we cannot make vitamin C, we usually get it from certain foods. Vitamin C is also commonly available as a supplement.

The question often asked is whether a supplement is as good a source of the vitamin as whole foods, but few studies have addressed this issue until now.

Associate Professor Margreet Vissers, of the University of Otago, Christchurch, recently found that, in a mouse model, a natural fruit source of vitamin C - kiwifruit - was vastly superior as a source of vitamin C than a purified supplement form.

In the research, vitamin C-deficient mice were fed the vitamin over a month, either as kiwifruit gel or as ascorbate added to their drinking water.

Vissers found that when mice were fed kiwifruit gel, the vitamin C was absorbed into their body stores much more efficiently than when it was given as a purified form in their drinking water.

She says that this was a surprising result, with important implications for human nutrition, and it was published in the *American Journal for Clinical Nutrition*, the highest-ranking journal in this field. Vissers says it is possible that some fruits, such as kiwifruit, allow the body to absorb vitamin C more efficiently and retain it longer. The next stage of the research is to ascertain whether this happens in people as well and an equivalent human trial is currently underway.



Associate Professor Margreet Vissers: Her research showed that kiwifruit was vastly superior as a source of vitamin C than a purified supplement form.

Austen's muse

Could it be that when Jane Austen drew inspiration from Shakespeare she took over the characteristics of a well-known actress and mistress to the Duke of Clarence?

In "Jane Austen and Celebrity Culture: Shakespeare, Dorothy Jordan and Elizabeth Bennet," published recently in the British journal *Shakespeare*, Emeritus Professor Jocelyn Harris (English) examines similarities between Austen's most-loved character, the heroine of *Pride and Prejudice*, and the bewitching Mrs Jordan.

Scholars now recognise that the widely-read Austen took ideas from everywhere, including Shakespeare, but roles alluded to in *Pride and Prejudice* are precisely those that Jordan made her own, especially cross-dressed ones such as Rosalind and Viola. Jordan's legs, it was said, were the best on the English stage.

Harris argues that Austen's fascination with Mrs Jordan challenges the long-held family myth that she was Victorian like themselves, and therefore shockable. "That Austen doesn't actually exist in the works and letters," she says. "In *Pride and Prejudice*, especially, she seems to have based her central character on a woman with a successful acting career and 10 children to the Duke of Clarence."

Harris finds many parallels between Elizabeth Bennet and Mrs Jordan, including a refusal to kowtow, zest, energy, a love of

Business of social media

Recent natural disasters and political rebellions have highlighted the communicative power and global spread of social media such as Facebook, YouTube and Twitter.

Many businesses realise the potential of this, but are uncertain about how to get involved, how they might benefit and what the risks might be.

Andrew Long (Information Science) is researching the growth of social media and how it is being used by businesses - successfully or otherwise.

"Many small to medium enterprises feel they should get involved, but they don't really understand how," says Long. "And it's not necessarily for all businesses."

Companies who actively seek out and engage with customers, and have global reach, are well placed to take advantage of social media, but they have to consider the significant amount of time, effort and resources required to deliver on a successful social media strategy. "Reputations can be turned around with intelligent use of social media," says Long, "but companies have to be willing to be transparent, which might need changes to the internal culture of many businesses."

Long suggests that younger staff members might be best to spearhead companies' forays into the world of social media. They laughter, and key physical attributes such as dark expressive eyes and wild hair.

"What makes Elizabeth Bennet attractive to us now is that she seems so subversive about rank and gender, but Mrs Jordan came first," says Harris. "By peering into social and historical contexts we can find out new things about Jane Austen that haven't been seen before. That's hugely exciting."



Emeritus Professor Jocelyn Harris: "By peering into social and historical contexts we can find out new things about Jane Austen that haven't been seen before."

are already committed to it, having grown up with the internet and mobile phones, and being inherently sociable.

"It'll need a lot of effort and experimentation to get right. Goals need to be set and measured. It won't happen overnight, but in the long term it is likely to show a return.

"Millions already use social media to follow businesses. The trick is to convert them into opportunities."



Andrew Long: "Reputations can be turned around with intelligent use of social media."

Gel coup

A revolutionary super gel, found to reduce the post-operative complications of sinus surgery, has been commercialised in a significant collaborative deal for the University of Otago.

The gel has been developed by a team of Otago scientists led by Emeritus Professor Brian Robinson, Professor Lyall Hanton and Associate Professor Stephen Moratti, all from the Department of Chemistry, in partnership with the University of Adelaide and Wellingtonbased Robinson Squidgel Ltd.

The patent has been sold to a leading United States-based medical technology company, Medtronic, in what is being hailed as an important coup for Otago's research commercialisation.

Derived from chitosan – a polymer extracted from the unlikely source of crab shell and squid pens – the gel has been more than five years in development. Work on it began after Professor Robinson's son, Wellingtonbased ENT surgeon and Otago alumnus Mr Simon Robinson, challenged his father to find a biological substance to help solve the disheartening and common complications that often follow sinus surgery. Scarring and adhesions that block sinus passages affect around one third of patients – and often require corrective surgery.

Chitosan has a long history of medical use. The research team found a way to make it water soluble and then turned it into a gel by adding oxidised dextran, a starch-like chemical. Extensive sheep and human trials have now shown that, when injected into the nasal passage after surgery, the gel forms a protective coating over the wound, preventing the formation of adhesions, and has been found to have to excellent blood clotting properties as well.

Mr Robinson believes the "squidgel" will be hugely beneficial to sinus patients and offers potential for other surgical applications as well. "From a physician's point of view, the big thing is that it reduces the amount of bleeding the patient will experience without any negative side effects – it ticks all the boxes."

The sale of the patent to Medtronic – facilitated by Otago Innovation Ltd – is a very significant one for the University, according to the Deputy Vice-Chancellor, Research and Enterprise, Professor Harlene Hayne. It is the culmination of outstanding science, clinical expertise,

commercialisation experience and research funding.

"From a research perspective, a commercialisation opportunity of this size is a clear reflection of the high calibre of the science conducted at Otago, in collaboration with the University of Adelaide.

"From a financial perspective, the deal will create new opportunities because a large proportion

of the proceeds will be used to support additional research and to foster future commercialisation activity. This University has extensive research expertise in basic biomedical science and we look forward to additional deals of this kind in the near future.

"Last, but certainly not least, the gel that these researchers have developed will reduce bleeding and suffering for patients undergoing ENT surgery, which is what motivated the research in the first place."

It is estimated that the "squidgel" has the potential to be of benefit in some halfa-million endoscopic sinus operations each year in the US alone – and several thousand each year in New Zealand.

Research is now continuing on other potential applications for the gel. Its powerful haemostatic and anti-adhesion properties are being explored by the team for use in neurosurgery, abdominal surgery, trauma and ophthalmology.



Associate Professor Stephen Moratti, Emeritus Professor Brian Robinson, Professor Lyall Hanton and ENT surgeon Mr Simon Robinson.

Photos: Sharron Bennett

The "squidgel" will be hugely beneficial to sinus patients and offers potential for other surgical applications as well.



Getting the politics right

What do we have to fear from natural disasters?

No, your sense of foreboding is not out of place. We are indeed experiencing a significant increase in the number of reported natural disasters, affecting many more people than 50 years ago¹. Only part of this trend is attributable to improved data collection.

The good news is that humanity has also become more adept at restricting the loss of human life. But how good are we at mitigating the social costs of natural disasters: dealing with the loss of livelihood, induced migration, strains on infrastructure and on social capital? And how concerned should we be about the potential for violent civil conflict resulting from these strains?

Research done at the Department of Politics at Otago and elsewhere indicates that some social arrangements and forms of government are better at dealing with the social results of disasters.

Compare the way the poorly organised, semi-authoritarian government of Haiti dealt with the 2010 earthquake, with how Japan managed to re-build and revitalise the Kobe region within a short span of two years after the devastating quake of 1995.

Poor countries, riddled by social tensions and plagued by politically fragile regimes, do face a higher risk of post-disaster social stress.

Our original research also showed that the risk of resulting violent civil conflict, in the Haitis of the world, is quite high in the case of geological disasters, but somewhat less so (albeit still statistically significant) in the case of climate-related disasters.

Does this mean that the lobby for a security focus on climate change is justified after all? This lobby is premised on the assumption that the wars of the future, both within and between states, will be wars over resources (land, food, water) and will become more frequent as climate change kicks in.

Support for this way of thinking comes from a variety of sources, both scientific and non-scientific. These include the chair of the Norwegian Nobel Committee who, when presenting the 2007 Nobel Peace Prize to former Vice President Al Gore and the Intergovernmental Panel on Climate Change (IPCC), warned against "those who doubt that there is any connection between the environment and the climate on the one hand and war and conflict on the other".

Available evidence, including that produced by our research, shows that care is needed in generating and interpreting the data linking climate change, disasters and violent civil conflict. So called "slow-onset disasters", such as drought, have been the focus of climate change-security studies given their direct connection to resource scarcity. Yet, when we undertook further analyses we found little statistical evidence of such a link. Indeed, it was disasters that were both rapid and destructive that appeared to generate the highest level of conflict risk in the short-to-medium term, with those of geological origin being the most dangerous.

This, we believe, has to do with the tremendous strain that such disasters place on infrastructure and public services, providing opportunities for existing disgruntled groups to exploit the over-extension of government resources.

Two divergent schools have developed in recent years. On the one hand, theorists and empirical researchers of a neo-Malthusian bent point to the conflict potential inherent in competition over depleting resources, and large-scale displacement of populations. The drawnout conflict in Darfur, West Sudan, remains their paradigmatic case study.

"Indeed, it was disasters that were both rapid and destructive that appeared to generate the highest level of conflict risk in the short-to-medium term, with those of geological origin being the most dangerous."

¹ Emergency Events Database (EM-DAT) of the World Health Organization Collaborating Centre for Research on the Epidemiology of Disasters (CRED) http://www.emdat.be/natural-disasters-trends

Professor Philip Nel and Dr Marjolein Righarts: Although natural disasters might pose a threat to political stability under certain circumstances, this risk is small compared to other factors. Photo: Bill Nichol

Opponents, in one case preferring to call themselves "Cornucopians" (derived from the Latin for "the horn of plenty"), point out that there is substantial evidence that disasters encourage co-operative behaviour. The signing of a peace agreement in the Indonesian province of Aceh, within a year after the devastation caused by the Boxing Day tsunami of 2004, serves as the paradigmatic contemporary case for the Cornucopians.

One recent statistical study from this school also points out that statistical models for calculating the civilconflict risk of climate-related natural disasters are very sensitive to alternative specifications. If one controls for the intensity of the disaster (portion of total population affected), the risk is weak, but significant. If one controls for the size of the total population (as some models of civil conflict prescribe), the risk disappears. Both specifications make theoretical sense, but exclude one another.

So, who has got it right: the neo-Malthusians or the Cornucopians? Our research suggests that the truth lies somewhere between these two extremes. As the recent behaviour of New Zealanders and Japanese show, natural disasters can bring out the best in people.

However, we should not forget that both these societies already had some of the highest levels of social capital in the world to begin with. In societies with less social capital – Sudan or New Orleans after Hurricane Katrina, for instance – the outcome might be different. As we indicated above, proven state capacity and legitimacy in responding to a disaster is also a crucial intervening variable.

We should also note that although natural disasters might pose a threat to political stability under certain circumstances, this risk is small compared to other factors. There is a long list of factors that have been shown to contribute to the onset of civil war. Therefore, it makes most sense to concentrate on those factors that have been repeatedly shown to explain most of violent civil conflict: political grievances, structural inequalities in a society, a history of conflict and regional conflict contagion.

That does not mean that we should ignore the potential social consequences of natural disasters. Social adaptation contingency planning for the effects of climate change must get as much attention as physical adaptation does. However, if we want to prevent or mitigate civil wars, most of our efforts must be directed at political and economic reform in at-risk societies, as well as at containing civil conflict and preventing it from spreading throughout a region.

It's an old story: get the politics and public policy right, and people will get through natural disasters.

PROFESSOR PHILIP NEL Department of Politics

DR MARJOLEIN RIGHARTS formerly of Otago's Department of Politics

Want to read more?

Boston, J., P. Nel, & M. Righarts (eds) (2009) *Climate Change and Security: Planning for the Future*. Wellington: Institute of Policy Studies, 116 pp.

Centre for the Study of Civil War, Peace Research Institute Oslo (PRIO) (2011) Research Project on Environmental Factors in Civil Wars. http://www.prio.no/CSCW/Research-and-Publications/Environmental-Factors-in-Civil-War/

Nel, P.R. & M. Righarts (2008) Natural Disasters and the Risk of Violent Civil Conflict, International Studies Quarterly, Vol. 51, No. 1, pp. 159-184.

Pielke, R. (2010) Climate change and African civil war. Blog 10 September 2010, available at: http://rogerpielkejr.blogspot.com/2010/09/ climate-change-and-african-civil-war.html



Otago's next Vice-Chancellor

Leading Psychology researcher Professor Harlene Hayne (above) has been selected as the University's next Vice-Chancellor. Currently Deputy Vice-Chancellor (Research and Enterprise), Professor Hayne will replace Professor David Skegg who steps aside from the position at the end of July.

Announcing the appointment, University Chancellor Mr John Ward noted that Professor Hayne was selected from a "highly competitive field of both national and international candidates".

"Professor Hayne has an impressive academic record, she's strongly committed to research and teaching excellence, she has proven administrative and strategic skills, and she has a deep understanding of the diversity of teaching and research requirements across the variety of disciplines at this University," he says.

Born in Oklahoma and raised in Colorado in the United States, Professor Hayne received her BA from Colorado College in 1983, followed by her MS (1985) and PhD (1988) from Rutgers University in New Jersey. She then spent four years as a postdoctoral fellow at Princeton University, before immigrating to New Zealand in 1992 to take up her first position at Otago as a lecturer in the Psychology Department. Once here, she quickly established herself as a firstclass teacher and researcher, becoming a senior lecturer in 1995, associate professor in 1999, full professor with a personal chair in 2002 and then head of the department from 2006 to 2008.

Professor Hayne's academic accomplishments have earned her numerous honours - including an ONZM in 2009 for services to medical and scientific research and a Fellowship of the Royal Society of New Zealand. She is also a Fellow of the American Psychological Society, the past President of the International Society for Developmental Psychobiology and she is the recipient of the American Psychological Foundation Robert L Fantz Award for Excellence in Infancy Research.

"It is an honour and a privilege to be able to serve Otago as its next Vice-Chancellor," Professor Hayne says. "Otago has flourished under the leadership of Professor Sir David Skegg and I am determined to build on his legacy."

Ocean research excels

A recent analysis of scientific articles published in international journals since 2000 has judged the University of Otago as being amongst the best research institutions in the world for oceanography.

After analysing the top one per cent of oceanography-related papers published in journals since that year, the UK *Times Higher Education* magazine ranked Otago as the institution with the highest average citations per paper in the world. The second-placed institution was the Massachusetts Institute of Technology (MIT).

In the analysis, oceanography was defined as encompassing many specific disciplines and their journals, including marine biology, limnology (study of inland waters), fisheries science, ecology and geophysics. Papers published in multidisciplinary journals such as *Science* and *Nature* relating to the discipline were also included.

The Pro-Vice-Chancellor (Sciences), Professor Keith Hunter, says that while caution is required against reading too much into individual ranking exercises and their particular measures, the University's result confirms the high quality and influential nature of oceanography-related research carried out at Otago.

He says the achievement is the result of a team effort, with many University staff from across several departments, and collaborators at the National Institute of Water and Atmospheric Research (NIWA), all contributing.

"However, special recognition should go to Professor Philip Boyd of the NIWA University of Otago Centre for Chemical and Physical Oceanography, who was the lead author on many of the articles contributing to the citations received and who provided the inspiration for much of the work."

Appointments

Professor **Richard Blaikie**, who is currently a Professor at the University of Canterbury and director of the renowned MacDiarmid Institute for Advanced Materials and Nanotechnology, has



been selected to take up the University's Deputy Vice-Chancellor (Research and Enterprise) role. After graduating with a first-class honours degree

in Physics from Otago in 1988, Professor Blaikie was a Rutherford Memorial Scholar at the University of Cambridge, where he received his PhD in Physics in 1992. He was the deputy director of the MacDiarmid Institute from 2002, succeeding Sir Paul Callaghan as director in 2008. School of Medical Sciences Dean Professor Helen Nicholson will be the acting Deputy Vice-Chancellor (Research and Enterprise) during the interim period between Professor Harlene Hayne vacating the role to take up her position as Vice-Chancellor and Professor Blaikie's arrival.

Professor **Sunny Collings** is the new Dean and Head of Campus at the University of Otago, Wellington. Professor Collings was formerly an associate dean



at the Wellington campus, where she has worked in joint academic and clinical roles for 19 years. She continues her role as director of the Social Psychiatry and

Population Mental Health Research Unit in the campus' Department of Public Health. Her research interests include suicide, primary-care-level interventions for mental health problems, carers for people with mental disorders and the social experience of people with such disorders.

Professor David Lont has been



appointed to a Chair in Accountancy within the University's School of Business. Since joining the University in 1989, he has

forged a career as a well-respected researcher in quantitative accounting.

Achievements

Professor **Jean Fleming** (Science Communication/Anatomy) has been elected a Companion of the Royal Society of New Zealand in recognition of her outstanding leadership in science, and contributions to the promotion and advancement of science and technology in New Zealand.

Senior lecturer in Law Ms **Jacinta Ruru** and Christchurch-based Associate Professor of Medicine **Richard Troughton** are the latest recipients of the University's Rowheath Trust Award and Carl Smith Medal. The award and medal recognise outstanding research performance of early-career staff at the University and are accompanied by a \$5,000 grant for personal scholarly development.

Associate Professor **Russell Poulter** (Biochemistry) became the first New Zealand researcher to lead a Grand Challenges Explorations Grant. This initiative is funded by the Bill and Melinda Gates Foundation and will allow Associate Professor Poulter to pursue a potential new method of combating HIV.

Dr William Levack (Rehabilitation Teaching and Research Unit, UOW) and Dr Sebastien Taurin (Pharmacology and Toxicology) received Health Research Council Emerging Researcher First Grants to pursue studies involving rehabilitation in respiratory disease and breast cancer, respectively.

Fifth-year dental student **Grace** Lee won the Hatton competition at the International Association for Dental Research conference in San Diego, USA.

Zoology PhD graduate Dr **Catherine Grueber** was awarded the D G Catcheside prize for the top Australasian doctoral student in the field of Genetics for her research into the critically-endangered takahe.

Scholarships/fellowships

First-year Otago Humanities student Will Coleman will begin modern and medieval languages studies at Cambridge University in October after winning the 2011 Sir Douglas Myers Scholarship. Fellow first-year Humanities student Ryan Ammar will also be travelling to Cambridge after winning the 2011 Girdlers' Scholarship, which is valued at £25,000 per year.

Health Sciences first-year student **David Bellamy** was awarded the inaugural Prime Minister's Award for Academic Excellence for being the highest-achieving New Zealand secondary school pupil in 2010.

Obituaries

Maurice Till (84). A leading New Zealand concert pianist, Mr Till began his association with Otago in 1949 when he took up a part-time position as pianist in the University's newly-formed chamber music trio. He became the University's inaugural lecturer in piano in 1971 and was a Department of Music staff member until the end of 1980.

Honorary Doctorate

Professor **David Skegg** received an Honorary Doctor of Laws during the final May graduation ceremony.

Queen's Birthday Honours

Alumni and friends of the University who received honours include:

Knight Companion of the New Zealand Order of Merit: Sir **James Wallace**.

Dame Companion of the New Zealand Order of Merit: Dame **Katerina Mataira**.

Companion of the New Zealand Order of Merit: Mr **Howard Broad**, Professor

Warren Tate.

Companion of the Queen's Service Order: Ms **Carol Moffatt**.

Officer of the New Zealand Order of Merit: Emeritus Professor **Martin Devlin**, Dr **Peter Gow**, Professor **John Hattie**, Dr **Keith Maslen** (New Year Honours list), Dr **Jack Parle**, Professor **Swee Tan**.

Member of the New Zealand Order of Merit: Dr Rodger Hilliker, Mrs Roka Ngarimu-Cameron, Dr Kantha Soni.

Queen's Service Medal: Mr Grant Nelson, Mrs Marilyn Nelson.



"I am five and I go to school"

Early years schooling in New Zealand 1900–2010 Helen May, May 2011

The 20th century saw great change in early years' education. As the century opened, Froebel's kindergarten methods infiltrated more infant classrooms.

Psychology, as a discipline, and especially its work on child development, was beginning to influence thinking about how infants learn through play. While many teachers maintained Victorian approaches in their classrooms, others experimented, were widely read and a few even travelled to the US and Europe, bringing new ideas home. Political support for "new education" ideas was increasing. This book discusses changes in school buildings, teaching practice and teacher education, the teaching of reading and other curriculum areas, Māori education, the emergence of kohanga reo and the teaching of Māori language in primary schools. It introduces many notable individuals - C E Beeby, Sylvia Ashton-Warner, Gwen Somerset, Don Holdaway, Elwyn Richardson, Marie Bell and Marie Clay - and many less well-known, but significant people who worked in or influenced early years' education. New Zealanders recount their first days at school - and, yes, school milk does get a mention.



An Accidental Utopia?

Erik Olssen, Clyde Griffen and Frank Jones, May 2011

The first systematic analysis over time of urban social structure in New Zealand, and of marital, work-life and intergenerational mobility, this book investigates a more egalitarian past through the lens of South Dunedin 1890-1940.

By placing the analysis deep within a particular community - one of the two most densely settled urban areas at the time - the authors demonstrate how colonists and their children made class less central to social organisation than it had been in Britain. They also show how people created a class-based politics to protect and advance equality. The account of political change across the period reinstates the importance of contextual analysis, showing the need to analyse the social and political together, in order to explain Liberal decline and the rise of Labour.

While class is their central focus, the authors also show how religious and ethnic divisions were rendered more marginal than in urban Britain or the US. The final chapter asks to what extent the remarkably fluid social patterns identified resulted from deliberate choices made by the first settlers and their descendants. By interweaving class and culture, structure and agency, the authors provide new insights into the making of modern New Zealand.



A Great New Zealand Prime Minister?

Reappraising William Ferguson Massey

Edited by James Watson and Lachy Paterson, March 2011

"Massey's Cossacks" - citizens called in to help break the 1913 General Strike - have long been cited as just one of the sins of William Ferguson Massey.

One of New Zealand's longest-serving prime ministers, his political legacy has not always been treated kindly. However, recent work by historians suggests that a reappraisal is overdue.

It is clear, a century later, that Massey was prime minister at a turbulent time. His political career began in opposition to the reforming Liberal Government in the 1890s and ran through World War 1 and its aftermath. Erik Olssen's opening essay reviews his own assessment of Massey over almost five decades. Other chapters from leading historians examine aspects of Massey's life and leadership – from his experience as a teenage immigrant from Ulster through to his part in the Versailles Peace Conference and the tough campaign in 1923, less than two years before his death, to secure the UK market for New Zealand products.



Outspoken

Liz Lightfoot, May 2011

In 2007, I underwent a crisis of sexual identity. I was married, with two young children, when I became attracted to another woman. The hostility I encountered at the Anglican Church I was attending made me curious about other people's experiences. It seemed to me imperative that stories of being gay in the Church be heard, especially in the context of the current maelstrom within the Anglican community in which the Church has been encouraged to undergo a "listening process".

The author presents the narratives of 11 people who have come out in the Anglican Church in New Zealand, including two ordained Church members. With a general introduction, as well as introductions to and reflections on each individual story, the book closes with a postscript discussing truth and the Church; community, belonging and rejection; ideas about hell and damnation; the theology of denial; and the implications and ramifications of the "Don't ask, don't tell" approach.

The daughter of an Anglican priest and a liturgist within her Church community, Liz Lightfoot hopes that this research will contribute to community building within the Anglican Church.

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

Books by Otago alumni

Enjoy the Moment, poems by Janet Carrington, Kereru Press, 2010.

Reconsidering Gender: Evangelical Perspectives, edited by Myk Habets and Beulah Wood, Pickwick Publications, Eugene, OR, US, 2011.

Contemporary Small Business Cases: Case Studies with a New Zealand Focus, edited by Linda Liddicoat, NMIT Press: New Zealand, 2010.

Daughter of Lachish, by Tim Frank, Resource Publications, Wipf and Stock, Eugene, OR, US.

Kai With Soul, by Katy Power, PublishMe Print & Publish, New Plymouth, 2010.

The Shawl: its Warp and Weft from 1746 to 1945, Stories of a Family, by Nick Thomson, 2010. Sport and Culture in Early Modern Europe/Le Sport dans la civilisation de l'Europe pré-moderne, edited by John McClelland and Brian Merrilees, CRRS, Victoria University, Toronto, 2010.

Holly's Christmas, by Amy Brooke (Agnes-Mary Mora). For a complete list of Amy's books visit www.amybrooke.co.nz

Professional Foodservice (2nd ed), by P Duncan and J Jensen, Pearson, 2011.

Bound, by Vanda Symon, Penguin NZ, February 2011.

The Spanish Helmet, by Greg Scowen, 2011.

The Medicine of the Future: a History of the Department of Preventive and Social Medicine, University of Otago, 1886-2011, by Warwick Brunton, Department of Preventive and Social Medicine, 2011.

Kiwi Rock Chicks, Pop Stars and Trailblazers, by Ian Chapman, HarperCollins, 2010.

The Messengers, by Malcolm Anderson, The Experience Publishers, Canada, 2010.

Tug of War: The Tension Concept and the Art of International Negotiation, by Tony English. Common Ground Publishing, Melbourne, Australia, 2010.

The Torchlight List: Around the World in 200 Books, by James Flynn, AWA Press, 2010.

Alumni:

if you have published a book lately email the editor at mag.editor@otago.ac.nz

Lines drawn

If caricatures - or cartoons - are celebrated as the most public and political of the visual arts, then it's worth pausing to consider the kind of press that makes this possible.

New Zealand's first caricaturist, James Brown, enjoyed a certain following for his satirical take on the politics and characters of 1850's Dunedin. Yet none of the 48 works that earned his reputation were published during his lifetime.

When Brown, a pattern-designer, arrived in Dunedin in 1850 from New Kilpatrick (near Glasgow), he found nothing of the free press he enjoyed back home. The collapse of the *Otago News* in 1851 was said to be engineered by Otago's founding father, MP William Cargill, who promptly launched his own fortnightly publication, the *Otago Witness*, oriented shamelessly to his purposes.

So, despite having designed the Witness's masthead, the newspaper had no further use for Brown's artistic expressions. Forging a career as a house painter and then engraver, Brown's wry lampoons were likely created for the amusement of his friends. In doing so, he produced a lesser-told commentary on the founding of a nation, as land was apportioned, political institutions established and Dunedin experienced a rush of gold to the head.

Cargill gets a particular mocking – he is depicted as a performing monkey, ribbed for his nepotism and imagined on broomstick (suggesting that it was the best way for Otago members to reach parliament in light of the two months by sea it took them to reach their first session in 1854).

Others inviting Brown's condescension included naturalist W B Mantell, appointed Commissioner for Extinguishing Native Titles. Having built a reputation on his discovery of moa bones, he is shown now advancing his political agenda on its back. Mantell's limiting of Māori title to just 10 hectares per person at Governor Grey's instruction was the origin of Kai Tahu's subsequent land claims (an injustice Mantell spent the rest of his political career attempting to redress).

In Brown's lifetime, just a few, mostly anonymous, caricatures were published, featuring in the Dunedin-based New Zealand edition of *Punch* magazine in 1868. Two

years following his death in 1877, six of his earlier pieces were printed in James Barr's *The Old Identities*. Since then the works from this period, which formed part of Dr Hocken's original collection, have become acknowledged as New Zealand's first political cartoons. The fact that his contemporary following was limited in no way weakens this claim, suggests former Hocken Curator of Pictures Tim Garrity: "[doubting this] is not much different from denying Goethe's greatness just because 95 per cent of his country's population were illiterate"¹.

NICOLA MUTCH

Garrity, T. *James Brown, Caricaturist*, Hocken Library, Dunedin, 1987

Garrity, T. "Brown, James - Biography", from the Dictionary of New Zealand Biography. Te Ara - the Encyclopedia of New Zealand, updated 1-Sep-10 URL: http://www.TeAra.govt.nz/en/biographies/1b36/1

Sorrenson, M. "Mantell, Walter Baldock Durrant -Biography", from the *Dictionary of New Zealand Biography*. Te Ara - the Encyclopedia of New Zealand, updated 1-Sep-10

URL: http://www.TeAra.govt.nz/en/biographies/1m11/1



James Brown (1819-1877), Refers to Mr W B Mantell's moa bone discoveries, c.1851, pencil on paper, 275 x 210mm, accession 11,594

HOCKEN GALLERY EXHIBITIONS

7 May - 25 June 2011

Ore Struck: The use of gold in contemporary art and photography, commemorating the 1861 discovery of gold in Otago.

9 July - 24 September 2011 Ralph Hotere: This exhibition

celebrates the life and career of one of New Zealand's most significant artists.

A word from the Head

One of the challenges of working with Otago's global alumni population is keeping up the momentum in between visits from University representatives. Modern communication technology is invaluable here, but there's nothing like a get-together of like-minded Otago spirits to keep the links alive.

Alumni in different parts of the world who want to remain connected have formed University of Otago networks or committees to provide opportunities for alumni to meet for social or professional purposes. Such groups exist in the United Kingdom, the United States, Australia and Malaysia, with the newest in the process of being set up in Canada. Each is run by a group of dynamic individuals who recognise the value of their Otago background as an ongoing influence in their lives and are keen to assist others to realise its potential. If you would like to find out if there is a group in your area, check out the list of Otago networks on the Alumni and Friends website. If you are interested in setting up a network in your region, email alumni@otago.ac.nz for more information.

Rugby fever is mounting in Dunedin as the countdown to the Rugby World Cup ticks by. The city will be a lively place in September and October and we expect that many alumni will be travelling from all around the globe to catch the action. Moves are afoot to hold an alumni event on campus on Saturday, September 24, so if you're planning to be in Dunedin around that time we'd love to see you there. Further notice of this event will appear on the Alumni and Friends website, along with information on how to register, but, in the meantime, please note the date in your diaries.

This has been a year of trauma and tragedy for alumni in the Christchurch area. We have been deeply moved by the stories sent to us by Christchurch alumni and saddened by the images of their beautiful city shattered beyond recognition. The courage shown by citizens in their efforts to re-establish a semblance of normality in the face of such difficulties is an outstanding example of the human spirit at its best in the worst of circumstances.

Graduation

Congratulations to over 4,800 graduates who received their degrees in 2010, including the 180 who graduated with a doctoral degree. We welcome you to the Otago alumni community. Your graduation ceremony marks the beginning of a permanent relationship with the University as alumni and we look forward to hearing about your successes in the years to come. Names and photos from past ceremonies can be found on the Alumni and Friends website. *www.alumni.otago.ac.nz/graduation*



Alison Finigan: Head of Alumni Relations

Supporting Otago

The 2010 Alumni Appeal was launched last October and, as in previous years, alumni have responded with great generosity to support undergraduate scholarships and the four designated research centres: the Centre for Entrepreneurship, the Centre for Peace and Conflict Studies, the Alpine Fault project and the Sir John Walsh Research Institute in the Faculty of Dentistry. Funds raised so far have provided a boost for these projects. Thank you for your support.

Alumni have also contributed to several other fundraising initiatives on campus over the past few months, giving generously to the following: the Alan Musgrave Scholarship Appeal, the Shona Reeve Memorial Prize, the Richard Sutton Memorial Appeal, the Diane Campbell-Hunt Memorial Appeal, the School of Physical Education Wall of Fame Fund and the recently launched Canadian Alumni Travel Awards for Exchange Students. Others have chosen to support various projects as part of a gift to mark a class reunion.

The 2011 Alumni Appeal will be launched over the coming months. With your support we hope to exceed the total



funds achieved in 2010 so that Otago can continue the excellent work of its researchers and scholars for the benefit of all.

Alumni Appeal Scholars

Congratulations to the 16 students who received Alumni Scholarships made possible through donations to the 2010 Alumni Appeal.



From left to right: Joshua Thom, Kieran Bunn, Madeleine Harris, Joel Labes, Alexandra Skerten, Samuel Barclay, Rohan Boyle, Georgia Palmer, Adam McCutcheon, Mackenna Roxborogh, Caitlin Owen, Kalie Eathorne-Gould, Dara Caradus, Rosie Whiting, Loren Baxter and Rebecca Ly.

If you would like to donate to the University, please visit www.alumni. otago.ac.nz/supportotago

Otago's international networks

Alumni of the University of Otago in America, Inc

Established in 2002, the Alumni of the University of Otago in America, Inc (AUOA) is committed to raising awareness of and support for the University amongst alumni resident in the United States. The board of the AUOA makes awards on an annual basis to deserving projects at the University, funded from money raised in the United States.

One of the areas supported is undergraduate scholarships. As reported

in the last issue, three Otago first-year students are being supported by AUOA Scholarship funding in 2011, and it is hoped that more scholarships will be made available in the next funding round for 2012.

Congratulations to the three Alumni of the University of Otago in America, Inc 2011 Scholars.



From left to right: Keiran Bunn, Rebecca Ly and Adam McCutcheon.

Alumni and friends wishing to support the AUOA, Inc, please contact:

Neil Matheson Huntsworth Health 800 Township Line Road Suite 250 Yardley, PA 19067 Tel 215-550-8302 Email Neil.Matheson@hhna.com

or Jennifer Carson Tel 215-550-8319 Email Jennifer.Carson@hhna.com

In this issue we profile two more members of the board of the Alumni of the University of Otago in America, Inc.

Andrew King (MB ChB 1971) is Professor and Chair of the Department of Orthopedics at Louisiana State University. His clinical interests



and research have centered on scoliosis and spinal deformities, and his work has helped develop methods of spinal fixation that are manufactured commercially and available internationally. He is a member of the Scoliosis Research Society and on the advisory board of the Scoliosis Association. Dr King has served on the Board of New Orleans Children's Hospital and the Spina Bifida Association of America. He was the 2007 President of the Louisiana Orthopedic Association and on the board of councillors of the American Academy of Orthopedic Surgeons. He has served the University as a Board member of the AUOA, Inc since 2008.

Geoff Nichol (MB ChB, BMedSc 1979) is currently Chief Medical Officer at Ikaria, a critical care biopharmaceutical company, headquartered in New Jersey.



Prior to joining Ikaria, he had a distinguished career in clinical therapeutic development, serving with SmithKline Beecham, Novartis and Medarex Inc. He played a leading

role in the development of *Augmentin BID*, a commonly prescribed antibiotic, and *Foradil* and *Xolair* for the treatment of asthma. At Medarex he led the development of ipilimumab (*Yervoy*), the first agent to prolong survival in patients with advanced malignant melanoma, which was approved by the US FDA in March, 2011. He has been a member of the Board of the AUOA, Inc since 2008.

Canadian Alumni Network

In October 2010 the University of Otago held a small gathering of Ontariobased alumni in Toronto's iconic Kiwi bar, Hemingways. It was here that the idea of setting up a Canadian alumni network was born, thanks to the efforts of Allan Portis and Brian Merrilees.

A campaign has now been launched to support Otago undergraduate students travel each year to study at Otago's Canadian exchange partner universities. The Canadian Alumni Travel Awards will enable Otago's alumni in Canada to help with the travel costs for these Otago students. As a result of this generosity, three students heading to Canada later this year will each be helped by an award of \$CAD2,000. Spencer Grover, enrolled at Otago for a BA in Psychology, will spend the 2011/2012 academic year at the University of Toronto; Jessica Bush, studying for a LLB/BCom in Economics, is going to the University of British Columbia for a semester and Lena Schallenberg, studying for a BSc in Ecology, is heading to Dalhousie University for a semester.

A function to launch the Canadian Alumni Network and to promote the Canadian Alumni Travel Awards will be held in Toronto in early November.



Jessica Bush, Spencer Grover and Lena Schallenberg with Allan and Santa Portis (left) and Pat and Brian Merrilees (right) at an event held in Dunedin in March this year.

If you wish to support this programme, donations from Canadian residents are tax deductible and can be made online via the Alumni and Friends secure online donation website. To make a donation by cheque (if you reside in Canada) please make your cheque in \$CAD payable to the University of Otago and send it to the Development and Alumni Relations Office, University of Otago, PO Box 56, Dunedin, New Zealand. You will receive a receipt suitable for Canadian tax purposes.

For the Canadian Alumni Network please contact:

Emeritus Professor Brian Merrilees brian.merrilees@otagoalumni.ac.nz

For information about regional alumni networks in your area visit the Alumni and Friends website www.alumni.otago.ac.nz/networks

Upcoming events, reunions and University celebrations

Sydney alumni reception, September 2, the State Library of NSW.

Aquinas College jubilee reunion, September 16–18, Aquinas College.



Dunedin alumni reception, September 24, ISB Link, University of Otago Campus, Dunedin, 3pm to 5pm. This event is timed to precede the England-Romania World Cup rugby match in Dunedin.

10th Latin American Film Festival, October, University of Otago Campus,

Dunedin.

MB ChB class of 1991 reunion, October 29–31, Dunedin. Contact Vicki Cunningham at *timc@ihug.co.nz* **Toronto alumni reception**, November 2, Faculty Club, University of Toronto.

Philadelphia alumni reception, November 5, Palomar Hotel, Philadelphia.

London alumni reception, November 10, Strangers Dining Room, House of Commons. Tickets for this event are always in demand. As in past years, numbers will be limited, so to avoid disappointment please note the date in your diary and reply promptly when the invitation arrives closer to the time.

ScienceTeller, Science Communication

Festival, November 15–19, Dunedin. ScienceTeller is a celebration of storytelling and science dedicated to documentary filmmaking, writing and other creative media. A limited number of free passes to festival events will be available to alumni. Information about how to obtain these will be emailed to alumni living in Dunedin and Otago in the coming months. For further information about the festival visit *www.scienceteller.com*

2012

University of Otago, Christchurch 40th anniversary. This celebration, originally scheduled for February 2012, has been postposed due to disruption caused by the February earthquake. Date to be advised. For further information, telephone 03 364 0038, or email *virginia.irvine@otago.ac.nz*

MB ChB class of 1970 reunion, March 2–4, Nelson. Contact John at *johnliz.emanuel@gmail.com*

MB ChB class of 1962 reunion, March 6–9, Queenstown. Contact Allan at *allan.viv@paradise.net.nz*

Hayward College anniversary (invitation only), March 10. Wanted: Hayward College memorabilia – college T-shirts 1997–2002. Please telephone 03 479 5520.

MB ChB class of 1953 reunion, March 23, Wellington. Contact Graeme Sharp at *graemesharp@paradise.net.nz*

MB ChB class of 1972 reunion, March 30–April 1, Nelson. Contact Karen McLean at *karen@encore-events.net.nz*

Sextet centenary reunion, May 18–20, Dunedin. Contact *alumni@otago.ac.nz*

MB ChB class of 1997 reunion, October 19–21, Dunedin. Contact Rochelle Phipps at *rochelle.phipps@gmail.com*

Dominican Hall reunion, date tbc. If you lived at Dominican Hall during your studies at Otago, please contact us at alumni.otago.ac.nz so we know who you are. A get-together of Dom Hall residents and all who have been associated with Dom Hall is planned for 2012.

2013

MB ChB class of 1963 reunion, March 15–18, Wellington. Contact Peter Dukes at *pmdukes@clear.net.nz*

School of Physiotherapy centenary and conference, date tbc. Contact sinead.kearney@otago.ac.nz

School of Pharmacy centenary and conference, date tbc. Contact

pharmacy.manageradmin@otago.ac.nz

Further information, including RSVP details for all upcoming events, reunions and celebrations, can be found on the Alumni and Friends webpages at www.alumni.otago.ac.nz/events. Alternatively contact us at functions. alumni@otago.ac.nz or telephone 03 479 4516.

Opportunities for Otago Alumni The Forsyth Barr University Supporters' Club

Otago alumni and staff can become part of the Forsyth Barr Stadium University Supporters' Club, which entitles members to an exclusive personalised brick to be laid in the University Supporters' Club wall or walkway, as well as access to complimentary tickets to matches at the stadium. To find out more, visit

www.forsythbarrstadium.co.nz/universitysupporters-club. If you have not received your alumni registration code sent by email in May, please contact database. alumni@otago.ac.nz

Light Blues dinners

The Light Blues is an association of former players, officials and supporters of the Otago University Rugby Club and the University. Test matches are often the catalyst for bringing members together and this year an invitation has been extended to Otago alumni to attend the dinners being held in Dunedin, Hamilton, Wellington and Auckland. For further information please email *john.burke@otago.ac.nz*

THE UNIVERSITY OF OTAGO MAGAZINE IS AVAILABLE ONLINE AT

www.otago.ac.nz/news/otagomagazine/

and is sent - by post or email - to Otago alumni and friends wherever they are in the world.

Please email database.alumni@otago.ac.nz

- to update or change delivery address
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- to receive an email notification when a new issue of the Magazine is placed online
- to receive just one "household" copy of the Magazine

KEEP IN TOUCH

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Physical address

Alumni House 103 St David Street Dunedin

Tel 64 3 479 4516 Email alumni@otago.ac.nz Web www.alumni.otago.ac.n

Alumni events 2011

Timaru at Sopheze Catering on the Bay



Oamaru at Pen-y-bryn Lodge







Palmerston North at Caccia Birch House



















Alumni news

Dr Xaviour Walker (MB ChB 2006), former president of the New Zealand Medical Students' Association and currently an internal medicine resident



in Boston, is working with colleagues from the International Federation of Medical Students' Associations to set up the world's first international body of junior doctors under the auspices

of the World Medical Association. The network will provide a forum for junior doctors worldwide to meet and to discuss issues facing them and will provide the junior doctors' perspective on health and health care.

Phil Broughton (BSc 1975, BCom 1981) has recently been elected as president of Business New Zealand. A consulting partner with Polson Higgs,



Phil specialises in the development of strategic and business plans, and conducts a Māori business mentoring programme. He is currently involved in a project for the

Retirement Commissioner aimed at improving the financial literacy of the Māori community. His role with Business New Zealand will involve setting policy and direction along with providing leadership on a wide range of issues.

Since finishing her studies at Otago, Saeeda Verrall (BA / LLB (Hons) 2004) has worked as an intern in Cambodia at the Khmer Rouge



Tribunals and is currently employed at the Hague in the field of war crimes prosecution. She has recently become involved in a fledgling NGO to promote educational

initiatives in rural villages in Nepal. The Himalayan Communities Project (HCP) is a grass-roots organisation dedicated to social and economic empowerment through small-scale educational initiatives to benefit children from villages in rural Nepal. HCP is a small organisation comprised solely of volunteers and Saeeda serves on the board of directors. Saeeda and her husband plan to move to Nepal in the future to play a more hands-on role with the organisation.

www.himalayancommunityproject.org

Ross Jackson (BCom 1986) has been elected President of the New Zealand Institute of Chartered Accountants. Ross is managing partner of McCulloch and Partners, in Invercargill, Queenstown and Te Anau. He is a past chair of the Southland branch of the institute and has served on its council since 1999. He has been chair of the Practice Review Board and a member of the Audit, Finance and Risk Management Committee. He has also served on the National Public Practice Committee, National Professional Development Committee and Young Chartered Accountant of the Year judging panel.

Brother and sister team **Steve Farqharson** (BCom 1989, DipCom 1994) and **Jane Bews** (BCom 1989), owners of Wooing Tree Wines, recently showed off their product in the highest

circles, when a Wooing Tree vintage was chosen for a dinner at the Blue House in Korea. The guests of honour were Korean President Lee Myung Bak and New Zealand Prime Minister John Key. When clearing the site for their new wine-growing venture in Cromwell, Steve and Jane discovered that one of the trees had a history as a lovers' rendezvous and had been given the name of the "Wooing Tree". The Wooing Tree was saved and the name adopted for the vineyard and wine label. The new label has had a remarkable first few years, collecting six trophies, many gold medals, a host of five stars, and praise from wine writers and wine lovers around the world.

Dr Brian McMahon CBE (MB ChB 1955), a humanitarian and retired soldier has been named New Zealand's second ever ANZAC of the year, an award instituted by the RSA in 2010. His lifetime of service and tireless commitment to improving the healthcare of military personnel and the public has been an inspiration to many. After completing his studies at Otago he started his military service as the Resident Medical Officer in Waiouru (1966) and went on to serve as a medical officer in Vietnam in 1969. His work in medicine continued until his retirement from his final military post as Director General Defence Medical Services in 1983. He also has had a distinguished medical career as medical superintendent of Wakari and Dunedin Hospitals, and as a lecturer at the Otago Medical School.

You can activate your own

©otagoalumni.ac.nz email address by registering as a member of Your Otago Link. Visit the Alumni and Friends webpages at www.alumni.otago.ac.nz

Alumni story

Aquinas Hall: In the beginning ...

In 1954 I was fortunate to be accepted for the first intake of students for Aquinas Hall [now Aquinas College]. Four of us from Ashburton needed board in Dunedin – a second-year medical student, two taking medical intermediate and one going to Teachers' Training College. We decided to apply for the new Catholic hostel, Aquinas Hall, having heard it would accept both Catholics and Protestants. All four of us got in.

Aquinas was built and opened by the Dominican Order and was headed by Father Leo T McArdle who had come from Australia. He had two assistants, Father B J Curran, from Australia, and Father A Loughnan, a New Zealander and returned serviceman. Also from the Dominican Order were Brother Martin, of the Keogh family in Dunedin, and Brother Peter O'Hearn from Australia. Brother Peter was the youngest of the five and is now the sole survivor of that first wonderful team. Father McArdle died in 1954 and was replaced by Father D Crowley from Australia. Later, Father A Hingston replaced Fathers Curran and Loughnan.

Father McArdle, a strong yet humble priest, had a vision for Aquinas as a scholarly place in keeping with the traditions of his order. The hall had tutorial rooms, a large library and two common rooms. These were for the students. There were also a spacious priory and a lovely chapel, the whole arranged as in a U shape. Ted McCoy was the architect.

The Dominicans worked in well with the students and the kitchen and cleaning staff. There were 72 students, a mixed lot, not least because about one third of them were Protestants.

The strongest academic contingents were the medical and dental students, who were somewhat balanced in numbers by the training college and physical education students. Of course, we were a strict, all-male hostel, but opportunities to socialise with the opposite sex arose via weekly dinners where we were permitted to bring a guest, and at other occasions such as the highly anticipated annual ball, where our partners were often students from Dominican Hall.

The hall settled well, with a good work ethic, but the wags were laying their mischievous plans. The recurring prank was to ring the chapel bell at all hours of the night. At first the perpetrators clanged and fled; then they used a fishing line which they let go; and eventually they perfected a slip knot which disengaged the line, so that Brother Martin rushed out in vain – he never did identify the prankster. Firecrackers and rockets were earnestly calculated to fire down the sloping access road as far as possible. But the most daring feats I remember were the winter morning bike rides down this steep, treacherously ice-covered road, hurtling out of control towards the hairpin corner at the foot of the hill. The morning bravado was followed by more exertion as we strode back up the hill for lunch, leaving our bikes halfway up the hill. Ah, we were young then!

JAMES NG Aquinas Hall 1954-58



Aquinas residents 1954

... the Hector Map?

Otago, 1861. The people have tasted gold and they like it, and the Otago Provincial Council is itching to find out where else they might find such veins of richness, be it gold or some other useful and potentially lucrative mineral.

Enter James Hector. The stand-out medical scholar is in London, writing up his report and basking in praise for his three-year assignment to Canada with John Palliser. Their team had been resourceful and tenacious, exploring a vast geographical area, finding passes through the Rocky Mountains and documenting the geology and natural science of the region. His reputation attracted the admiration of Sir Roderick Murchison, director of the British Geological Survey, who advised the Otago administrators that he'd be just the man to reveal the secrets of the earth.

And so it was that Hector, aided by surveyor and topographer John Thomson, began a three-year project to provide a comprehensive account of the mineral resources of southern New Zealand. They reported on the coal seams of Kaitangata, the gold deposits of Central Otago and toured the volcanic residue and limestone outcrops of North Otago. They pushed west from Queenstown, in search of a viable route to the sea. Their first attempt took them across an alpine saddle now known as Hector Col, while other journeys took in the Greenstone and Caples Valleys.

Perhaps the most arduous challenge, however, was to shed light on the uncongenial coastlines of Fiordland and the Catlins. This involved a six-month voyage to the west coast on a 20-tonne schooner, *Matilda Hayes*, venturing onto shore by whale boat. Another trip saw him trapped by bad weather near Owaka for six weeks.

The result was not one map, but many. Versions were exhibited in the Dunedin International Exhibition in 1865, and have shown up in Archives New Zealand (Wellington) and the Geological Society of London.

In total, 22 minerals were identified, reflecting, says Professor Ewan Fordyce of the Department of Geology, Hector's "hard-won knowledge at an instant".

Fordyce regards Hector's efforts as "the map that changed the south". Until well into the 1900s, it was the only large and detailed map of the area. Even now, his representations of the mineral deposits in the region stand up well when compared with recent Geological and Nuclear Sciences maps.

Exactly when the so-called Hector Map held in the University's Geology Museum was produced remains something of a mystery: it features topographical details of deepest Fiordland that were not well known in the 1860s. One theory is that Hector's original survey was transposed over a topographical map at a later date. Neither is it clear why it was never published, nor when or how it came to be housed at the University. It was on display at the School of Mines for the duration of Professor James Park's career (1901–1931), and is remembered by staff and students until the late 1970s. So whatever did happen to the Hector Map? When this was asked in 2005 by Anthony Hocken in the course of his doctoral research into Hector's early career, it was acknowledged as a "Very Good Question". Heads were scratched.

Last anyone knew, the map had been taken down for conservation work, but the paper trail quickly ran cold. However, in 2007 it was tracked down to the Auckland Art Gallery, who returned it to the University.

"We were naturally elated to have it back," says Hocken Librarian Sharon Dell, "but there was some sheepishness, too, both here and in Auckland. Systems had broken down.

"The important thing is that it had been stored carefully. No damage was done and we have it back!"

It might even be argued that the map did well to have its conservation delayed: ignoring it for 30 years perhaps heightened people's urge to lavish attention upon it. With a University of the Third Age Charitable Trust research grant, the original map was cleaned and repaired, and filed appropriately in the Hocken Collections. A beautiful digital copy was also made, enabling this artefact of New Zealanders coming to understand the land to become fully accessible online. The launch of the online exhibition was celebrated on Hector's birthday; cake was served.

A copy is once again on display at the Geology Museum.

NICOLA MUTCH

http://library.otago.ac.nz/hocken/hector/index.html



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