



# Otago

UNIVERSITY OF

MAGAZINE

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OTAGO'S MULTIDISCIPLINARY STUDIES: REAL-LIFE RESEARCH

SILENCE: A RIGHT TO BE PROTECTED?  
COMPASSION IN CONFLICT  
OBESITY: BIG PROBLEM ... BIG OPPORTUNITY



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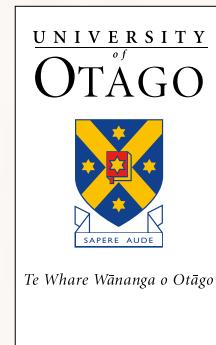
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## VICE-CHANCELLOR'S COMMENT



The magazines that some universities send to their graduates and friends tend to be marred by excessive bragging. My colleagues who produce the *University of Otago Magazine* aim to avoid this pitfall, but I hope I can be forgiven for mentioning our pride in one recent distinction. A new report from the Ministry of Research, Science and Technology has concluded that Otago is New Zealand's most research-intensive university.

Why is this important? First, because university teaching is more effective and inspiring in a research-rich environment. Most of us probably can remember gifted university teachers who were not researchers, but academics who are active in discovering new knowledge are generally the most able to communicate enthusiasm for their subject – as well as appropriate scepticism about the limitations of current dogma.

The prestige of universities, as reflected in international rankings, is determined almost entirely by the excellence of their research. This is a pity, because it has led some universities to neglect their commitment to high-quality teaching and learning. In the United States, for example, there is frequent comment about the unsatisfactory experience of undergraduates at eminent universities where most teaching has been farmed out to graduate students and postdoctoral fellows, so that the professors can get on with their research. I am glad to say that this is not the case at Otago: our staff regard teaching as a privilege, not a chore, and many of our most distinguished academics enjoy teaching first-year classes.

The second reason why we are proud to be New Zealand's most research-intensive university is that one of the key functions of any university should be the advancement of knowledge. It is seldom recognised that Otago, along with Auckland University, is now one of the two largest research organisations in the country. The research conducted by universities and Crown research institutes is crucial for the future of New Zealand, as well as contributing to international progress. This may seem most obvious in the case of scientific and medical research, but it is equally true for the humanities and commerce. Consider, as examples, the work of our Humanities Research Cluster on Poverty, Inequality, and Development – and the capacity of experts in our School of Business to improve the economy and to promote good business practice.

The continuing debate about school assessments such as the NCEA reminds one that few topics are as contentious as the methods used to educate young people. Research in education can provide the robust evidence that is sorely needed to leaven opinion and tradition. This is one of the reasons why it is desirable that teachers, along with most other professionals, should be educated in the research-led environment of a university.

On 1 January 2007, the Dunedin College of Education (which older graduates will remember as the Training College or the Teachers' College) merged with the University of Otago. With this issue of the magazine, I am delighted to welcome alumni of the College of Education to the Otago family.

A handwritten signature in black ink, appearing to read "David Skegg".

*Professor David Skegg Vice-Chancellor – University of Otago*

**COVER FEATURE**



# Real-life research

**MULTIDISCIPLINARY STUDIES RUN BY THE UNIVERSITY OF OTAGO IN DUNEDIN AND CHRISTCHURCH ARE THE ENVY OF RESEARCHERS AND DRIVE POLICY AROUND THE WORLD.**

**PARENTS AROUND THE WORLD** are raising their children with knowledge gleaned from two of the University of Otago's oldest and most productive studies.

Professor Richie Poultton runs the Dunedin Multidisciplinary Health and Development Research Unit, which has followed about 1,000 people from birth for almost 35 years.

Professor David Fergusson runs the similar Christchurch Health and Development Study, which is nearly 30 years old.

Together, they are hoping to see New Zealanders benefiting more from their continuing research programmes, which are recognised as leading the world in many areas.

They are combining with colleagues in Auckland, Wellington and Waikato to suggest that the government sets up a Centre of Research Excellence based on their work.

The proposed Families Young and Old Centre will research New Zealand families across multiple generations, providing the world's most comprehensive source of information about family relationships, human development and adaptation – from cradle to grave.

"We could provide a unique blueprint for the creation of a healthy, cohesive and adaptable Kiwi nation for the 21st century and beyond," says Poultton.

"Our current studies are already the gold standard for this kind of research and we are asked for advice by



**Professor Richie Poulton:** “There are studies that have been around longer, but I can’t think of any that have been both so productive in research and more successful in retaining participants.”

governments around the world. We need to ensure that New Zealand benefits from our research as well as other countries. We should take advantage of these treasures of knowledge and act on them.”

The Multidisciplinary Health and Development Research Unit is part of the University’s Department of Preventive and Social Medicine and is primarily funded by the Health Research Council of New Zealand.

Study members are 1,037 children who were born in Dunedin in 1972-73. They were assessed at three, five, seven, nine, 11, 13, 15, 18, 21, 26 and 32 years old.

Every aspect of their health and development has been tracked – their physical and psychological growth, how they have negotiated the hurdles life throws up, why they sometimes fail to negotiate them and what health problems they have. And those are just some of the measurements made.

The original group comprised 535 males and 502 females, 1,013 singletons and 24 twins. Of these children, 1,014 are still alive, and 972 took part in the age 32 assessments – a remarkable 96 per cent of those still alive.

Most of the study members are now working, 18 per cent are married (including four study-member-to-study-

member marriages) and 22 per cent have children. Only a minority now live in Dunedin, the rest having scattered around the country and around the world.

Because of their willing participation, the study has been able to offer advice to parents everywhere. Now they know that the first three years of their children's lives are the most critical in terms of brain development, and that love and affection are vitally important to brain growth.

The study has also saved young lives, seeding safety standards for children's nightwear, playgrounds, hot water temperatures and cycle helmets.

Recent research on criminal offending and anti-social behaviour has discovered two groups of offenders – those who will offend throughout their lives and those who will only do so during their teenage years. This has major implications for how offenders are dealt with, and is already having an impact in countries like the United States and Britain.

Multidisciplinary studies, following populations over years to gain data never gathered before, are growing in popularity around the world. The Otago studies are some of the oldest and most respected.

"New Zealand is a world leader in this area," says Poulton. "We have shown the value of studies like ours. We have not only lasted the distance but have done so in a spectacular fashion. We're not just a leader, but arguably the best study of its kind in the world in certain areas. The world looks to us."

Three decades of research have been highly productive, with almost 1,000 papers published – an average of one every 13 days.

"There are studies that have been around longer, but I can't think of any that have been both so productive in research and more successful in retaining participants," says Poulton.

One of the greatest difficulties of any long-running study is keeping track of voluntary participants over the years.

The Dunedin study got off to a good start with sampling babies born in 1972. "New Zealand was a kinder, gentler place in the 1970s," says Poulton, "but these days our study members are motivated by altruism. They see that we do useful things with their contributions."

"We do ask a lot of them. For example, some 80 people now live in London yet still take part of their annual leave to fly cattle-class here to give us one full day of their time.

"We have treated them well over time – as we ourselves would want to be treated. Our strictest rule is that of confidentiality. It's absolute. Why would you tell anyone about the most private aspects of your life unless you trusted them to protect your anonymity?"

"What we study are very sensitive issues and, unless our study members know we're going to follow through with the contract we have with them absolutely, then we jeopardise the future of our work."

"After 30 years we've built up a reservoir of goodwill with our study members. It's a world record to have 96 per cent of our participants still involved after three decades."

The Dunedin study has a clinical methodology with a focus on the person. Participants come to the centre every few years for interviews and physical tests. A large group of researchers from within the study and from international centres are involved.

The Christchurch study has a small research group that visits participants in their homes, and places greater emphasis on the social context.

"The two studies were shaped differently from the start," says Fergusson, "but their interests have tended to converge over the years."

"Dunedin has a confederation of researchers, including a number from overseas, who work collaboratively to build a common resource, with different people having different interests, a high publication rate and some support from international funding agencies."

"In Christchurch we have a very focused group relying mainly on New Zealand funding, but still with a very high publication rate."

The Christchurch study has followed the health, education and life progress of 1,265 children born in Christchurch during 1977.

"The significance of these programmes is not properly recognised in New Zealand," says Fergusson. "They have a much greater reputation internationally, where we are rated as one of the top longitudinal studies in the world."

That recognition led this year to the founders of the two studies, Fergusson in Christchurch and Dr Phil Silva in Dunedin, being honoured by their peers.

Fergusson was made a Fellow of the Royal Society of New Zealand and both men were made Honorary Fellows of the New Zealand Psychological Society. They are the two most cited Australasian researchers in the area of mental health.

Poulton has also been honoured, most recently being a joint winner of the University of Otago's Rowheath Trust Award and the Carl Smith Medal.

Despite peer recognition, funding is always a problem, especially for open-ended research such as longitudinal studies.

"Continuity of funding is always a concern," says Poulton. "It keeps us hungry and striving, but the work is actually incredibly difficult, requiring a huge commitment and huge resources."

"People only see the end result, which can be quite compelling and contributes to the growth in popularity of this kind of work. But anyone in their right mind would have to think twice about jumping in to one of these studies. They are complex and challenging."

Fergusson points out the difficulties of staffing. "The nature of science funding in New Zealand is largely for short-term, three-to-five-year contracts. We need more than that, or we cannot offer security and this becomes a high-risk career.

"We already have problems acquiring research staff, especially since the 1980s saw much more interest in qualitative research rather than the quantitative work we do."

The Christchurch study has broken new ground in many social areas. Sample research findings include:

- Parents' smoking causes respiratory problems in infants. Passive smoking doubles or triples the rate of illness, and is now being acted on.
- Lead levels impair performance in children for as long as 18 years. Now environmental lead has been reduced, this research area has all but disappeared.
- Dysfunctional families affect children's development. Bad family situations lead to bad outcomes for children and are not just related to poverty or race, but to lifestyles. This research has resulted in the successful Early Start home visitation service to promote better health.
- Women who have abortions appear to be at a greater risk of later mental health problems.
- Cannabis users appear to be up to twice as likely to have mental health problems.

**Professor David Fergusson:**  
*"The significance of these programmes is not properly recognised in New Zealand. They have a much greater reputation internationally..."*

**“... we’ve just ripped the lid off the nature/nurture debate by identifying, in different studies, specific environments and specific genes whose interaction leads to aggression, depression and psychoses.”**

- Circumcised males are less likely to suffer from sexually transmitted diseases, according to Christchurch research. However, this is not supported by findings in Dunedin. Everyone agrees more research is necessary in this and many other areas. Major Christchurch themes include:
- The mental health effects of alcohol and cannabis use in young adults
- Suicidal behaviour in young adults
- Unemployment and personal adjustment
- Mental health and treatment seeking
- The development of cigarette smoking
- Domestic violence in young adults
- The transition to parenthood and parenting
- Māori health in collaboration with the Ngāi Tahu Māori Health Research Unit.

Recent research is showing that social class at birth has a great influence on educational success at 25. As with dysfunctional families, having the right background is not related to race or poverty so much as to having an appropriate lifestyle and acquiring a world view, technologies or understanding.

Fergusson has discovered that many findings get a strong reaction, especially when they touch on emotional areas, but stresses that all they are doing is producing responsible research – and that often just highlights the need for more research to be done.

Poulton agrees. “Our work challenges people’s preconceived notions. It’s the reason to exist as researchers. Research can be unpredictable and uncomfortable, and that often makes for the best science and the best outcomes for society in the long run.

“We have received criticism for turning conventional wisdom on its head, but whatever we tend to lead on and publish ends up being replicated independently. We have rigorous scientists who interpret data as objectively as they can.

“In some areas we’re answering questions that have been around for thousands of years. For example, we’ve just ripped the lid off the nature/nurture debate by identifying, in different studies, specific environments and specific genes whose interaction leads to aggression, depression and psychoses.”

Proving those exist has created a paradigm shift in working on nature versus nurture in the field of behavioural genetics. A 2003 paper published by the Dunedin study is one of the 100 most cited papers in the world, and number one in the category of neuroscience and behaviour.

Poulton has more exciting finds in the pipeline examining how nature and nurture interact to predict why we turn out the way we do. He’s enthusiastic about the future.

“We’re also hoping to become one of the government’s Centres of Research Excellence. Our findings could inform policy-making and practice in New Zealand and overseas. They are relevant to all government departments and ministries, and have special relevance for key policy areas such as social development, health, education, justice, labour and Māori development.”

*Nigel Zega*

# Silent rights



## **THE RIGHT TO SILENCE IS ENSHRINED IN NEW ZEALAND'S BILL OF RIGHTS. BUT IS IT TIME FOR THIS FUNDAMENTAL TENET OF OUR LEGAL SYSTEM TO BE RE-EXAMINED?**

**YOU ARE INNOCENT UNTIL** proven guilty. Those who accuse you carry the onus of proving your guilt beyond reasonable doubt. You have the right to silence.

For those who have spent their careers understanding and upholding the legal justice system, these principles are often seen as a kind of holy trinity. They are enshrined in New Zealand's Bill of Rights. They are the safeguards that ensure trials are fair, and that all people are free and may be considered equally and without prejudice under the law.

They may be hallowed words, but they are not set in stone. In 1994, the United Kingdom made landmark changes to its evidence laws whereby it was agreed that, while individuals may have the right to remain silent, choosing to exercise this right may be interpreted as an indication of guilt.

The presumption of innocence has also taken some knocks with counter-terrorism measures worldwide. In the United Kingdom, United States and Australia, provision has been made for police to detain suspects for questioning, while also extending their powers of surveillance, search and seizure.

And in New Zealand, the non-co-operation of the Kahui family into the investigation of their baby twins' deaths – exasperating the police and the public alike – led to a flurry of debate as to whether a strict interpretation of the right-to-silence may have had its day. Curious exceptions to the right to silence provision already exist here relating to fraud, traffic and fishing offences, where it is a criminal offence to refuse to answer questions. Meanwhile, the Law Commission is currently pondering the future of our search-and-seizure legislation.

The task for any legal justice system is to observe the rights of individuals, while ensuring the safety and protection of the community. The question for New Zealand is, do we have the balance right? And, in ensuring this balance, how important is it to have the option of keeping your mouth shut?

Crown Solicitor, and Otago arts graduate, Simon Moore has spent the past two decades mounting cases in some of the country's most high profile trials. He was prosecuting counsel in the Peter Plumbly Walker case, and helped convict the killers of pizza worker Marcus Doig and bank teller John Vaughn. Immediately after speaking with the *University of Otago Magazine* he was off for another round of Pitcairn trials.

Now, as prosecuting counsel for the Kahui case, he is unable to comment on the specifics of the investigation that prompted retiring QC Kevin Ryan's parting shots at the justice system, and the excitement of the national media regarding the right to silence. And Moore hastens to point out he's not opposed to the right to silence *per se*. But its interpretation, he believes, does need some tweaking around the edges.

"What's really frustrating is when individuals choose to exercise their right to silence from the outset. Then, because of the requirement for full disclosure of prosecution evidence, they are made aware of all the facts the Crown has against them. Later still, they agree to speak, and we hear a story that neatly and conveniently fits all the facts they know we know."

"That's all fine, I don't have a problem with it," Moore continues. "But it does create an uneven playing-field in

**"What's really frustrating is when individuals choose to exercise their right to silence from the outset ... Later ... we hear a story that neatly and conveniently fits all the facts they know we know."**

**- Crown prosecutor Simon Moore.**

**"You'd have to say individual rights are faring pretty well in New Zealand at the moment."**

**- University of Otago Professor Richard Mahoney.**

terms of the presentation of evidence and I do think the prosecution should be allowed to advise the jury of the pattern that occurred.

"At the moment, there is an absolute prohibition on a prosecutor making any comment to a jury about an accused's failure to give evidence at trial. To do so is to invite the immediate declaration of a mistrial or, at the least, an appeal which would almost certainly succeed. But where an accused makes the tactical decision to say nothing to the police pre-trial, but then weaves a neat exculpatory narrative at trial, a prosecutor needs to tread with very real caution if attacking the accused for waiting until trial to open their mouth.

"The courts are becoming increasingly intolerant of prosecutors criticising accused for asserting legal rights which are theirs to assert, and which are often claimed after legal advice."

Allowing the prosecution to comment on how the accused has utilised their right to silence may seem a small modification, but it could require an amendment to the Bill of Rights Act. It would also move away from current understandings of what it means to be "proven" guilty – a concept expressed, not least, in the Universal Declaration of Human Rights.

Even so, the relationship between the Bill of Rights and laws of evidence has been the subject of some pushing and pulling among the Law Commission, Ministry of Justice and parliamentarians in recent times. Evidence specialist at Otago's Faculty of Law Professor Richard Mahoney was somewhat surprised when the Evidence Bill – "which had been floating around the law reform agenda for years" – suddenly arrived on his desk as the Evidence Act late last year.

The Act aims, for the first time, to codify properly New Zealand's laws of evidence, ranging from its treatment of hearsay evidence to admissibility of evidence gained via confession. While examining it in detail was set to be hearty summer reading for Mahoney, he noted with interest that the Bill of Rights was "quite strongly" reaffirmed in the document.

"The Law Commission had one reference to it in the Evidence Code they drafted, the Ministry of Justice took it out in the draft they sent to parliament, but the select committee re-asserted it, in even stronger terms than the Law Commission, by adding a new section early on in the Act which includes the Bill of Rights among the principles for interpreting the whole of the Evidence Act.

"You'd have to say individual rights are faring pretty well in New Zealand at the moment."

One of New Zealand's leading defence lawyers, Otago alumnus Greg King, sort of agrees.

He'd rather be working here than in the United Kingdom, but there are areas where he feels fair-trial provisions have already been eroded, namely for defending historic sexual abuse allegations. "You usually can't provide an alibi; inexact dates and representative charges are allowed; and while the accused's sexual history can be questioned, that of the alleged victim cannot."

King is also concerned about the extent to which it is now possible to argue for the admission of improperly-gained evidence. And he thinks it is outrageous that police have moved beyond using the media to report "we found this, we're looking for sightings of that", to making comments about accused people's and victims' characters and lifestyles, as he believes has happened in the Tony Stanlake murder case (found in the sea with his hands cut off), in which King is now acting for the accused.

"In a year or so, 12 people, who are being exposed to this reporting, will be asked to deliberate on the facts of this case. Who knows how much they will be influenced by what is nothing more than speculation."

While there are those who would argue that the legal processes should not be static – that changing times, technologies and terrorist threats call for changing measures – King argues that, actually, the opposite is true. "That's

the argument that has been used to defend police states for years. That's what the Nazis said about the threat posed by Jews. It's precisely when a society feels under threat that you need a robust legal system that sits outside of the emotion and politics of the situation."

So when it comes to the right to silence, King believes it must be vigorously defended.

"Any person who is charged with a crime is behind the eight ball from the word go. The prosecution has practically unlimited resources. The accused person is usually hopelessly outmatched by the police officer questioning them. The defence needs to take every opportunity it can to protect itself."

Having represented some of New Zealand's most notorious criminals – including Bruce Howse, sadly remembered for his sexual abuse and murder of his step-daughters Saliel and Olympia Aitken – King is very clear. His job is not to try to keep bad guys out of jail. It is to ensure all processes are carried out properly, to ensure every individual receives a fair trial.

"The ethics of defence law are about as well developed as in any area of ethics. My primary duty is not to the client, it is to the court, to help the jury reach the correct decision." That can only happen, he argues, when the facts of the case have been proved without being coloured by prejudice and conjecture. Overseas evidence has repeatedly shown that the leading cause of miscarriage of justice is false confessions.

As it is, pressure for police to gain confessions can be intense. The concern for lawyers, such as King, is that the greater the compulsion that exists for police to have their questions answered, the more forceful their tactics might be.

Speaking at the University of Otago's Memory on Trial research symposium recently, Professor Gisli Gudjonsson, of London's Kings College Institute of Psychiatry, examined the psychology of false confessions. Quite aside from those who take the rap for their mates (foolish, maybe, but a miscarriage of justice nonetheless), Gudjonsson explored the phenomenon by which people come to believe they have committed a crime of which they are innocent.

He recounted the tale of a young man who, after 25 days of gruelling questioning while being held in solitary confinement in a Norwegian jail in 1997, eventually came to believe he had murdered his cousin, Brigitte Tengs, but had blocked out the experience. So powerful was the "confession" as evidence, police relied on it in securing his conviction, even despite DNA evidence excluding him as the murderer.

The moral, according to Gudjonsson: "Any sane, intelligent person with normal vulnerabilities could, in the right conditions, make a false confession."

Simon Moore adds that relying too heavily on spoken confessions can backfire. He has seen cases where police have gained confessions and turned up to court thinking the matter was cut and dried, and would be over with. "Then, if the confession is thrown out of court, for whatever reason, suddenly they find they have no evidence, and no case. Good police officers will always gain additional corroborating evidence."

All the same, while juries are instructed not to make any inference from an accused person's silence, it must take a fair bit of discipline to override the feeling of "if you've nothing to hide, why would you not talk?"

There's no telling what a jury makes of a person refusing to give evidence in their defence – it is against the law to ask them. But Moore does recall a few raised eyebrows following a particularly blistering few weeks of avid defence work in a high-profile murder case, "calling into detailed question every scrap of evidence presented".

"Then, the defence was asked if they wished to call any witnesses to tell their side of the story, and they declined. It was a bit startling."

*Nicola Mutch*

**"It's precisely when a society feels under threat that you need a robust legal system that sits outside of the emotion and politics of the situation."**

**– Defence lawyer Greg King.**

**"Any sane, intelligent person with normal vulnerabilities could, in the right conditions, make a false confession."**

**– Professor Gisli Gudjonsson,  
Kings College Institute of  
Psychiatry, London.**



# Compassion in conflict

*Jenny McMahon trained as a nurse because of the “flexibility and variety” it offered. She achieved this in bucket loads.*

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**THE RECIPIENT OF AN MBE AND A FLORENCE NIGHTINGALE MEDAL FOR HER WORK IN SOME OF THE MOST DEMANDING LOCATIONS ON THE PLANET, JENNY McMAHON HAS ALSO ADDED A COLLECTION OF OTAGO DEGREES TO HER RESUMÉ.**

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**YOU KNOW YOU'VE LIVED** a sheltered life when the person you're interviewing, perfectly cheerfully, explains that being taken hostage by 40 armed militants in southern Sudan was not, in fact, the most terrifying experience of her professional career.

Far more frightening was being in the city of Huambo, Angola, as it "changed hands militarily", says Otago alumna Jenny McMahon as she reflects on the 16 years she spent working for the International Committee for the Red Cross, a career which has seen her recognised with an MBE and a Florence Nightingale Medal, one of the Red Cross's highest honours.

"The shelling itself wasn't too bad," she continues in the frank, unflappable style which clearly has got her a long way administering health services in some of the world's most demanding locations. "You could see the planes hovering overhead and could watch where the shells were going to fall. People would suddenly disperse. Their precision was pretty terrible and most of the time they landed in empty space."

What *was* frightening was, a few days later, when the "stragglers" – members of the defeated UNITA forces – were getting out of the city. "They were desperate," remembers McMahon, who at the time was running feeding centres in

the city. The centre's abundant supply of food and transport would prove irresistible to the soldiers. While her terrified staff sheltered, highly agitated men looted the premises. "At night they had come in and pointed at a car in the carpark, and demanded to be given the keys."

McMahon says she trained as a nurse because of the "flexibility and variety" the career offered. She achieved it in bucket loads.

By the time McMahon finished secondary school, she had already lived in Cromwell, Waiouru, Malaysia, Singapore and England. She graduated as a nurse in Dunedin in 1978, later adding a midwifery qualification in order to practise in hospitals in the Australian outback as a way of testing herself in a more extreme environment.

Then, during a brief stint as an intensive-care nurse in Wellington, she heard about the Red Cross call for senior nurses to assist in a surgical hospital on the Thai-Kampuchea border. McMahon was off.

The multinational teams worked to a gruelling schedule of 21 days on, seven days off, 11-hour day shifts and 17-hour night shifts, processing up to 1,000 admissions a day in the dry season. And loved it. "Everyone worked incredibly well together. The processes were in place, we knew what we had to do. As a unit, my goodness it was slick."

As a medical practitioner, McMahon conveys images of a raw and real experience, a celebration of resourcefulness and lateral thinking – “we learned of a Khmer tincture of chewed-up ginger that was remarkable at treating burns” – and where ironies of humanity and life and war were laid bare.

“We’d have the Thai military, the Khmer military and civilians all lined up, side by side. If there was space, we might try and separate the factions a bit if they were arguing, but often there wasn’t.”

McMahon became aware that the International Committee of the Red Cross was a highly homogenous institution, only drawing upon non-Swiss expertise in specialist areas when required (it exists to monitor the Geneva Convention it wrote in 1863 to protect the victims of armed conflicts). More nutritionists were required at the time and McMahon took up the challenge, undertaking nutrition papers through Massey University.

These were the skills that took her to Africa, where she came to lead feeding and household-food-security programmes across the continent. Countless moments remain in her heart. The Ethiopians, McMahon says, amazed her with their patience and discipline – communities of thousands arriving to registration and health centres, each registering and taking vaccinations, vitamin A and assistance in turn.

She was humbled by the gratitude of communities to the health interventions her team offered. “In New Zealand, our immunisation rate sits around 62 per cent. In Mozambique, even behind rebel lines, we were able to achieve 95 per cent coverage. That’s the difference when you’re with people who know the cost of disease.”

And she says she won’t ever forget the ordeal of being faced with 2,000 starving children and only having facilities to treat 50. “How do you choose?” she asks, before outlining

a couple of rules. “You don’t choose the kids who will be there next week. And you don’t choose the ones who will die no matter what.”

Despite the extreme nutritional deficiencies she witnessed among the people and the persistent effects of war, McMahon rejects the media-portrayed view of Africa as impoverished and dysfunctional. “Sierra Leone had one of the best weaning programmes in the world. And eventually peace returns.

“The women are the drivers of the communities. They are the hub. If you can keep them healthy, you can keep whole societies functioning.”

Then there are the stories of the lucky escapes. Such as when McMahon needed to be early and get supplies to a new feeding centre in a village in Eritrea, during a time of persistent battling between the military and the Eritrean People’s Liberation Front. The road between the main centre and the village was daily mined with explosives, and McMahon managed to negotiate with the leaders of both sides to keep the road clear of mines for two days so she could carry out her work. Both sides kept their word. “I drove incredibly carefully all the same!” she remembers.

Then there was the time when fighting broke out in Liberia and McMahon was airlifted from the developing conflict by a United Nations helicopter, piloted by a former United States serviceman, who persisted in hovering over the danger area, dodging bullets, ostensibly to gain a better understanding of the action while commenting, “I haven’t had this much fun since ’Nam, mam”.

Once again, McMahon’s negotiation skills came to the fore. “I said to the pilot, ‘If I tell you who they are and which faction they’re from, can we go?’”

Contrast this, though, with the act of gallantry McMahon witnessed as she and three others were held hostage in South Sudan in 1988 for reasons which are

**“The women are the drivers of the communities. They are the hub. If you can keep them healthy, you can keep whole societies functioning.”**

*1985: A feeding centre in Akordat, Eritrea.*



Photo Supplied



**1988: Tired and dirty, McMahon boards a small aircraft to fly from south Sudan to northern Kenya.**

still not entirely clear. A Red Cross delegate, frustrated by the lack of progress with the negotiations, came to the group's rescue. "So then there were seven of us," McMahon notes drily. On the up side, she points out, they then had a grounded aeroplane on hand and were able to use the jet fuel to cook with, which made the process a lot more efficient, apparently.

But while being held captive for some nine days by Sudanese rebels may not have quite tested her outer limits of terror, the experience was unnerving enough to convince McMahon to take a break. She came to Otago later that year to undertake a Master in Consumer and Applied Science, studying paediatric dental decay – children with chronic conditions such as epilepsy, who required ongoing medication with sugary formulas, were at greatest risk of severe tooth decay, she discovered.

It had nothing to do with her field of work at all, McMahon freely admits, but earned her the qualification that would assist in gaining permanent employment with the Red Cross, rather than the mission-based secondment arrangement she had been working under.

McMahon next returned to student life in Dunedin in 2000 when her mother became ill, enrolling in a Master of

Business Administration. She followed up its completion with a doctorate in Human Nutrition, under the guidance of Professor Murray Skeaff, investigating the influence of attempts to lower the amino acid homocysteine in the blood to ward off dementia in older people. The team found that the treatment was not effective in lowering dementia rates. Of this last tangent, she offers her philosophy for postgraduate study: "Choose your supervisor, worry about the topic later!"

McMahon now holds a number of company directorships in the city, taking on project and consultancy work as required. It's not so different from Africa, she reckons.

"The situations are different, but the processes are the same. I still do things to minimise risk – I still wear a seatbelt when I drive. And in business, you're still making decisions within constraints. I may not be negotiating with African generals, but I still have to negotiate bringing whatever issues and leverage I have."

*Nicola Mutch*



*Professor Mike Lean: "No country in the world has tackled the obesity issue and succeeded. But if any country can, it's New Zealand. New Zealanders are prepared to have a go at things."*

# BIG!

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**PROFESSOR MIKE LEAN EXPLAINS HOW NEW ZEALAND CAN SUCCEED IN TACKLING ITS OWN OBESITY EPIDEMIC, AND PRODUCE A BLUEPRINT FOR THE REST OF THE WORLD.**

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**AS AN ENTHUSIASTIC CLIMBER** Professor Mike Lean knows a formidable ascent when he sees one. But the Scottish obesity and public health expert also knows that New Zealanders are rather good at beating the odds.

“Being a mountaineer, I kind of noticed that you New Zealanders spotted a very high mountain once upon a time and one of you went up it.

“Here’s another high mountain. This one is much bigger and it looks unlikely that Europe or America will get up it. New Zealand, on the other hand, has a population that is capable of pulling together and a government which is accessible.

“Everybody knows each other, works together and has a really good warm feeling about working together. New Zealand tends to have the ethos of ‘we’ll do it’.”

Lean is talking about the worldwide obesity epidemic, and the particular challenges and opportunities it presents this country.

“We have run into a few problems in the world of medicine and preventive medicine in that the big diseases affecting populations, including New Zealand, are ones where diet and lifestyle – human behaviours – play a part.

“And in order to solve problems that are mediated by human behaviour, you have to be able to influence that behaviour.”

Lean, a world authority on obesity prevention, is working at the University of Otago on a project aimed at stemming the tide of one of the great health challenges of our time. And he has little patience with obesity sceptics in face of the incontrovertible evidence.

"The figures are worldwide and have been collected by the World Health Organisation for about 20 years. They are terribly scary," he says. "The prevalence of obesity has been doubling about every 10 to 12 years. We have now reached a point where about a quarter of the adult New Zealanders are obese, where three-quarters will be overweight by the age of 65."

And if we do nothing about it, he adds, those figures are going to get worse – much worse. Already, he recently told *New Zealand Listener*: "There are countries that are facing bankruptcy by the healthcare costs of diabetes."

Lean took his first degree in the philosophy of science at Cambridge University. He followed up with a degree in medicine and, after a brief spell as a heart surgeon in Edinburgh, concentrated on general medicine, diabetes and endocrinology, with an increasing interest in disease prevention. Of the heart surgery he says: "I decided that treating heart disease, and even diabetes to some degree, was a mug's game. They can be prevented, and treatment alone is not sustainable."

After Cambridge University he completed his clinical training at Aberdeen before returning to Cambridge to join the Medical Research Council and University of Cambridge Dunn Nutrition Unit. Here he embarked on a research career in nutrition, specialising in obesity and energy balance, and completed higher professional training in diabetes.

He has now been in Glasgow for the last 16 years, where he is Professor of Human Nutrition and head of arguably the pre-eminent research centre for human nutrition in Britain, and one of the best in Europe.

In between indulging his passion for climbing, and playing the fiddle in traditional Scots music styles, he has found time to write extensively on diet and obesity in the popular press, as well as in the prestigious medical and research journals. In the 11 June 2005 edition of the *British Medical Journal* (BMJ) he wrote: "The prevalence of obesity is already above the critical threshold of 15 per cent set by the World Health Organisation for epidemics needing intervention. We cannot withdraw medical support for obese individuals, but we urgently need politically-driven public health measures to curb this epidemic."

He is optimistic that New Zealand is the one country where such public health measures can take hold.

"No country in the world has tackled the obesity issue and succeeded," he says. "But if any country can, it's New Zealand. New Zealanders are prepared to have a go at things. They have a grasp of the issues and work through them. New Zealand is not too big and it does not have the

international interference of Europe. Government is in touch with issues affecting ordinary people and recognises obesity as a significant issue.

"Critically, New Zealand owns and can influence healthful changes in its own food industry, and that will bring new markets globally."

To this end he is working towards a Centre of Research Excellence based around the Centre for Applied and Translational Research in Chronic Diseases at the University of Otago, which is kicking off with an obesity programme.

This will unite internationally-recognised researchers from disparate disciplines in five New Zealand universities. Their research will aim to provide effective, economic, socially-inclusive and sustainable solutions for evidence-based management and policies.

Translational research typically encompasses three distinct phases. First comes the basic science – for example, the specific mechanisms and pathways to certain eating choices.

"As a species," explains Lean, "we have evolved in such a way that we store calories as fat if we possibly can. Why? Because this is the only way you survive a famine. And we are very good at surviving famines.

"There are about 200 genes related to eating and appetite. There are 40 or 50 chemicals in the brain known to influence eating or appetite. But there are also external factors, crowd norms, what is cool ...

"So there are many, many factors that require a lot of basic research."

The relevance of such factors can be tested in clinical trials and, once clinical trials have established an appropriate treatment or approach, phase two of translational research can begin: community delivery systems built upon sound, evidence-based public policy platforms.

"Policies need to be very well informed by what's driving appetite, what's driving weight down, clinical studies, community initiatives."

But they also have to be flexible and this is where the third, crucial, phase of translational research comes in: the measurement of outcomes and adaptation of policies to ensure continuous improvement.

Explains Lean: "To make policies sustainable you have to do two things. You have to modify the environment that is currently generating and sustaining unhealthy diets and behaviour; and you have to introduce continuous improvement methodology of the kind that has been used in industry for years. You evaluate and, as soon as you

get critical feedback which says it could be improved, you improve it.”

It follows that the obesity programme will be a multidisciplinary, multi-sectoral initiative and, in addition to scientists, will involve economists, sociologists, policy analysts and clinical trial organisers.

And it will need to get the New Zealand food industry on board. “The market for a pattern of eating that will not generate obesity is already big and it’s going to become enormous ...”

“In Europe and the United States, we’re already seeing a huge swell in ‘healthy eating’. People with buying power are looking at food for its health aspects – not just taste, value and other traditional decision bases, and they want evidence behind health claims.

“If someone can say, ‘we’ve done it. We’ve checked obesity, and we’ve done it in this way and our food speaks for that’, then they will be in a great position to be supplying that growing international market, and also to advise the rest of the world’s food industry.”

The other crucial factor is social marketing and a strong government that is prepared to take some risks.

“New Zealand led the world in banning smoking in public places – what a brilliant thing,” says Lean. “It was fuelled by very good evidence, and the evidence said most New Zealanders don’t smoke and most New Zealanders who do would rather not. It’s a bit like saying most New Zealanders are not obese, and the ones who are would rather not be.

“Most people who are obese – and we’re talking about a quarter of New Zealanders – say, ‘I’ll do anything to lose weight’. But actually they don’t. Of course they could if they ate a little less and used their legs a bit more, but they don’t and they actually want someone else to do it for them ...”

“A wise government will say, ‘OK, if people want someone to do it for them, then let’s get them all on board, and let’s get industry on board, too, because they can make a lot of money out of this’ – here, but more especially overseas.”

In Lean’s view it’s a win-win situation, and a perfect opportunity for New Zealand to lead the way. Besides, he says, in the long term, the health-care costs of not tackling the problem are simply untenable.

Obesity and its associated health problems are indeed a mountain. But mountains are there to be climbed and, on this one, Lean and his colleagues at the University of Otago are determined to take New Zealand with them.

*Simon Cunliffe*

**“To make policies sustainable you have to do two things. You have to modify the environment that is currently generating and sustaining unhealthy diets and behaviour; and you have to introduce continuous improvement methodology of the kind that has been used in industry for years. You evaluate and, as soon as you get critical feedback which says it could be improved, you improve it.”**

# A secret shared

*Professor of Child Health Research Stephen Robertson: “Our research is all about filling in some of the gaps; arriving at molecular explanations ... so families can get more accurate information.”*

**ASK ANY RESEARCHER:** the human genome never gives up its secrets readily.

Piecing together the minute strands of this massive genetic puzzle is painstaking work – the work of patient, systematic, inquiring minds like that of Professor of Child Health Research Stephen Robertson.

For example, when first presented with the Miru/Tito family in 1996, he could see the big picture – a family where a genetic mutation, that started with grandmother June, was passed down the female line – but how the millions of pieces fitted together had to be worked out.

The now paediatrician and clinical geneticist was, at that time, a junior doctor training at Auckland’s Starship Children’s Hospital. By that stage congenital malformations had tragically claimed the life of five baby boys born into the West Auckland family. That number has since grown to seven. No one could tell them why, but in a career-defining move, a young Robertson set out to provide answers.

“Our research is all about filling in some of those gaps; arriving at molecular explanations and coming up with blood tests so that the diagnoses can be made and the families can get more accurate information,” he says.

“The questions they ask are, ‘Will it happen again? Can it happen to other members of my family?’ Those sorts of things. That’s what clinical genetics is all about.”

Filling in those gaps and finding those explanations eventually took him to the United Kingdom, via three years at Melbourne’s Royal Children’s Hospital, to Oxford University where he worked towards his PhD as a Nuffield Fellow under Professor Andrew Wilkie, the Nuffield Professor of Pathology at the Institute of Molecular Medicine.

Robertson had graduated from the University of Otago with the Alumni Association Prize in Medicine as well as the Prince of Wales Prize for the most outstanding undergraduate student at the University, so being selected to work with such a distinguished scientist in such a prestigious institution was an understandable progression.

This collaboration proved vital as he continued his hunt for the genetic mutation behind the problems suffered by the Miru/Tito family.

Painstaking research, punctuated by a number of disappointments when it was thought they had found the culprit gene, led them to filamin A (FLNA), a member of a family of genes which, until then, had been thought to be a relatively inert part of the internal scaffolding of cells.

They had actually discounted the gene at one stage because it was already known to be responsible for a form of epilepsy, but, again, their careful assembling of the pieces of the puzzle brought them to the inescapable conclusion that the genetic basis of the malformations that claimed the lives of so many boys in the Miru/Tito family lay within FLNA. Such was the breakthrough, it was published in the prestigious international journal *Nature Genetics*.

Robertson’s focus soon broadened to include filamin B (FLNB) and, working with collaborators from the Cedar Sinai Medical Research Institute in the United States, they found defects in this gene also caused congenital malformations.

## **“... there are more genes to find and we’re using some of the new state-of-the-art genetic screening methodologies to do that.”**

Between them, FLNA and FLNB underlie 11 separate syndromes involving abnormalities of the skeleton, brain, heart, gut and kidneys in children, he says.

“FLNA-related disorders tend to have profound effects on the structure of the kidney, urogenital tract, heart, brain and gut. FLNB was found to be responsible for several syndromes associated with malformations of the skeleton and integrity of the joints.”

Understanding what is behind those syndromes gives an insight into the cause of more common congenital anomalies, such as congenital dislocation of the hips.

Being one of the few laboratories in the world testing for these mutations means Robertson and his colleagues get hundreds of samples from all over the world – more pieces, more puzzles – but it increases their chances of finding more answers.

“Inevitably, some of those samples for those families don’t quite fit the classic forms of these conditions. What we want to do is use new genetic methodologies to try to find the culpable genes which underlie those conditions in those families,” says Robertson. “So there are more genes to find and we’re using some of the new state-of-the-art genetic screening methodologies to do that.”

Health Research Council of New Zealand funding is allowing them to take a clinical picture of those patients and their malformations. They can then correlate that information with the molecular make-up of their genes.

Understanding what Robertson calls the “molecular geography” of the proteins encoded by the filamin A and B genes allows them some insight into which parts of the gene, when mutated, produce particular patterns of malformation.

These conditions can range from quite mild abnormalities, such as club feet or dislocated joints, to severe disorders, such as when the chest is so small the lungs don’t develop and the child can’t breathe, or limbs are severely truncated and whole skeletal elements are missing.

A recent Marsden Fund grant will also allow them to look at another of the same family of genes filamin C (FLNC), which is yet to be connected to a disorder similar to those caused by FLNA and FLNB mutations.

“Our approach in this instance will be not so much studying families, but instead we will engineer a mouse model of a filamin C disorder to see what the developmental consequences of that are,” he says.

“Part of the Marsden approach is trying to work out how filamins work, using biochemical and cell biology approaches, so hopefully with those insights we can go back and implicate other genes.

“Once again it’s work that’s heading back towards delivering something clinical for these families.”

Taking his research back to the paediatric clinic has always been important to Robertson.

“Through medical school there was a dawning realisation that this sort of medicine was very satisfying – just an enjoyment from helping children.”

To this end he spends 20 to 30 per cent of his time doing clinical work – seeing families in Dunedin, Christchurch and Invercargill as a practising clinical geneticist – and spends another 10 to 20 per cent of his time teaching medical and science students on the medical aspects of genetics.

Robertson values the connections he has with hospital clinicians in New Zealand but, because of the rare nature of these genetic abnormalities, he also works hard to maintain links with a worldwide network of geneticists.

“Our main collaborators are in California, Japan and several locations in Europe,” he says.

“They all provide something different. Some provide clinical expertise and samples from large populations like Japan. Others have very similar sorts of interests in the same sort of biology we’re studying – so their collaboration is more scientific.”

But support closer to home has also made a big difference, particularly the charity Cure Kids which helped establish the Chair in Child Health Research he filled when he returned to Otago in 2002.

Cure Kids has raised about \$1 million over the past five years with its highly-popular annual ski event in Queenstown.

Its continued support, through a \$1.25 million donation in July 2006 that was matched by the Government through the Partnerships for Excellence Programme, means that his position is now in perpetuity.

“They are heavy backers of what I do. The main theme of my whole tenureship of this position has been growing the position and having this alliance with a charity which is pretty special.”

*Mark Wright*

# The accidental geologist

*Associate Professor Gary Wilson: "... New Zealand is a maritime environment, and that variability and change in the ocean will significantly affect our marine activities as well as our climate."*

## **GEOLOGIST, RESEARCHER AND SIR PETER BLAKE EMERGING LEADER AWARD WINNER, ASSOCIATE PROFESSOR GARY WILSON IS A SCIENTIST WHO LIKES TO LOOK OUTSIDE THE SQUARE.**

**NOVEMBER 2006:** icebergs become a tourist attraction off the Otago coast and initial core samples from the Antarctic drilling research project, ANDRILL, reveal startling climate change clues. Should we be surprised by the coincidence? Well, no, not according to the University of Otago's Associate Professor Gary Wilson, geologist, Associate Dean of Research (Sciences) and chair of the multi-national, multi-million-dollar drilling project.

"I've always said that Antarctica is the engine room of the global climate and environmental system. Ice sheets are changing in character, ice shelves are breaking up and melting, ocean systems are readjusting and we know it's linked to carbon dioxide levels," he says.

Wilson, on the ice for a good part of the 2006 – 2007 summer helping supervise the project and writing proposals for the next stage, is passionate about the need to decipher the indicators on our doorstep.

The analysis of the core samples retrieved from beneath the Ross Ice Shelf will reveal up to seven million years of climate history and likely show how the shelf responded to periods when the temperatures were warmer than they are now. But this is only part of the story.

"The general public gets the message that the 'weather' patterns are changing, but that's just the thin end of the wedge. It is the whole global environment that is changing, with a complex series of tipping points in the system, and the tipping points are already beginning to tip. The question is, where do they finish tipping and what does that mean for New Zealand?"

It is a question that lies at the heart of a proposal for a new Centre of Research Excellence based at the University of Otago, of which Wilson is a leading proponent. The mooted Centre for Marine Research is named after Sir Peter Blake in recognition of his own vision and leadership in the marine environmental stewardship.

Wilson explains that the Sir Peter Blake Centre for Marine Research is a multidisciplinary effort involving researchers from Otago, Auckland and Victoria universities as well as GNS Science and the Sir Peter Blake Trust. The idea behind it "is recognising that New Zealand is a

maritime environment, and that variability and change in the ocean will significantly affect our marine activities as well as our climate".

He explains that sitting directly in the path of critical Antarctic-driven global ocean currents and at the convergence of the subtropical front, while also astride a major tectonic plate boundary, New Zealand is the ideal laboratory for examining the global ocean and climate system.

"What we want to do is look at the potential for change in that system and use that to predict and plan for the impact on New Zealand as the earth warms."

These are all big questions for a scientist, not yet 40, but who has established a worldwide reputation.

"In fact, I'm not a very focused, narrow scientist," he confesses in a disarmingly frank manner. "I'm pretty much a generalist and someone with a broad view of what's going on. And I think the background of my different subjects in my degrees helps me to see things in different ways."

It's an acute self-assessment that has helped the geologist break more than a few rocks during his steep rise to prominence. It would appear to be among the sort of "outside-the-square" qualities that captured the imagination of the Sir Peter Blake Emerging Leader Awards panel. For, in 2006, Wilson was singled out as one of six people nationwide to receive the award.

While demonstrating an ability to lead was a key criterion in the award, it was more the style of the leadership and its potential that interested the selection panel.

Wilson, chuffed about the award, sees it as a vote of confidence. Part of his style is being comfortable with leading and speaking publicly, communicating the issues facing scientists, in particular, geologists, today and how these relate to the wider community.

Wilson wasn't always going to be a geologist. Born in the United Kingdom, he emigrated to New Zealand with his parents, both teachers, in the early 1970s. With his mother at Waikato Diocesan School for Girls, Wilson was able to attend Hamilton's Anglican boys' schools – Southwell and St Paul's Collegiate School. At high school he displayed a flair for music – which remains one of his passions – and

**“As a small island nation, New Zealand can do little at home to slow the greenhouse juggernaut, but it must do much to plan for its impact.”**

was a clarinetist with the New Zealand Secondary Schools' Orchestra. Quite an achievement, but not one that propelled him into the front ranks of school leadership.

“I wasn’t a 1st XV rugby player and that’s what was important back then,” he notes wryly.

At Victoria, he began a science degree in physics and maths, while also doing papers in music. “In those days when you did a science degree you did four sciences, so I did maths, physics, chemistry and the only other subject that fitted the timetable – geology.”

The physics didn’t gel. “At the end of the first year I decided I was going to switch to a music degree, but I kept the geology going, finishing up with two degrees, one in geology and sciences, and the other in music.”

An honours year beckoned and Wilson’s first visit to Antarctica, a trip that has been repeated from various academic bases around the world almost annually since.

Going on to do a PhD at Victoria – Ice-Induced Sea-Level Change in the Pliocene – Wilson spent the middle of the three-year stretch in the United States at Nebraska University on a Fulbright Scholarship.

While there, he was flown across to the Byrd Polar Research Centre at Ohio State University to do a lecture and was encouraged to apply for the Admiral Byrd Fellowship. Following the completion of his PhD, he did just that and found himself at Ohio State for four years, one on the fellowship and the other three years of Antarctic research funded by National Science Foundation grants.

“A lot of my work was focused on extending what I started on my PhD,” he says, and his transition back to a Research, Science and Technology fellowship at Geological and Nuclear Sciences at Lower Hutt saw involvement in the Cape Roberts drilling project and a spell on the multinational drilling ship, the *Joides Resolution*.

Three years as a lecturer in earth sciences at Oxford University followed. “I developed good friendships in the department relatively quickly and embraced what Oxford had to offer,” he says. He met his wife, Kate, there and recalls it as a particularly happy time. There were regular trips to listen to the London Symphony Orchestra, for example. Then someone put a job advertisement for a lectureship in geology at the University of Otago under

his nose. He came out for an interview and “really loved it”, putting the decision to move down to a number of factors.

“There are world-class people in geology here at Otago. It is a great department and is renowned as such. I wanted to build a research laboratory, an issue that was resolved, and then there was the fact that if I was really going to grow something like ANDRILL, there was no mechanism for funding such large programmes in the United Kingdom.”

And, as much as he and Kate liked Oxford, “it wouldn’t have been an environment I wanted to bring up my kids in”.

Since arriving in Dunedin in 2002 Wilson hasn’t let the grass grow under his feet. His paleomagnetic research lab – housing a \$600,000 state-of-the-art supercooled magnetometer – is well bedded in and is being used to analyse core samples collected from the ANDRILL project which, after five years’ careful planning, has “spudded in” just this summer – with initially promising results. He has been promoted to Associate Professor of Geology and Associate Dean of Research in the Division of Sciences and has spent a sabbatical term as the Blaustein Visiting Professor at Stanford University. He helped lead efforts to acquire the new research vessel *Polaris II* for the University and, of course, there has been the Sir Peter Blake Award for Emerging Leaders.

And on the domestic front, he notes proudly, there have been milestones, too. Jacob was born in 2004 and, in October this year, Adam joined the family.

“Having a family at home now and such great support from Kate gives me all the incentive I need to understand our changing global environment and still be home in time to cook tea and bath the boys a few days a week.”

It’s a busy life. But as his glittering CV illustrates, Gary Wilson thrives on being busy. With the Sir Peter Blake Centre for Marine Research in his sights that is not going to change any time soon. As the proposal for the centre notes: “As a small island nation, New Zealand can do little at home to slow the greenhouse juggernaut, but it must do much to plan for its impact.”

Who better than a compulsive achiever like Wilson to lead the charge?

*Simon Cunliffe*

# Urban excellence

**I GREW UP IN** a small town, but shifted close to the centre of the city as soon as I could. I walk to work, take short-cuts through council housing and chat to people along the way. Walking keeps me fit and it also keeps me in touch. We all want our cities to be thriving, interesting and attractive, and ensuring these standards is important for economic development as well as our way of life.

My colleagues and I are bidding to set up a Centre for Urban Health and Development with leading international collaborators. The centre will build on influential community trials we've carried out in *He Kainga Oranga/Housing and Health Research Programme*. Now we plan to explore, in partnership with communities, sustainable urban design solutions. This means smarter economic development that enhances health. Our centre will be led by Otago, but draw together major research groups from four other universities – Victoria, Massey, Canterbury and Auckland, plus NIWA and BRANZ.

We see an urgent need for solution-focused research to address urban health and development problems, highlighted in Auckland but faced in most of our cities. For example, we need to know how to improve key infrastructure – housing, energy and transport systems. We know social factors contribute to good health, but many new neighbourhoods are still engineered to reduce physical activity, promote obesity and reduce opportunities for social interaction. Most urgently, despite climate change, it is still difficult for many people to make environmentally-sound choices because they lack information about specific options, and because many of our cities are car-dependent.

We have found, in working together already across social science, epidemiology, environmental economics, architecture, physics, engineering and policy studies, that we enjoy the challenges of creating a common language. We are planning to have a significant impact on the way

our growing cities develop by setting up world-class studies of how that development works. We will weave knowledge together from five research themes with a cross-cutting theme of enhancing Māori health and development.

We want to show the advantages of upgrading our housing so that we live in warm, dry houses. We want to cut carbon emissions by establishing the co-benefits of reducing transport-related energy emissions and overcoming barriers to physical inactivity. We plan to set up demonstration solar cities with electric cars that show the impact of integrating urban and energy system design on energy use, air quality and carbon emissions. But it is not just technical knowledge we seek; we need knowledge of *social sustainability*, ways of enhancing meaningful participation in local governance and how it affects well-being and development. We need to

understand how social inclusion can be developed in local communities. We plan projects to evaluate urban renewal projects, vertical villages in the inner city, as well as green-field sites. We will evaluate how neighbourhood differences in culture can create a sense of identity and place, and be a source of advantage.

Our research will compare six national and several international cities, and compare behaviour change at the individual level with changes in household and organisations' behaviour. We believe that better-designed urban areas can become focal points for economic interaction, enterprise and innovation, and can

help attract skilled workers, residents and workers, and enhance the quality of social life. The establishment of our centre will undoubtedly provide a major exciting new strand to Otago's research.

*Professor Philippa Howden-Chapman  
University of Otago, Wellington*



**Professor Philippa Howden-Chapman:**  
*"We see an urgent need for solution-focused research to address urban health and development problems ..."*



*Dr Paul Trotman: "Taking a medical story and turning it into good television, while still doing justice to the science and medicine, is extraordinarily difficult ..."*

# Getting to know Dr Know

**PART CROCODILE HUNTER, PART DR KILDARE AND  
PART DANNY DEVITO: OTAGO MEDICAL GRADUATE  
PAUL TROTMAN (aka DR KNOW) BRINGS REAL MEDICINE  
– AND A SENSE OF HUMOUR – TO THE SMALL SCREEN.**

"**WOULD YOU LIKE AN** electric shock?" asks Dr Paul Trotman (cheerfully) while we sit in the living room of his Port Chalmers home.

He owns 30 or so electric shocking machines as well as other items he describes as "electro-quackery" and "medical weird stuff". They're dotted around the house he shares with partner Debbie and their two children, and he just loves showing them off.

Among his treasures: a medicine chest that may have belonged to Queen Victoria; a Civil War amputation kit; a very primitive examining table dating back to the 1800s that he triumphantly bought for \$1 on eBay (and had shipped out from Denver, United States); a 1930s violet-ray machine that glows purple and sparks when plugged into the mains, and was reportedly used for curing baldness; an old dental cabinet filled with pill bottles and surgical tools; a surgeon's light (from Oamaru Hospital) hoisted above a desk; and a 1960s anaesthetic machine that was parked beside the bed in the spare room until a guest complained that it was too disconcerting to sleep beside and moved it out of the room.

Trotman is indeed a *bona fide* medical doctor – but that's not the only string to his bow. He's also a published cartoonist, a photographer and – to American television viewers – he's Dr Know, presenter of a 20-part series of the same name that is currently screening on Discovery Health Channel. It's a show that debunks, deflates, discredits and demystifies medical and health myths and folk tales. And, because it's a quirky, fast-paced affair, it called for a host

who could echo those qualities. Trotman stepped up to the mark. He says he had to amplify his personality a bit to the point where he was "part Crocodile Hunter, part Dr Kildare and part Danny DeVito".

Though he'd had previous experience working behind the scenes in various writing, directing and producing roles, he hadn't been in front of the camera before. It was baptism by fire. This is where an admirable ability to *not* take himself too seriously came in handy.

"Fortunately you've got an editor on your side so you can be larger than life, and if you fall flat on your face nobody ever sees it, apart from the crew who laugh quietly behind their hands and keep that one aside for the out-takes reel. It was fairly tightly scripted and that's the thing I found the hardest. I'm not somebody who's known for my sense of timing, so learning a long piece to camera and then delivering this while walking, interacting with objects and other people was quite hard. But in the end, once I got used to it, I actually enjoyed it more than I expected."

Trotman's forays into television are driven by a desire to make science and medicine compelling to the average viewer while maintaining the subject's integrity.

"I like to try to help explain science and medicine without being boring and stuffy. Producers on the whole will sacrifice the science for the story, whereas I'm much less willing than the average producer to do that. Medicine and science are actually a lot more complicated than most people think."

**“Practising medicine keeps me honest – and it gives me story ideas too. I like doing something different every single day.”**

“Taking a medical story and turning it into good television, while still doing justice to the science and medicine, is extraordinarily difficult because you need to have a good understanding of television and a good understanding of science. Lots of people have one or the other, few people have both.”

His restless intelligence has seen him straddle two career paths: one in medicine and the other in broadcasting. When he was a medical student at the University of Otago in the 1980s he got involved in capping shows, medical school reviews, radio announcing (“inflicting my musical taste on everybody else”), and writing and producing comedy for student radio. His appetite thus whet, he headed to the United Kingdom and spent six years writing comedy in London while doing enough medicine part-time (as a locum) to pay the bills. During this time he and a friend submitted several comedy pilots to BBC radio (a couple of these were made) and wrote and produced a few Edinburgh Festival shows.

On his return to New Zealand he continued scratching away at radio and television scripts in between locum work. Fortunately, he had enough equanimity to withstand broadcasting’s slings and arrows.

“I pitched a sitcom idea to Radio New Zealand which they hated an *unbelievable* amount! They didn’t just send it back with a ‘sorry we don’t want this’ but with a ‘this is the most horrible sitcom we’ve ever seen and there’s no way we would even consider this in any way, shape or form. We hate it!’”

Ever tenacious, Trotman refused to give up. “I’m one of these people who, the first time I do something, I do it appallingly badly and make all of the mistakes you can possibly make, but I learn really quickly and the next time I do it I don’t make the same mistakes again.”

His doggedness paid off. In the past four years he’s helped develop more than 25 hours of television (most of it in conjunction with the clever folk at Natural History New Zealand) for Discovery Primetime, Discovery Health and TLC (The Learning Channel). This has

included programmes such as *Kill or Cure*, *Stomachs of Steel* and *Medicine on the Edge*. He also directed and co-produced a documentary called *The Curse of the Elephant Man*, which scooped the Arte prize for best artistic film at the Villa Real Film Festival in Portugal and a bronze medal at the New York Film Festival.

Buoyed by this success, he bought a high-definition video camera and editing equipment and set up his own film business with the help of his lawyer partner Debbie (“she looks after the contracts and makes sure I don’t do anything really stupid”). It’s called PRN Films (PRN is the medical abbreviation written on prescriptions for “take as required”).

Trotman has already produced one documentary for TVNZ and has two more in pre-production – one on experimental spinal chord repair surgery and another being developed in conjunction with the University’s Department of Anatomy.

In between times he dons his white coat and heads to Gore Hospital (with occasional locum work at Dunedin Hospital). “I like small rural hospitals. I like the fact that you’ve got limited resources and you have to be able to deal with whatever comes through the door.”

If he were financially able, would he flag medicine away to focus entirely on television? “No. I like the balance,” he says. “Practising medicine keeps me honest – and it gives me story ideas too. I like doing something different every single day. I like trying to put the pieces of the puzzle together and trying to work out what is going on, and I like interacting with people.”

So, should you end up in hospital and find a Crocodile Hunter-cum-Dr Kildare-cum-Danny DeVito at the other end of the stethoscope, just mention your fascination with old electric shocking machines and you’re bound to get very good service.

He may even offer to cure your baldness with his violet-ray machine.

*Claire Finlayson*



David Elliot (b.1952)  
*Mona Minim and the Smell of the Sun* (cover illustration)  
 Medium: watercolour, pastel and ink  
 Purchased by the Hocken Collections 2006

**WHEN DUNEDIN ARTIST DAVID** Elliot was asked to illustrate a re-issued publication of Janet Frame's ant story *Mona Minim and the Smell of the Sun*, he was given an Everest of tasks.

"My brief was to make the story a bit more accessible to children, but ants aren't the most endearing of creatures, close up," says Elliot. "Janet's Mona had very human emotions and relationships, so I tended to emphasise that aspect."

Frame's story follows the adventures of a young house ant called Mona who leaves the nest and encounters the excitements and terrors of the garden ant world. The story was originally published in New York in 1969 and illustrated by Robin Jacques. The drawings in this first volume were much more ant-ish, but a little on the menacing side (their mandibles are the stuff of children's nightmares). Elliot's ants are a lot more lovable. Frame's niece Pamela Gordon agrees. "David Elliot has done a great job. I like the way he solves the problem of making a creature with six legs look appealing. He's gone for four

arms and two legs. But it could have been the other way around."

*Mona Minim* was born when Frame was staying in a caravan at the home of her sister (Gordon's mother) in Northcote, Auckland. Having grown up in Otago where ants are infrequent domestic guests, she was utterly fascinated by the invasion of these insects that are the Aucklander's summer lot. With the help of nine-year-old Gordon, Frame started imagining big, interesting lives for these small, often despised creatures. "Janet thought there was quite a resistance to insects in the children's book world. If she'd written about rabbits instead of ants, Mona might have met with a warmer reception."

The reception for Random House's re-issued volume – and therein the marriage of Elliot's illustrative talents and Frame's literary whimsy – has been *very* warm. *Listener* reviewer David Larsen said of this publication: "There are not very many perfect books. This is one." Indeed.

Claire Finlayson

## Hocken Collections Gallery Exhibitions

Until 24 March 2007

*Four by 10: 40 years of gifts and acquisitions at the Hocken (1966-2006)*

Works obtained through generous gifts and acquisitions funding (work by past Frances Hodgkins Fellows such as Ralph Hotere and Rohan

Wealeans, and recent acquisitions including contemporary photography by Ann Shelton and Neil Pardington, and David Elliot's illustrations for *Mona Minim and the Smell of the Sun*).

30 March – 26 May 2007

*Working Drawings: Sarah Munro*

Recent work by the 2006 recipient of the University of Otago's Frances Hodgkins Fellowship.



Photo: Alan Dove

*Dr Warwick Bowen: With many questions still to be addressed, his aim is to find out just how accurately particles can be positioned.*

## Squeezing optical tweezers

**TRAPPING AND MANIPULATING** a single particle, less than a thousandth of a millimetre in diameter, is going to take an incredibly fine set of tweezers – that's why physicist Dr Warwick Bowen is keen to find out just what optical tweezers can do.

He has been awarded a \$140,000 Marsden Fast Start grant to investigate and develop the science and technology involved.

Optical tweezers use a highly-focused laser beam to trap, move and monitor microscopic particles. They offer the potential to be used in many fields, from medical diagnosis to the building of tiny nano-structures by trapping particles in a series of tweezers.

When a particle is caught in a laser beam it gets some sort of "kick", Bowen explains.

"While it is random, what you find is that the net direction is towards the most intense part of the beam. Optical tweezers have an extreme intensity at the focal point, and that effectively attracts particles in and traps them."

Bowen says there are still many fundamental questions to be addressed and his aim is to find out just how accurately particles can be positioned.

First, he will model the system to establish the theoretical limit and then set out to test it in the lab, as well as investigating ways of improving on it.

"It will be a case of pushing optical tweezers to their limit and asking how good can they be."



Photo: Todd Sison

*Professor Glenn Summerhayes: His work in the Kosipe Valley has the potential to "rewrite the text books" on human adaptability.*

## Heads in the clouds ...

**A REMOTE VALLEY** in the highlands of Papua New Guinea may hold a key piece in a global jigsaw puzzle that explains how and when ancestors of modern humans left Africa somewhere around 60–70,000 years ago.

At the time our modern ancestors arrived in Europe to replace Neanderthals, *Homo sapiens* had already colonised the land mass known as Sahul (comprising Papua New Guinea and Australia) for many thousands of years, says Professor Glenn Summerhayes, head of Otago's Department of Anthropology.

Recent research by a team of experts he led to Kosipe in the Papua highlands has shown evidence that human occupation was much earlier than the previous estimate of 26,000 years. The Kosipe valley is one of the oldest sites of upland occupation in the world.

"We now know that people have been in Papua New Guinea for 40,000 and probably 50,000 years."

Evidence suggests early colonisers of the Western Pacific not only had the maritime skills to cross oceans, but had the endurance to adapt and survive in a harsh subalpine environment 2,000 metres above sea level in an age when the climate was much colder than it is today.

The Kosipe Valley is important internationally because very little is known about this archaeological period. Each new discovery will fill a void in our understanding and "rewrite the text books" on human adaptability, Summerhayes says.

He has received a three-year Marsden grant to assemble a team of international experts and researchers to further explore the secrets of Kosipe.

Photo: Todd Sisson



*Andrea Valentin: "I guess I'm political in my thinking and I wonder if tourists are, too."*

## Tourism's ethical dilemma

**SHOULD TOURISTS VISIT** a country run by a military junta and renowned for its brutal abuses of human rights?

That is the ethical dilemma that Department of Tourism researcher Andrea Valentin will examine in her PhD thesis investigating the political dimension of tourism in Burma.

Burma's democratically-elected leader, Nobel Peace laureate Aung San Suu Kyi, has been detained or restricted for most of the last 17 years. Her pro-democracy party won political control in a landslide victory in 1990, but the military junta has steadfastly refused to concede.

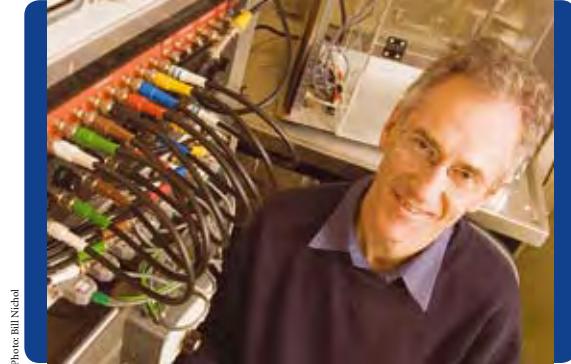
Travel to Burma has become controversial, Valentin says, because every tourist, in effect, supports an illegal regime, whether consciously or not. Aung San Suu Kyi has urged visitors to boycott tourism because it was helping "to prolong the life of one of the most brutal and destructive regimes in the world".

Valentin will interview independent travellers in Thailand en route to Burma to examine their political knowledge and personal values in the context of destination choice.

The issue is personally relevant to her. She was born in Romania, a communist dictatorship at the time, grew up in Germany, has lived in Italy and studied in England.

"I guess I'm political in my thinking and I wonder if tourists are, too," she said.

Her master's thesis at Otago looked at the effects of the terrorism attacks of 11 September, 2001, on tourist perceptions of the United States. That research confirmed in her mind that the industry is not only very resilient, but that tourists also have short memories.



*Associate Professor Brian Hyland: "If you can nail down how these new drugs work you can apply more directed design to developing new or enhanced drugs in the future."*

## Brain cell recordings a hit

**BEING ABLE TO RECORD** the activity of single brain cells is enabling Department of Physiology researchers to gain an insight into how a new generation of drugs – called A2A receptor antagonists – are acting on brains affected by Parkinson's disease.

Associate Professor Brian Hyland, who is heading the Health Research Council-funded research, says the technique, similar to that sometimes used during human neurosurgery, monitors the activity of specific brain cells during natural behaviour.

This means they can study brain function in both a healthy state and in a diseased state, and also look at how the new drugs work.

"Our focus is understanding the mechanisms involved – how the drug works and how it normalises brain function," says Hyland.

He says that the new drug blocks the action of adenosine, a natural product of metabolism, which builds up during the day to promote sleep and slows movement. The stimulant actions of coffee are also due to blocking adenosine action but, unlike an ordinary cappuccino, the new drugs selectively act in the part of the brain affected by Parkinson's.

"The idea is that by blocking the action of adenosine selectively in the movement-control pathways of the brain, you can boost performance without affecting other functions," he says. "This effect may complement L-DOPA, the treatment mainstay for Parkinson's, and help avoid side effects."

"If you can nail down how these new drugs work you can apply more directed design to developing new or enhanced drugs in the future to improve outcomes for Parkinson's disease patients."



Photo: Ross Comnibes

*Dr Jacqui Keenan (right) and PhD student Nina Salm: "... these foods may have an impact either directly on *H. pylori* itself or by blocking the responses of stomach cells ..."*

## Bacteria-beating foods

**THE BACTERIUM *HELICOBACTER PYLORI*** has been lurking in the stomachs of humans for millennia. It is believed to now infect half the world's population and is associated with increased risk of serious gastric disease such as ulcers and stomach cancer.

Dr Jacqui Keenan and colleagues at the University's Christchurch campus are experts on *H. pylori* and are researching ways of reducing stomach inflammation caused by this bug, in association with Crop & Food Research. The study is funded by the Foundation for Research Science and Technology, and Comvita New Zealand Ltd.

"Different foods have varying impacts on the activity of *H. pylori* in the stomach and we're trying to determine which foods reduce inflammation of the epithelial cells which make up the stomach wall," explains PhD student Nina Salm.

The researchers have screened more than 30 foods in the laboratory and are now concentrating their attention on honey products and broccoli sprouts in terms of their effectiveness in reducing *H. pylori*-induced inflammation.

"At present our research suggests these foods may have an impact either directly on *H. pylori* itself or by blocking the responses of stomach cells to the infection."

It may be preferable not to totally eradicate this bacterium. New information suggests that if it can simply be controlled, health outcomes may be better.

"Balance seems to be the key word when it comes to controlling the negatives and positives of *H. pylori* infection," says Keenan.

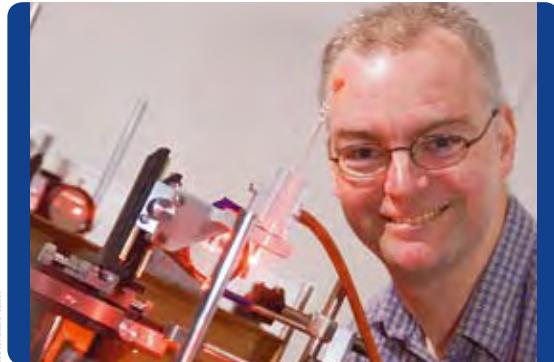


Photo: Bill Nichol

*Associate Professor Keith Gordon: "The big deal with OLEDs is that they don't use much energy."*

## Bright light on small screen

**THE FUTURE IS LOOKING** brighter and better for small-screen technology used in mobile phones, digital cameras and personal media devices, thanks to groundbreaking research at the University of Otago Department of Chemistry.

LCD or liquid crystal display, the common technology behind many small digital screens, is already being replaced by OLEDs – organic light emitting diodes. However, Associate Professor Keith Gordon and his team are busy developing a new way of making those displays.

"The big deal with OLEDs is that they don't use much energy," he explains. "An LCD screen needs backlighting and then it basically blocks light to create the picture. The problem there is that blocking light to make a picture is less efficient than having each pixel emit light to make the picture."

"Also, an OLED has a much simpler architecture whereas every pixel in an LCD screen has 19 components, so it is more complex and, therefore, more expensive to make."

Gordon is looking to take a further leap forward by making an even more efficient OLED.

While they are currently made using a structure of up to seven layers, he and his team are developing a much simpler single-molecule structure. A three-year Marsden grant will allow them to take this technology even further.

Once they have perfected their tiny, but bright, molecules you can expect to see these new generation OLEDs coming to a small screen near you.

Photo: Alan Dove



*Dr Judith Duncan: This study has important implication for future diversification of kindergartens.*

## The new kindy kids

**AS ENROLMENTS AND WAITING** lists have dropped, New Zealand kindergartens have opened their doors to children under the age of three.

The impact of this has been the subject of research led by Dr Judith Duncan (Children's Issues Centre, Otago) with Carmen Dalli (Victoria University).

Following the experiences of 18 two-year-olds over a two-year period, they found that younger children quickly adapted to being a "kindy kid", especially those who already had siblings at kindergarten. However, they did face physical challenges – longer legs would have helped them with swings, steps and furniture. Some routines, such as mat time, also presented difficulties and younger children often gravitated to the reassuring presence of the teacher.

While impressed by how well the children coped, teachers themselves experienced some frustrations. Duncan says two-year-olds often used non-verbal forms of communication that were missed by busy teachers who felt constrained by the teacher:child ratio.

"There was a realisation by teachers that they could be doing things better. While they could make changes to the physical environment to better suit younger children, they felt a real frustration knowing that, with smaller group sizes and more trained adults, they could provide the kinds of educational and care opportunities that would be most rewarding for themselves and the children."

Duncan says this study has important implications as increasing diversification of the kindergarten service seems likely in the future. She recommends further research into issues such as the impact of mixed-age sessions on older children and the complexity of the kindergarten teacher's role. *The full report is available on [www.trli.org.nz](http://www.trli.org.nz)*



*Dr Alexander McLellan: His work has shown that exosomes are unlikely to be a major mechanism in the process of viral transmission.*

## Trojan horse a lame duck?

**NEW WORK BY** Dr Alexander McLellan (Department of Microbiology and Immunology) has been recognised as a major contribution to the field of immunology by publication in the prestigious *European Journal of Immunology*. The work has shown that exosomes are unlikely to be a major mechanism in the process of viral transmission.

In order to infect mammalian hosts, viruses have to avoid detection by the host's immune system as they jump from cell to cell. It has been proposed that some viruses can do this by hijacking and hiding inside exosomes – small particles released by host cells. The theory has been termed the "Trojan horse" theory because the virus is well camouflaged by its close association with host material.

"Although we thought this idea to be very appealing, we were aware that the majority of work supporting the Trojan horse hypothesis had been performed *in vitro*," says McLellan.

"We were able to repeat the *in vitro* work of others, but when we looked at normal human tissue we could not detect exosomes. We then confirmed their absence using a variety of methods and showed that proteins thought to provide the 'camouflage material' for viral transmission were not associated with exosomes."

McLellan estimates that several million dollars of overseas taxpayers' money would have been spent in several international laboratories on work on the Trojan horse hypothesis. By comparison, his research was made possible by a \$100,000 Marsden Fund Fast Start grant awarded in 2003.

Photo: Bill Nichol



*Jacinta Ruru: "It's valuable to look to another country to recognise people can do things differently."*

## Land rights comparisons

**NEW ZEALAND AND CANADA** could learn from each other's approach to the land rights of their indigenous populations, says Otago senior law lecturer, Jacinta Ruru.

Ruru, who recently received a University of Otago Early Career Award for Distinction in Research, spent 2006 at the University of Victoria in British Columbia, Canada, looking at how the Crown and indigenous Canadians are dealing with the ownership and management of national parks.

Her research included interviewing staff of Parks Canada, who control the parks, and members of the First Nations aboriginal Canadian population.

She says Canada and New Zealand are in similar positions, with the Crown currently owning and managing sections of land that hold major significance for indigenous people.

A First Nations woman gave her an excellent insight into the current situation in Canada, calling National Parks "walled gardens" into which her community was limited to "looking in at all the resources".

Both countries are now trying to rectify some of the injustices created over land. The Supreme Court of Canada began reconsidering the legal recognition of land rights in 1973. Similarly, in New Zealand, in 1987 the Court of Appeal justices reinterpreted the Treaty of Waitangi.

Ruru believes she has gained a better understanding of New Zealand's situation by studying Canada's attempts to find a resolution.

"It's valuable to look to another country to recognise people can do things differently. It's been an incredibly stimulating and challenging experience that will hopefully transpire into useful and transformative research results for both countries."

Photo: Bill Nichol



*Associate Professor David Bilkey: "We can look at how the [brain] cells encode or weigh up the costs and benefits, and then drive the choices."*

## Mind how you go

**IT WOULD BE SIMPLE** to think of the brain as functioning like some little person in your head, helping you to find your way through the world, but reality is far more complex.

"It's neurons firing, communicating with each other, storing information, weighing up costs and benefits, and then coercing your behaviour in particular directions based on that information," says Associate Professor David Bilkey (Psychology).

Navigation is handled by the hippocampus, while decision-making is handled in the pre-frontal cortex, and it is the interplay of the two during spatial decision-making – used when navigating your way to a familiar place – that particularly interests him.

It might be something as ordinary as finding your car in the supermarket carpark, but even that simple act taps into complex brain processes that have evolved over millions of years.

Bilkey and his co-researchers, working through a three-year Marsden grant, will use a highly specialised technique to record the electrical activity of single brain cells of animals to help unlock these long-held secrets.

They will present them with choices such as going in one direction to get a small food reward with little effort, or going in another direction to get a large reward for higher effort.

"We can then look at how the cells encode or weigh up the costs and benefits, and then drive the choices."

They also plan to extend the work to examine what happens when two or more animals compete for a resource.

## University and College merge

**THE DUNEDIN COLLEGE** of Education and the University's Faculty of Education officially merged last month to become the University of Otago College of Education.

The new College and three quarters of its 1,350 students will be based at the former Dunedin College of Education site – now an integral part of the University campus. The remaining students are based at the former College's Invercargill campus. This campus, together with the Central Otago Education Centre in Alexandra, forms the new College.

Two academic departments – Education Studies and Professional Practice and Curriculum Development and Teaching – set the strategic development of programmes in their respective disciplinary areas. In addition, functional units within the College are concentrating on education studies, research, postgraduate studies, distance learning and technology, teacher education programmes and education support. Professor Helen May is Foundation Dean of the College. May was head of the University's Faculty of Education – a position she took up in July 2005. She initially trained as a primary school teacher and has been involved in political advocacy and activism on early childhood issues. She was co-director on the development of *Te Whaariki* (the first national early childhood curriculum for New Zealand) and occupied the first Professorial Chair in Early Childhood Education at Victoria University.

"We have a strong senior team across the new College and they have already worked together in the past year," May says.

The College's Associate Dean (Academic) is Professor Kwok Wing Lai, who will also be the Centre for Distance Learning and Technology director. Barbara Benson is Associate Dean (Teacher Education). Benson was previously director of Secondary Education Programmes at the former College.

The Dunedin College of Education was New Zealand's first College of Education, established 130 years ago. University Chancellor, Lindsay Brown, says the new College builds on that proud reputation and will quickly establish itself as a leading teacher education and research facility in New Zealand.

## Medical and dental funding boost

**SIGNIFICANT ADDITIONAL GOVERNMENT** funding announced late last year for undergraduate medical and dental training has been welcomed by the University.

Pro-Vice-Chancellor (Health Sciences) Professor Don Robertson says the move recognises the need to provide funding that not only meets current requirements, but also enables the future development of health professional training.

"Otago is New Zealand's biggest provider of medical training and has the country's only Dental School. Funding for these areas has been an issue of growing concern over recent years and we are delighted that the Government has now moved decisively to address this," Robertson says.

The funding, to be provided from January 2007, will support undergraduate curriculum development in both medicine and dentistry to the highest Australasian and international standards.

## Māori scholars meet Pope



**ON A TRIP LAST** year to ask access to Vatican archives regarding New Zealand's first Catholic missionary, representatives from the University's School of Māori, Pacific and Indigenous Studies, Te Tumu, enjoyed the unexpected privilege of meeting Pope Benedict XVI (above).

Led by the school dean, Professor Tania Ka'ai, (right) the Te Tumu group was accompanied in Rome by St Margaret's College warden Rev Dr Peter Norris (centre) as a cultural advisor. Their mission was to ask Church leaders for permission to use Italian material in researching Bishop John Baptiste Pompallier, a key figure in the early days of European settlement of New Zealand. The bishops involved in the discussions were receptive to the idea.

During their Rome visit, Ka'ai presented the Pope with an Oamaru stone koru as a gift.

## Chair in Scottish Studies

**THE UNIVERSITY HAS ESTABLISHED** New Zealand's first Professorial Chair in Scottish Studies.

The new chair was announced at a University function on Scotland's national day, St Andrew's Day. Among the guests was the British High Commissioner to New Zealand, His Excellency Mr George Fergusson.

Vice-Chancellor Professor David Skegg says the Stuart Chair in Scottish Studies is a welcome and fitting development, given the Scottish heritage of the University and of southern New Zealand.

A \$1.5 million donation from the Stuart Residence Halls Council has made the chair possible. As the chair is part of the University's Leading Thinkers programme, the donation will be matched under the Government's Partnerships for Excellence scheme.

The new professor, to be appointed after an international search for a senior scholar, will pursue research and teaching in Scottish history, culture and society, and its considerable impact on New Zealand's identity and development.

A multidisciplinary Scottish studies programme is planned which will build upon existing expertise at the University. The programme's two strands will cover Scottish history, politics and economics, and Scottish literature, music and culture.

## Audit commends University for changes

**THE UNIVERSITY OF OTAGO** was recently commended by an independent audit team for the collegiality and strength of communication between the University community and senior management.

As part of a three-year programme assessing each of New Zealand's eight universities, the New Zealand Universities Academic Audit team spent five days at Otago's Dunedin and Christchurch campuses, speaking to about 200 people, including external stakeholders.

The audit team commented specifically on the performance of Vice-Chancellor Professor David Skegg: "Changes to the senior management team have brought new approaches to strategic processes, and the University is commended for the increasing collegiality and the reported strength of communication and relations between the University community and the senior executive."

It also commented on the University's strong reputation for high-quality education, as well as the processes that are in place to assure this quality, its student facilities, including the Information Services Building, and the "lively and distinctive campus life".

## First Saudi medical students graduate

**THE UNIVERSITY'S FIRST SAUDI** Arabian medical graduates received their degrees at the end of last year.

They are Dr Abdulrahman M Alqahtani, Dr Jalal S Alsaad, Dr Ali H A Alsinan and Dr Mai M Alshammari.

Also collecting her degree at the same ceremony was the first Omani graduate, Shaikha Rashid Hidaib Al Falahi, who picked up a Bachelor of Health Sciences, endorsed in Dental Therapy.

## Medical grads hit 10,000 mark

**A SPECIAL MILESTONE** was marked when the University's 10,000th medical student graduated in December. The graduate, Dr Lincoln Nicholls, was presented with a certificate at a pre-graduation prize-giving.

Nicholls (of Ngāti Raukawa) grew up in Otaki and taught at Queen Elizabeth College, in Palmerston North, before studying medicine. He recently started work as a house surgeon at Palmerston North Hospital and plans to specialise in orthopaedics or sports medicine.

Health Sciences Pro-Vice-Chancellor Professor Don Robertson says reaching the 10,000th student mark was a special event in the history of the University's Health Sciences Division. "Otago has an internationally respected reputation and a long history as a provider of medical training. We are delighted to have educated so many talented and dedicated doctors who have made an enormous contribution to the health of the community."

## Otago's 2007 Arts Fellows

**DUNEDIN WRITER AND FREELANCE** curator Laurence Fearnley is the new Robert Burns Fellow. She will use her tenure to complete the final book in her trilogy of novels set in Southland and Central Otago.

The Frances Hodgkins Fellow is photographer Ben Cauchi, whose distinctive body of work using Victorian-era photographic processes has established him as one of New Zealand's most interesting photographic artists.

Neville Copland is the Mozart Fellow. Copland has composed soundtracks for many natural history documentaries. His work has earned a gold medal at the Prix Leonardo in Italy and top honours at four New Zealand Film and Television Awards.

Australian choreographer Katrina Rank is the Caroline Plummer Fellow in Community Dance. Rank has worked in community dance since 1994 and gained her PhD from Deakin University in 2001. Her fellowship project involves developing a solo dance work for untrained older performers from the community.

## Council members elected

**THE UNIVERSITY'S COURT** of Convocation has elected Judge Oke Blaikie of Nelson, Lorraine Isaacs of Dunedin and Michael Sidey of Christchurch to a four-year term on the University Council. Isaacs and Sidey are both sitting councillors. Representatives elected by academic staff are Dr Marilyn Duxson from Anatomy and Structural

Biology and Professor Tony Wheatley from Physiology. Wheatley is also a sitting councillor, as is the third academic staff representative Professor Sarah Todd.

General staff elected Margaret Morgan, director of policy and programmes in the Health Sciences divisional office. The staff representatives also sit for a four-year term.

## Otago in top 100

**OTAGO HAS BEEN RECOGNISED** as one of the world's top 100 universities. The University ranked 79th equal in *The Times Higher Education Supplement's* 2006 list of the world's top 200 universities.

The world university rankings were topped by Harvard University, followed by the University of Cambridge and the University of Oxford.

## MBA still on top

**THE UNIVERSITY'S SCHOOL** of Business has again been named as the leading provider of MBA programmes in New Zealand in 2006, repeating its 2005 performance.

The Economist Intelligence Unit – the business arm of The Economist Group which publishes *The Economist* newspaper – named the Otago MBA in its top 100 MBA programmes. It was the only New Zealand MBA to be mentioned in the rankings.

## Heritage Festival

**OTAGO MUSIC** is a feature of the Dunedin Heritage Festival taking place in March 2007. And not just any music, but the compositions of 10 of the University of Otago's Mozart Fellows.

The University's Music Department is gathering together a group of living fellows including Anthony Ritchie, John Rimmer, Gillian Whitehead and Martin Lodge. Their music, along with that of the late Anthony Watson, will feature in a special concert on Thursday 22 March at Marama Hall.

The Mozart Fellowship was established 38 years ago to give composers and performers the opportunity to practice and advance their art.

The five-day Heritage Festival, celebrating Dunedin's innovative and vibrant past, showcases music in Dunedin over the ages.

The University of Otago is actively involved with a series of events being held in Marama Hall. Details of the festival programme can be found at [dunedinheritagefestival.co.nz](http://dunedinheritagefestival.co.nz)

## Appointments

Professor **Helen Nicholson** (Anatomy and Structural Biology) as Dean of the Otago School of Medical Sciences.

Professor **Sarah Todd** (formerly of Marketing) as the University's first Pro-Vice-Chancellor (International).

Professor **Mike Eccles** (Pathology) to the New Zealand Institute for Cancer Research Trust Chair in Cancer Pathology.

Professor **Robin Olds** (Pathology) as the next Chief Executive of the New Zealand Health Research Council.

Professor **Carolyn Burns** (Zoology) and Professor **Harlene Hayne** (Psychology) have been appointed to a newly-established National Science Panel consisting of top science leaders in New Zealand.

**John Ward** (BCom 1975) was elected Pro-Chancellor by the University Council. He replaces **Bruce Aitken**, who has stood down from the Council after 22 years of service.

## Obituaries

Emeritus Professor **Agathe Thornton** (95). A respected teacher in the Classics Department (1949-1975), she made an important contribution to the understanding of Māori creation narratives.

Dr **Harry Morton** (81). An influential historian and engaging lecturer who wrote many popular works on New Zealand subjects, Morton was a member of the History Department from 1966-1984.

**Malcolm Mills** (28). A technician in the Computer Science Department since 1998, Mills was noted for his efficiency and helpfulness.

Professor **Ian McDonald**. A lecturer in Medicine 1962 whose clinical and experimental neurological work revolutionised understanding of multiple sclerosis. In 2000 he received an HonDSc from the University.

**Scott Greaves** (23). A technical trainee in the Psychology Department noted for his volunteer service in the community.

Dr **Franc MacNamara** (90). An associate professor in the Microbiology Department, of which he was a member from 1962-1972.

## Achievements

Psychology senior lecturer Dr **Jamin Halberstadt** was awarded the New Zealand Association of Scientists' Research Medal for outstanding research in social psychology. He also received the University's Rowheath Trust Award and Carl Smith Medal for 2006.

Ophthalmology senior lecturer **Gordon Sanderson** won the Dunedin School of Medicine's senior staff award for quality in teaching.

Accountancy and Business Law lecturer **David Sim** won the 2006 OUSA Teaching Award, while Dr **Anne Bray** (Donald Beasley Institute) won the OUSA's Supervisor of the Year Award.

Professor **Terry Crooks** (Education) was made an Honorary Fellow of the New Zealand Education Institute in recognition of his significant contributions in educational assessment research.

Law students **Marcelo Rodriguez Ferrere** and **Daniel Pannett** won the Mahony Cup in last year's national family law mooting competition.

**Brant Backlund** and **Thassilo Franke**, graduates of the University's Natural History Filmmaking postgraduate course, won the Newcomer Award at the Wildscreen Festival 2006 in the United Kingdom for their natural history film *Exhuming Adams*.

*Longfin* by fellow graduates **Lindsey Davidson** and **Melissa Salpietra** won the Best Newcomer Award at the third Annual Montana CINE International Film Festival.

## Scholarships/fellowships

Associate Professor **Biman Chand**, of the University of the South Pacific, is the University of Otago's first Ratu Sir Kamisese Mara Fellow. Otago established the visiting fellowship to strengthen ties between the two institutions.

**Holly Walker** (BA (Hons) 2005) was selected as a Rhodes Scholar. At Oxford, she intends undertaking an MPhil in development studies.

Professor **David Fergusson** (Christchurch) was made a Fellow of the Royal Society of New Zealand (FRNZ), and also an Honorary Fellow of the New Zealand Psychological Society (Hon FNZPs.S).

Professor **Rick Sibson** (Geology) was made a Fellow of the American Association for the Advancement of Science for distinguished contributions in the study of fault rocks and mechanisms.

Biochemistry student **Daniel Garama** has gained a Te Tipu Putaiao Fellowship from the Foundation for Research, Science and Technology. The three-year funding will support his PhD research into the compounds that affect roe colour and flavour in kina.

Dr **Chris Pemberton** (Medicine, Christchurch) and Dr **Yiwen Zheng** (Pharmacology and Toxicology) have received four-year Sir Charles Hercus Health Research Fellowships.

Human Nutrition PhD graduate **Francesca Crowe** received the prestigious Girdlers' New Zealand HRC Fellowship to Green College at Oxford University. Crowe will study the connection between dietary fat intake and prostate cancer.

PhD candidate **Rebecca Lilley** (Injury Prevention Research Unit) received an ACC Career Development Postdoctoral Fellowship to research the determinants of occupational injury and ill-health.

Professor **Wickliffe Abraham** (Psychology) was awarded a prestigious James Cook Research Fellowship to pursue his groundbreaking research into the brain's learning and memory mechanisms.

## Professorial promotions

The following staff have been promoted to professor: **Chris Ackerley** (English), **Rex Ahdar** (Law), **Roger Bartlett** (Physical Education), **Tony Blakely** (Public Health, Wellington), **Richard Cannon** (Oral Sciences, School of Dentistry), **James Higham** (Tourism), **Steve Jackson** (Physical Education), **Wing Lai** (Education), **Robert Patman** (Political Studies), **Richie Poulton** (Preventative and Social Medicine), **Murray Skeaff** (Human Nutrition), **Sarah Todd** (Marketing) and **Tim Wilkinson** (Medicine, Christchurch)

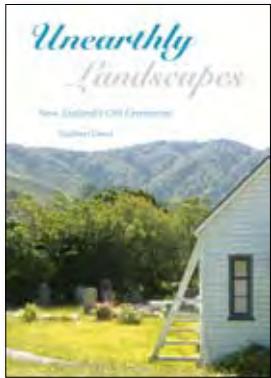
## Honorary doctorate

In December the University conferred an Honorary Doctor of Laws on Professor **Malcolm Grant** (LLB 1970, LLM 1973, LLD 1986), the President and Provost of University College London.

## New Year Honours

New Year Honours appointment to the Order of New Zealand – ONZ: Emeritus Professor **Lloyd Geering** (BA 1939, MA 1940, HonDD 1976).

Appointments to the New Zealand Order of Merit – CNZM: **Ian Farrant** (BCom 1966); **Graham Fortune** (BSc 1962, MSc 1963); Emeritus Professor Graeme Fraser (BA 1961, MA 1963); Emeritus Professor **Anne Smith** (BHSc 1964, BA 1966). ONZM: Dr **David Clews** (MB ChB 1981); Dr **Farah Palmer** (BPhEd (Hons) 1994, PhD 2000). MNZM: Dr **Patrick Beehan** (MB ChB 1961); Dr **Tenick Dennison** (MB ChB 1952); **Andrew Drummond** (Frances Hodgkins Fellow 1980); **Warwick Duell** (BA 1970); Dr **Denis Friedlander** (MB ChB 1955); **Suzanne Muirhead** (BPhEd (Hons) 1996); **Sheila Natusch** (BA 1947, MA 1948); Dr **Dennis Pezaro** (BSc 1964, MB ChB 1968, DAvMed 1991); Associate Professor **Peter Schwartz** (Pathology); Dr **Allan White** (MB ChB 1944). QSO: **Gavin Kerr** (BA 1956, MA 1957). QSM: Dr **Owen Wiles** (MB ChB 1971, DipGP 1999); **Yvonne Duncan** (BA 1966); **Ronald Walker** (BA 1963).



## Unearthly Landscapes

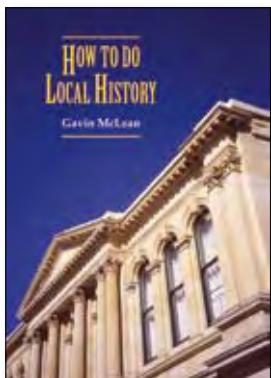
*New Zealand's Old Cemeteries*

**Stephen Deed**

**EVERY TOWN AND SMALL** settlement in New Zealand has an old cemetery. Rather than being ignored and left to moulder, these are increasingly being seen as the repositories of family and community histories and, as Stephen Deed argues in this book, they should be treasured as part of our heritage.

Using many interesting examples from throughout New Zealand, Deed discusses European and Māori approaches to death and burial at the time the two cultures came into contact, and how cemeteries developed after European settlement. He surveys different types of cemeteries including churchyard, urban, rural, goldfields, quarantine and war graves. Aside boxes provide background information on some of the country's most interesting graves, cemeteries to visit and gravestone symbolism.

Deed recently completed an MA in History at the University of Otago with a thesis on the subject of this, his first book.



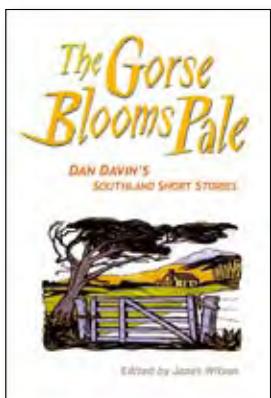
## How To Do Local History

**Gavin McLean**

**GAVIN MCLEAN IS ONE** of New Zealand's most prolific and leading historians. His latest book offers useful insights for people looking to write or commission a local history. It is a brief and lively introduction to historical research, writing and publishing.

This book explains how to use books and archives, and is full of practical tips on "reading" the landscape, on oral history and on using illustrations effectively. The last chapter takes historians and their clients through the intricacies of internet and conventional publishing, using case studies of real books to explain terminology, scheduling, design, costing and selling.

McLean is a graduate of the University of Otago and is currently senior historian for the Ministry for Culture and Heritage. His many books include *The Governors* and the co-edited *Frontier of Dreams*. He has written several local histories and, in 2006, edited *Oamaru 1878: A Colonial Town* and, with Kynan Gentry, *Heartlands: New Zealand Historians Write About Places Where History Happened*.



## The Gorse Blooms Pale

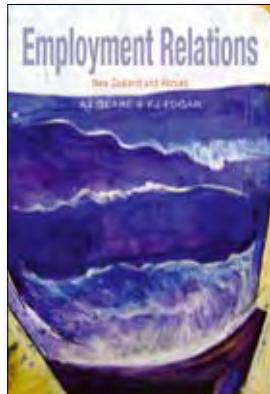
*Dan Davin's Southland Stories*

**Edited by Janet Wilson**

**DAN DAVIN, RHODES SCHOLAR**, editor of Oxford University Press, and one of New Zealand's acknowledged masters of the short story, was born in Invercargill in 1914. *The Gorse Blooms Pale* gathers together 26 stories and a selection of poems reflecting Davin's Southland experiences while growing up in an Irish-New Zealand farming family.

Comic, haunting, poetic, profound and lyrical, the stories have a regional flavour unlike any other body of work in New Zealand literature. They capture the character of an idiosyncratic rural community, its post-British social relationships and tribulations.

Janet Wilson is presently editor of the *Journal for Postcolonial Writing* and a Reader of English at University College of Northampton. She was formerly a lecturer at the University of Otago. Wilson has contributed to the *Oxford Companion to New Zealand Literature*, and edited *Intimate Stranger – Reminiscences of Dan Davin* (Steele Roberts, 2000).



## Employment Relations

A J Geare & F J Edgar

**EMPLOYMENT RELATIONS IS ALWAYS** a topical and controversial subject.

Using case studies from New Zealand and around the world, this comprehensive book describes current industrial relations, provides some historical background and introduces concepts key to the field.

Discussion includes what is an employee/employer, what are unions and their roles, industrial relations objectives, and interactions such as bargaining. The book addresses issues such as wages, work flexibility, participation and equal employment opportunities.

A J Geare is a professor in the Department of Management at the University of Otago. He has worked as a consultant to many organisations and unions, and was an adjudicator and mediator member of the Employment Tribunal. F J Edgar teaches and researches in human resource management, industrial relations and management theory at Otago.

## Recent Otago University Press titles

*Living Together: Towards Inclusive Communities*, edited by Claire Freeman and Michelle Thompson-Fawcett, October 2006.

*Amassing Treasures for All Times: Sir George Grey, Colonial Bookman and Collector*, by Donald Jackson Kerr, November 2006.

*Gothic New Zealand: The Darker Side of Kiwi Culture*, edited by Misha Kavka, Jennifer Lawn, Mary Paul, November 2006.

*A Religious Atheist? Critical Essays on the Work of Lloyd Geering*, edited by Raymond Pelly and Peter Stuart, October 2006.

*Kiwi: The People's Bird*, by Neville Peat, November 2006.

*The Governors: New Zealand's Governors and Governors-General*, by Gavin McLean, November 2006.

*The Defence of Madrid*, by Sir Geoffrey Cox, November 2006.

For further information email [university.press@otago.ac.nz](mailto:university.press@otago.ac.nz) or visit [www.otago.ac.nz/press](http://www.otago.ac.nz/press)

## Recently published books of Otago Alumni

*Strangers and Pilgrims, the von Tunzelmann Saga*, by Douglas S Coombs and Anne G Coombs, published by the authors, June 2006.

*Johannes Brahms and Klaus Groth: The Biography of a Friendship*, by Peter Russell, Aldershot, Ashgate, 2006.

*Standing Upright Here: New Zealand in the Nuclear Age 1945 – 1990*, by Malcolm Templeton, Victoria University Press, September 2006.

*A Vision of New Zealand: the Paintings of Harold Coop*, by Harold Coop, Saint Publishing, Auckland, 2006.

*Stop Smoking Easily: 5 Simple Steps to Freedom*, by Sue Wells, New Holland, 2007.

**ALUMNI:** if you have written a book lately email the editor at [mag.editor@otago.ac.nz](mailto:mag.editor@otago.ac.nz)

## Welcome to Dunedin College of Education alumni

**THE ALUMNI** and Development Office (ADO) at the University of Otago would like to extend a special welcome to alumni of the Dunedin College of Education.

The University has many alumni groups with unique histories and communities, and the ADO is committed to giving them all the opportunity to be involved in a rich, diverse and rewarding relationship with the University.

We will contact you regarding a range of topics, including information about upcoming reunions, regional alumni events and our Annual Appeal. Our appeal helps a new generation of students access the Otago experience by offering annual scholarships, bolsters the resources of the University's libraries and the ground-breaking research efforts of our staff. You will also receive the *University of Otago Magazine* which is published three times a year.

To find out more about events, reunions and to update your mailing address, visit our website at [www.otago.ac.nz/alumni](http://www.otago.ac.nz/alumni)

## 2007 Alumni Event Schedule

**MARK YOUR** diaries! Another comprehensive schedule is planned for 2007. Please let us know where you are so we can make sure you'll receive an invitation.

Further dates and details will be added in the next *University of Otago Magazine* and are available at [www.otago.ac.nz/alumni](http://www.otago.ac.nz/alumni)

Thursday 8 March  
Friday 9 March  
Thursday 12 April  
Saturday 14 April  
Thursday 24 May  
June (tbc)  
June (tbc)  
Thursday 30 August  
Friday 21 September  
Friday 28 September  
Thursday 15 - Friday 16 November

Oamaru  
Timaru  
Melbourne  
Brisbane  
Palmerston North  
Kuala Lumpur  
Singapore  
Apia  
Christchurch  
Queenstown  
Auckland

Events are also being planned for Invercargill, Wellington, Sydney, and London on dates which are yet to be confirmed.

### Suva, October, 2006



### London, November, 2006



### Wellington, November, 2006



### Auckland, November, 2006





## Alumni update

### Top DOC job

**EDUCATION GRADUATE** and former newspaper and radio journalist Al Morrison (BA, 1975) has become New Zealand's biggest property manager, following his appointment as the chief executive and director-general of the Department of Conservation.

### Environment commissioner

**POLICY ANALYST** and consultant Dr Jan Wright has been selected as the next Parliamentary Commissioner for the Environment. Wright has a PhD from Harvard University, a master's degree in energy and resources from the University of California and a BSc (Hons, 1994) from the University of Otago.

### Church music fellow

**SHIRLEY MURRAY** (MA (Hons), 1952) has become a Fellow of the Royal School of Church Music. The citation is in recognition of distinguished services to church music and is held by only one other New Zealander, Professor Peter Godfrey. It is believed to be the first fellowship given to a writer of hymn texts, and one of the very few awarded, worldwide, to a woman.

### Move to Budapest

**ANTONIA WATSON** (BCom (Hons), 1992) has recently moved to Budapest, Hungary, as general manager of a new business services and technology centre being established by global financial services firm Morgan Stanley. She is joined by her husband, Tim Bartley (MSc, 1991).

### New judge

**FORMER OTAGO** District Law Society president and Dunedin lawyer Michael Radford (LLB, 1970) has been appointed a District Court judge.

### Inaugural recipient

**WAYNE MARRIOTT** (BA, 1990) was the inaugural New Zealand recipient of the United States Department of State, International Visitor Leadership Programme "Cultural Heritage Preservation", 2006.

### Supreme winner

**FARAH PALMER**, three-time World Cup-winning captain of the New Zealand women's rugby team, was named the supreme winner of the 2006 National Māori Sports Awards. Palmer completed a BPhEd (Hons) in 1994 and a PhD in sociology of sport in 2000.

### Services honoured

**PROFESSOR BILL GILLESPIE** (ChM 1981), former Dean of the Dunedin School of Medicine, received an OBE for services to medicine. Now retired, in 2002 he was appointed founding dean of the United Kingdom's Hull York Medical School.

### Tell us your story

**WE ARE** always interested in hearing what you've been doing since you left University. If you'd like to share what's been happening in your life, we'd like to hear it.

To share your story, please send an email to [alumni@otago.ac.nz](mailto:alumni@otago.ac.nz) with "magazine" in the subject line.

### KEEP IN TOUCH

[www.otago.ac.nz/alumni](http://www.otago.ac.nz/alumni)

Updates about what's on for alumni

Your link to an online change-of-address form

Information on how to contact other alumni and reconnect with old friends

Links to virtual postcards and desktop wallpaper

## Reunions

### Dental centenary and reunion

**THE DENTAL** School is celebrating its centennial in 2007 with a variety of activities and functions throughout the year. The highlight will be a reunion gathering planned for Queen's Birthday weekend, 1-3 June. More than 1,000 alumni and staff are expected to gather in Dunedin with the following activities planned: a return of the Dental vs Medical debate, a "clinical excellence day", a research symposium, public lectures, a launch of the book *Pickerill: Pioneer in Plastic Surgery, Dental Education and Dental Research*, as well as parties, meals, tours and memorabilia displays.

Please join us as we reflect on the past and prepare for the future. To register for the reunion, go to [www.dcms.co.nz/dentalcentenary](http://www.dcms.co.nz/dentalcentenary)

### Chinese reunion

**THERE WILL** be a reunion of graduates of Chinese descent held during Easter 2007 in Dunedin. For more information please contact Dr Phillip Lowe (09) 638 7927.

### Medical class of 1968

**THE GRADUATING** Otago Medical School class of 1968 is holding a reunion at Labour Weekend 19-22 October, 2007, in Dunedin. Please contact: Brian Williams, 35 Braeview Crescent, Maori Hill, Dunedin; 03 467 2053; or [briansheila@clear.net.nz](mailto:briansheila@clear.net.nz)

### DCE 1958 intake

**A REUNION** of those who began their teacher training at the then Dunedin Teachers' College in 1958 is planned for the weekend of 25-27 January, 2008. For further information and to register your interest, please contact: Judy Gumpatzes, 140 Belford Street, Waverley, Dunedin; or [judyandgerald@actrix.co.nz](mailto:judyandgerald@actrix.co.nz)

To help the updating of the database, please supply your name as a student, your current name, address and email contact if you have one.

### Correction

Anna Santure (BSc (Hons) 2001, PhD 2006) has moved to the UK and is employed as a postdoctoral research assistant at the Institute of Zoology, Zoological Society of London. Her PhD research was supported by the inaugural Livestock Improvement Patrick Shannon Scholarship.

### Care to be Wise Annual Appeal

**THE ANNUAL** Appeal is underway and we wish to extend a big thank you to all who have generously contributed over recent months. The Care to be Wise Appeal enables alumni to maintain an active connection and contribution to this University community. It supports three crucial areas – scholarships, research and library resources. Every dollar donated helps the University to better meet the challenges of the 21st century, creating better opportunities for staff and students alike. And you can decide into which of the three areas your contribution should be directed.

To find out more or to make a gift please visit our website [www.otago.ac.nz/alumni/annualappeal.html](http://www.otago.ac.nz/alumni/annualappeal.html) or call the Alumni Office on 64 3 479 5246.

### Bequest programme

**FROM ITS** earliest days New Zealand's first university has benefited from bequests and legacies and the tradition has continued over recent years. Alumni and friends, by making a donation through a will, can be part of this lasting tradition which plays a key role in advancing Otago as a world-class university. Leaving a legacy in support of the University will enhance its future.

To find out more about the Bequest Programme, please contact the Registrar, Jan Flood, on 64 3 479 8899 or email [registrar@otago.ac.nz](mailto:registrar@otago.ac.nz)

### Tramping club "antics"

**HAVE YOU** ever traversed Fiordland in a toy boat; avoided trains in the Otira Tunnel; carried a mountainbike over a mountain, or a fridge up Refrigerator Valley? Have you ever climbed the glistening face of a glorious peak; spent a night in an ice-box with a frozen chicken; been engulfed by an avalanche and lived to tell the tale?

Otago University Tramping Club members have!

*45 Years of Antics* recalls these stories and lots more. Many were recorded in the club's annual magazine, *Antics*, and have been interspersed with photos (were you there?) and cartoons, poems and opinion pieces.

*45 Years of Antics: Adventures and Escapades of the Otago University Tramping Club* has been edited by Kelvin Lloyd and published by the Otago University Tramping Club, 2006.

For further information, please go to [www.outc.org.nz/45years](http://www.outc.org.nz/45years) or email [45years@outc.org.nz](mailto:45years@outc.org.nz)

# The capping procession?



Photo: Hocken Collections

**LONG AND COLOURFUL** – both in form and history – the University of Otago capping procession first took to the streets in 1899 when (as described in *The Otago University Review*) “a number of students drove through the streets in a dray, discouraging mixed music on mixed instruments”.

Students were celebrating. Public graduation ceremonies – banned in 1894 by the University of New Zealand because of riotous behaviour – had been reinstated. With its associated carnival and balls, capping quickly became the most important event on the University’s social calendar – and the procession led the charge, with the capping band (a motley crew at best) at the helm.

By the late 1920s shops and offices were closing for the occasion and thousands of people lined the streets to watch the collection of floats as they trundled through the city. They were accompanied by the cry of “just a penny” from outrageously-costumed students as they collected for worthy causes, a practice which had begun in 1915 with a

wounded soldiers appeal, and which continued for decades. In his book *Ritual Song of Defiance: A Social History of Students at the University of Otago*, Sam Elworthy describes how students gave immunity badges to those who donated and kissed those who did not.

“Once the procession reached the Octagon, a student dressed as the mayor gave fellow students the freedom of the city, acknowledging the custom of many retailers who gave free cigarettes, meals and drinks over capping time.”

The procession was not without controversy, however, such as in 1932 when it was banned because of drunken behaviour at the previous year’s event. And, as the good-natured schoolboy-style of humour of earlier years was overtaken by a wilder form of revelry, the procession was also increasingly used as a platform for opinions and political messages.

Reminiscing on the History of the University Unit website, former student John Mackie recalls students’ response to the “sending down” of a *Critic* editor who



Photo Supplied



Photo Supplied



fell foul of University authorities in the early 1930s. He describes how, at the head of the procession, the capping band played Handel's *Dead March* from *Saul* and formed part of a small cortege accompanying an open carriage. In the carriage was a coffin topped by an academic trencher.

"The sides of the coffin bore the words 'the professorial board' for all to see. The cortege finally reached the open areas of the Exchange where it stopped to allow the burial service to be read and the consignment of the coffin underground into the men's toilet." Mackie recalls that this prompted many letters to local newspapers ... "sacrilege, by gad".

Political debate featured strongly in the processions of the 1960s when sections of the student population were strongly opposed to the Vietnam War. The event survived this controversy and Elworthy comments that it continued to draw large crowds throughout the 1970s, at a time when capping rituals were dying out on other university campuses.

Of the 1975 procession *Critic* reported that "there were many pub-crawlers, very few of them sober, but a great time was had by all with a minimum of incidents".

But by the 1980s enthusiasm had waned and it was finally abandoned in 1987 due to a lack of student support.

The tradition has not been lost forever, however. In 2001 it was resurrected in the guise of the Scarfie Parade. Then OUSA social activities manager Rob McCann realised that students needed motivation. He and his team rallied the support of the Residential Colleges and, with the help of sponsorship, the students from each college were given \$100 to decorate a themed truck or trailer.

During the May capping celebrations, the Scarfie Parade now leads graduands along George Street on their formal march to the Town Hall for graduation.

*Karen Hogg*



## Stopping cancer where it starts

Professor Anthony Reeve is trying to second-guess an unpredictable killer.

Reeve, head of the Cancer Genetics Laboratory at the University of Otago, is battling cancer at a genetic level, trying to understand more about how it starts.

Over three decades he has been part of many world-leading breakthroughs.

Early discoveries led to revelations in Wilms tumour and colon cancer, and have helped explain why some families and some races are more or less susceptible to the disease.

In 1998, the research team led by Reeve's colleague Dr Parry Guilford identified a gene mutation in an extended Māori family with high rates of diffuse gastric cancer. While Reeve and his team have won a raft of international accolades and awards for their ground-breaking work, he says being able to tell this stricken family why generations of them had suffered similar fates was a "real buzz".

Now the aim is to try to predict what cancers will do, so doctors can offer patients the most suitable treatments.

The latest research will put New Zealand at the forefront of emerging technologies and could revolutionise medical practice in the 21st century.



The University of Otago, first in research.\*

[www.otago.ac.nz/news](http://www.otago.ac.nz/news)

\*MORST, Ministry of Research Science and Technology Report 2006