UNIVERSITY OF A ISSUE 22: FEBRUARY 2009 ANNETTE BAIER: "LIVING GENIUS" THE CREDIT CRUNCH: WHAT HAPPENED? OTAGO TAKES LEAD IN GENOMICS REVOLUTION DARE TO BE DISOBEDIENT? UNIVERSITY OTAGO NEW ZEALAND

TOTALLY WIRED

The Intelligent Choice for the Quality Conscious

the well tempered turntable

An exquisite example of intelligent engineering and design. Whether you're already a vinyl enthusiast or joining the revival you'll find the 'Amadeus' makes music like nothing you've heard before. Options from \$4400.



networks

The new Tivoli NetWorks Global radio brings you over 20,000 crystal-clear stations and podcasts from anywhere in the world. All it needs is a broadband connection, which can be wireless. It's also the best sounding FM radio and you can connect your iPod as well. NetWorks is capable of streaming sound around the house and has a second speaker option for stereo. Being the size of a bookshelf speaker the sound is wonderfully rich. The remote controlled menus are easy to use and NetWorks looks gorgeous in Walnut, Cherry or Wenge finishes, \$995.



perreaux

Buy NZ Made. Simplify & focus. The minimalist design of the ultra compact Silhouette range deliverers exceptional clarity of sound and includes individual solutions such as the USB DAC and headphone amp. The new éloquence integrated amps are the finest expression of Perreaux's MOSfet power heritage with advanced audio refinement and features.



www.totallywired.co.nz

VISIT Totally Wired in Dunedin's historic Stuart Street Terrace Houses. EXPLORE our web site. CALL or email us for information.

John Ransley BSc (Hons) Otago and Sharon Guytonbeck BA Otago.

Totally Wired Ltd. The Terrace Houses 217 Stuart Street, DUNEDIN email info@totallywired.co.nz www.totallvwired.co.nz Phone (+64) 3 479 0444 NZ Toll Free 0800 909 101

Totally Wired support the World Wide Fund for Nature. Choices made today will determine the future.

Become design conscious, consume less and help protect the environment.



Photo courtesy of Will Rayment®

University of Otago Magazine

A magazine for alumni and friends of the University of Otago

Issue 22 ~ February 2009 ISSN - 1175-8147

EDITOR Karen Hogg DESIGNER Peter Scott CONTRIBUTING WRITERS Simon Ancell

> Nigel Costley Terry Crooks Rick Garside Linda Hobbs Karen Hogg Grant McIvor Nicola Mutch Ainslie Talbot Rebecca Tansley Kerrie Waterworth Mark Wright Nigel Zega

PHOTOGRAPHY Sharron Bennett

Ross Coombes Alan Dove Ken George Bill Nichol Graham Warman

COVER Professor Annette Baier Photo: Bill Nichol

ADVERTISING Ryan Helliwell

APN Print PRINTING

CIRCULATION Office of Development and Alumni

Relations

To update or change delivery address

Telephone 0800 80 80 98 Email magazine@otago.ac.nz

Web www.otago.ac.nz/alumni/changedetails

Editorial contact details

University of Otago Magazine Marketing and Communications

PO Box 56 Dunedin New Zealand

64 3 479 8679 Telephone 64 3 479 5417

A UNIVERSITY OF OTAGO

4

Vice-Chancellor's comment

5

Crunch time!

The global credit crunch: what happened?

10

Up to speed

The New Zealand Genomics Research Infrastructure

14

Philosophy for life

Otago alumna Professor Annette Baier

17

Captain Jack

Emeritus Professor John Mackie

20

Opinion

Setting standards for school achievement

22

Advancement

The Centre for Peace and Conflict Studies

25

The acid test

Associate Professor Abby Smith and ocean acidification



29

Hocken legacy

30

InBrief

Academic highlights

36

Chancellor farewelled

Lindsay Brown steps down

38

UniNews

40

UniClippings

42

Books

44

Alumni news

50

Whatever happened to ...

Student protest?



VICE-CHANCELLOR'S COMMENT



"Youth must have its fling." Residential universities all over the world have to cope with boisterous behaviour and I often hear alumni recalling with delight the high jinks they indulged in. These episodes were usually good-humoured and civilised compared with some other places and times.

At Oxford 100 years ago, for example, Maurice Bowra reported that "it was a common amusement on summer evenings to take the furniture from a man's room and burn it. The victim need not necessarily be unpopular or have come from the wrong school; what counted was the thrill of incendiarism".

As the University of Otago grew rapidly in the 1980s and 1990s, a small minority of students began to adopt patterns of behaviour that were not so much boisterous as loutish and antisocial. This impacted on other students, on staff and on the Dunedin community. The University was criticised for not doing more to curb such disorder, although the extent of the University's powers was unclear. By the time I became Vice-Chancellor in 2004, it was clear that the antisocial behaviour of a small minority was becoming a threat to the enjoyment of other students and to the reputation of the University.

I am pleased to report that there has been a dramatic change for the better. In 2005 and 2006, Professor James Higham convened two working parties (including student representatives) which assessed the problem and proposed solutions. Among a range of measures adopted were the introduction of a Code of Student Conduct and the employment of Campus Watch teams.

Some critics portrayed the Code of Student
Conduct (which now forms part of our Discipline
Regulations) as an assault on human rights, but it needs
to be remembered that no one is obliged to join this
University. Students elect to become members of an
academic community, and membership involves mutual
responsibilities as well as rights. During the last two
years breaches of the code have, where appropriate, led to
disciplinary action. No one has questioned the legitimacy
of actions taken under the code, and we believe that most
people have regarded the sanctions as fair and reasonable.

Campus Watch involves over 20 staff in teams who patrol the North Dunedin campus precinct 24 hours a day, seven days a week. Their role is mainly pastoral and they have undoubtedly helped to enhance the quality of campus experience for students making the transition from residential colleges to flatting. The aim is to promote the best aspects of student life at Otago, so care was taken to select staff who are friendly and approachable.

As well as being welcomed by most students, these measures have led to a steep decline in antisocial incidents, which has been noted with satisfaction by the police, the fire service and the wider community. One would have to be naīve to imagine that there will be no relapses in the future, but it was pleasing to read a recent editorial in the local newspaper – previously a harsh critic of what it saw as University inaction. Under the headline "Getting over it", the ODT concluded: "The speed of the 'campus culture change' has surprised almost all concerned."

Professor David Skegg Vice-Chancellor - University of Otago

havid Skegg

Crunch time!

ECONOMIC HISTORIAN PROFESSOR RICK GARSIDE CANVASSES
THE EVENTS THAT LED TO THE GLOBAL CREDIT CRUNCH: WHAT
HAPPENED, WHO IS TO BLAME, WHERE DO WE GO FROM HERE?

WHEN MY BOOK *Capitalism in Crisis* was published in 1993, little did I expect that, within a decade and a half, pundits would be declaring the capitalist system – or more precisely financial capitalism – almost moribund. Yet, during the latter months of 2008, it seemed that financial Armageddon had arrived.

From the US to the UK, to Europe, Hong Kong, Australasia, Hungary, Argentina, Iceland and beyond came urgent pleas for national and international funding to safeguard not only banks, but huge corporations, social welfare and, in some cases, political stability.

Suddenly everyone was made aware of banking liquidity, a credit crunch, inter-bank lending rates. Businesses and pension funds were at risk because of the supposed profligacy of get-rich spivs in Wall Street and beyond.

What had happened? Who was to blame? Were we witnessing the unfolding of a series of tragic events or

the exposure of deep flaws in the capitalist structure? Balanced assessment was at a premium when all eyes were on whether one's savings were safe.

It is time to gain some perspective.

Financial turbulence has been an endemic feature of capitalism for centuries. Britain was punctuated by banking crises during the heyday of its economic growth in the 19th century. Analysts of manias and crises from the mid-18th century and beyond have discerned common features – a series of events that alter the economic outlook; opportunities for profit are seized upon, but exuberance or irrationality spur excess. After a while there is a rush to reverse the trend before it produces panic, but this results in a drastic fall in the prices of whatever assets drove the financial bubble in the first place.

Even if we limit ourselves to recent decades, there were 117 episodes of systemic banking crises spread



over 93 countries during the years 1970 to 2002. Notable examples were in Norway, Finland and Sweden in the early 1990s, and in Japan during that decade. All were associated with poor financial deregulation, excessive real-estate borrowing, and the collapse of consumer spending and output once asset bubbles were pricked.

Faced with financial meltdown, Sweden acted promptly to take over its troubled banks and, in consequence, recovered relatively quickly. Japan, on the other hand, engaged in denial and forbearance and suffered a decade and more from overindebtedness, deflation and lower-trend growth.

The spectre of financial turmoil, stock market collapses and global recession naturally prompts historical comparisons, and there are some lessons from history, both from the very recent past and from the 1930s. The most telling is the impact of a crisis of confidence.

In economic folklore the 1929 Wall Street crash has become synonymous with the Great Depression, but it is worth remembering that economic slowdown was already underway in the US before the stock market crisis. What transformed an economic recession in America into a worldwide depression was the fragile operation of financial markets.

A wave of bank failures occurred in 1930 as depositors withdrew their money midst rumours about the health of the financial system. Perversely, the Federal Reserve Bank – America's central bank – raised interest rates, thereby restricting the supply of credit. The Fed only reversed its policy in April 1932, but such was the continuing crisis of confidence that bank failures continued. Roosevelt had to declare a brief period of bank closure in March 1933. More than 2,000 banks never re-opened.

By the summer of 1931, the solvency of many European banks was threatened by deflationary pressure and the rising scale of indebtedness. Austria's largest bank, the Creditanstalt, collapsed in May 1931. By July 1931 German commercial banks were also facing a crisis of confidence. Industrial debtors defaulted on their loans and the German people began withdrawing their money from local banks.

Other countries in the early 1930s were forced to shore up their reserves because they were obliged, under the rules of the gold standard, to maintain a fixed exchange rate. A scramble for liquidity ensued. Governments tried to repatriate funds from abroad, but found it increasingly difficult in the wake of banking uncertainties and mounting panic in financial circles.

The problems of debtor countries quickly spread the crisis to creditor nations. Financial contagion, in other words, turned an economic crisis into a global depression as authorities tightened budgets and spending in a vain effort to sustain confidence and exchange rate stability.

The problems of the more recent financial meltdown began in the early 1970s. In 1971 Nixon suspended the US dollar's convertibility into gold in an effort to force other countries to appreciate their currencies and provide welcome relief to America's mounting trade deficit. This, effectively, put an end to the fixed-exchange-rate system developed at Bretton Woods in 1944. Now currencies could float and the door was open to large international shifts in capital in search of competitive returns.

Japan proved the classic example of an accident waiting to happen. Financial liberalisation during the 1980s had encouraged Japanese corporations to seek out international sources of funds, rather than rely upon traditional bank-centered finance. Banks responded by courting a wider customer base, but they began lending to relatively unknown clients and for increasingly risky forays into land and equity speculation.

Shorn of adequate monitoring, but fuelled by a growing capacity to boost low-cost lending against ever-increasing, though dubious, collateral values, a financial bubble engulfed the country. It took a dramatic and sudden reversal of monetary policy to end the mania of speculative excess.

The result was previously-unheard-of bank failures and a massive overhang of non-performing loans. The situation was made infinitely worse by the reluctance of the Japanese authorities to face the reality of the financial chaos into which the country had descended. For years, the Ministry of Finance refused to make public the scale of the financial crisis, while the Japanese government continued to safeguard ailing banks as part of its previous legacy of mutual support. The country paid a heavy price in prolonged deflation and low growth.

It is clear, in retrospect, that the financial meltdown of 2008 had origins much deeper than suspect lending in America. It lay in a decade or more of extraordinarily cheap money created by vast imbalances in the global economy, and fed by the huge exchange reserves and current account surpluses of countries such as China (and Japan before it).

With China saving nearly half of its gross national product, abundant capital inflows, especially to the US, helped reduce the cost of borrowing. From 2001 global long-term interest rates fell. Lending to households ballooned in the US, Spain and the UK, often to borrowers who would, in earlier years, have been excluded from, or rationed within, the loans market.

Banks and institutional investors sought higher and higher returns via the use of increasingly dubious and risky financial transactions, especially in structured products geared to real-estate lending – just as Japan did in the 1990s. Sub-prime loans, in particular, offered attractive fee income without the need to raise liabilities to cover the asset. The asset price bubble in real estate quickly spread to equities.

The global situation down to 2007 mirrored Japan's experience in the 1980s. Monetary policy, especially but not exclusively in the US, was too loose for too long. Central banks failed to monitor adequately the risks of opaque financial instruments and rising home-owner indebtedness.

Household debt, as a percentage of total disposable income, had risen in the US from just under 80 per cent in 1986 to 100 per cent in 2000, to 140 per cent by 2007. In Britain the equivalent figures were 120 per cent in 2000 and 175 per cent in 2007.

Years of low inflation and economic stability had reduced the perception of risk. Economic purists argued that, in a free market, financial deregulation would allow capital to flow to its most productive use. Instead, financial innovations responded to the low-interest regime and the

"It is clear, in retrospect, that the financial meltdown of 2008 had origins much deeper than suspect lending in America."



February 1932, a demonstration by the unemployed in Dunedin's Queens Gardens. "Thus far the industrialised world has been spared the extremes of the Great Depression."

political pressure to boost spending and home ownership, fuelling a credit binge.

Banks, which previously held loans on their books, began to pool and sell mortgage-backed assets in repackaged form, often several times over. This practice of "securitisation" encouraged "arm's-length" transactions, with investors buying bundles of loans linked to unknown customers with whom they had few direct dealings.

When interest rates began to rise and house prices fall in the US in 2007, the scale of the potential losses arising from lending to those with little hope of repaying in more straightened times – the sub-prime market – became unnervingly clear. It was even more frightening when it transpired that more than half of the assets backed by sub-prime loans had been off-loaded, mainly to European banks.

Then a crisis of liquidity turned into a crisis of solvency. As banks in rich countries became seriously short of capital they began to hoard cash, refusing to lend to each other. This forced down asset prices and consumer spending further. A multi-country banking crisis threatened a global economic catastrophe. With banks unable and/or unwilling to lend to each other, and with the public fearful of financial insolvency, corporations and small businesses were caught in a downward debt deflation.

Lenders stopped lending and those in debt stopped spending, threatening jobs, investment and growth across the global economy. With flows of capital between banks and companies severely curtailed, and with major exporting countries aghast at the prospect of consumer markets

like America denied access to spending power, it is little wonder that governments proved willing to print money, to buy toxic assets and to engage in quasi-nationalisation of their banking sectors. Significantly, the US quickly turned away from "merely" buying distressed mortgage-backed securities towards buying equity stakes in troubled banks.

Ultimately the spectre of the 1930s – massive job losses, collapsed output and a prolonged depression – was too much to bear. In the early 1930s governments were hobbled by the neo-classical straightjacket of balanced budgets and fiscal conservatism. But in 2008 few authorities were prepared to allow the market to punish excesses via bank failures and protracted decline.

The virtual nationalisation of large sections of the financial system and the huge injections of liquidity witnessed in the US, the UK and elsewhere reflected an important lesson of history – banking crises need prompt and decisive government action using public money either to recapitalise banks or to take over toxic debts.

A collapse of confidence can usher in deep and lasting depression at a cost that cannot easily be weighed against the niceties of fiscal probity. That is why governments in the UK and the US (the bastion of free enterprise) have taken unprecedented steps to move beyond extending bank liquidity to actually buying bank equity in order to safeguard the flow of funds to businesses, large and small.

Employment and growth depend on levels of financial assistance beyond mere crisis containment, and only governments can provide that quickly.

State vs market?

THE DETAILS of panic, crisis and emergency international gatherings kept observers transfixed in late 2008. Graphic though such events were, their significance may yet prove more fundamental in shifting the parameters of political economy throughout the industrialised world.

Some years ago a reviewer of my work described me as an "unreconstructed Keynesian". If it was meant as criticism, I took it as a compliment. Keynesianism, it now seems, is fashionable again.

Keynes, arguably the most influential economist of the 20th century, warned that the possibilities of financial collapse and panic are always present and that, unless governments intervene to offset the reluctance of financial institutions to lend either because of irrational exuberance or panic, then there is every likelihood that countries can slide into deep and lasting depression.

But by the 1970s economic revisionism was afoot. The new mantra – mistaken in my view – was that stability and prosperity could best be delivered by robust monetary targeting, and that proactive government fiscal policy was likely to damage, not sustain, economic growth.

However, because of the latest international financial meltdown, we are beginning to reconsider the roles of the state and the market. Dysfunctional credit markets, the aftermath of loose monetary policy, and the speed by which a financial crisis turned into a crisis of solvency threatening output, growth and jobs, have focused attention on the role of government in propping up demand by fiscal means, even at the expense of inflation.

The methods by which governments might act would differ across countries in scale and nature – cutting taxes or raising public expenditure, for example. And there would always be risks – tax cuts can lead to increased saving rather than expansionary spending, and public-expenditure hikes are difficult to time alongside the economic cycle and even more difficult to reverse if need be.

Moreover, it is well known that Japan's fiscal stimuli in the 1990s and beyond did little to boost its economic performance. But it was constrained by a deep reluctance of the population to spend borne of uncertainty and by the difficulty of shedding commitments to low productivity, but politically sensitive, vested interests.

Western governments have to be more proactive if they are to avoid Japan's fate of prolonged slump, erosion of confidence and low growth.

That said, we need to keep things in perspective. Thus far, the industrialised world has been spared the extremes of the Great Depression. The American economy shrank by more than a quarter between 1929 and 1933; unemployment rose to 25 per cent and there were runs on banks.

Western nations, in particular, were brought to the brink in 2008, but there were no catastrophic bank runs by depositors. Nonetheless, the drying up of credit – and with it spending – so threatened the global real economy that governments found themselves obliged to underwrite aggregate demand. Mercifully, the authorities, reluctant at first, but humbled by economic realities, proved determined to avoid the restrictive and disastrous policy errors of the past.

Even so, this is not the time for governments to heed the socialist call to take control of the commanding heights of the economy. Though past deregulation and privatisation brought the US and the UK to the edge of financial collapse and deep depression, what is required is not far more regulation so much as more finessed and focused intervention to manage capitalism better. Remember that both Japan and the US before the crisis were heavily-regulated economies. That did not protect them from serious policy errors.

Since the 1970s money capital has emerged as an especially dominant feature of modern capitalism. It has lured individuals, corporations and policymakers into the heady world of easy money and lax credit, the volatility of which has shattered confidence, liquidity and the stability of economic activity across the industrialised world.

Whether states can rescue capitalism from its worst excesses remains to be seen, but belief in the "invisible hand" of the market has certainly been badly bruised. When Keynes advocated deficit spending in the 1930s, his goal was to stimulate demand through public spending to a level where business confidence was sufficiently restored that private investment would thereafter take up the slack.

What we need now is a strong political will to reinvigorate free market capitalism so that economic agents are willing to engage in risk-taking investment and innovation in a stable macroeconomic environment. Growth and stability depend upon it.

Rick (William Redvers) Garside is Professor of Economic History. He has published widely on the national and international impact of the Great Depression, on the political economy of economic growth and on Keynesian macroeconomic management. He is currently completing a study of the rise and fall of the modern Japanese economy.

"... what is required is not far more regulation so much as more finessed and focused intervention to manage capitalism better."

FEATURE



Up to speed

THE NEW ZEALAND GENOMICS RESEARCH INFRASTRUCTURE WILL ADVANCE GENETIC RESEARCH AND TECHNOLOGY IN THIS COUNTRY, ENABLING OUR SCIENTISTS TO KEEP UP WITH THE GENOMICS REVOLUTION.

THE DIRECTOR of the University of Otago's Cancer Genetics Laboratory, Professor Anthony Reeve, remembers 30 years ago one of his professors being very proud because he had 65 units of DNA.

"I think he had worked on that for about six months to a year," Reeve recalls. "But you can now sequence in excess of a million units, or bases, of DNA in a matter of hours, so it's gone up by many orders of magnitude. It's a bit like computing power – the rate of increase has been exponential."

That incredible rate of change is a blessing to researchers in biomedical, agricultural and horticultural science. But there is also the underlying danger that New Zealand's small, but productive, research community, which has for so long punched above its weight, risks being left behind if it can't keep up with changes in technology.

To safeguard against that a New Zealand Genomics Research Infrastructure is being established to accelerate the progress of genetic research and technology in New Zealand.

The initiative brings together scientists from three universities – the University of Otago, Massey University and the University of Auckland – and one Crown Research Institute (CRI), AgResearch. It also has support from another four universities and six CRIs.

Otago has taken the lead role in getting the concept up and running. Reeve, departmental colleagues Associate Professor Tony Merriman and Dr Mik Black, and Dr Rachel Elliot from the Enterprise Office began developing a proposal, working closely with the Research Infrastructure Advisory Group which had been formed by the Ministry of Research, Science and Technology (MoRST).

The infrastructure will receive \$40 million in government funding over the next nine years, alongside parallel investment from collaborating institutions.

"It is very, very difficult for researchers here to purchase large equipment. Often what we find is that in five or eight years it is out of date and we usually don't have the funds to buy new equipment so it becomes very difficult to function," says Reeve.

"The whole analysis of genomes and genetics has changed hugely over the last decade and there has been fierce competition from technologies which are getting faster and faster all the time. Over the last three years, in particular, there has been a new way of analysing genes which is mindbogglingly fast."

Reeve says while the term "infrastructure" tends to suggest buildings and equipment, the reality is that this new technology generates huge amounts of information that requires specialised analysis by people working in the field of bioinformatics.

"This infrastructure is not just a collection of fancy-looking nerdy machines with flashing lights – it also involves human capital because the analysis of the genetic material is now so incredibly complex and putting these analyses into a biological context is essential," he says.

"I think it was very foresighted of MoRST to realise that people were part of this infrastructure. These days you can't run a large piece of scientific equipment without highly specialised people to work it – to take the data and analyse it."

One of the infrastructure's strengths is the fact that each of the institutions brings its own area of expertise to it.

Otago has expertise in all areas, including genome sequencing, bioinformatics and gene arrays – technology used to examine genetic variations. This is complemented by the strong expertise Massey University has in sequencing, genomics and bioinformatics, and the University of Auckland and AgResearch's expertise in genomics and bioinformatics.

"I think New Zealand scientists are remarkably good at working together because we are stuck on this small remote island, thousands of miles from the centre of the scientific universe, which is basically North America.

"Pooling equipment and skilled people will engender a critical mass which is going to be really important."

Reeve says having these resources available in New Zealand will make it far easier to generate health research that is relevant to our distinctive population characteristics.

"While the diseases we are dealing with are seen the world over, knowledge of our own population's genetic make-up can help us find new solutions to problems that have genetic causes, such as obesity, cancer and heart disease.

"We also have our own unique primary sector, so knowledge of the genetic make-up of animals and plants allows substantial improvement in product quality and productivity."

Otago is well placed to benefit from the infrastructure, he says. It already has a particularly strong reputation in human genetics, including paediatric genetics, cancer genetics and microbial genetics, all led by internationally-renowned investigators.

Reeve's own research into the genetics of colorectal cancer relies heavily on genomics to understand what has gone wrong at the gene level.

"This can help lead us to better diagnostic methods, better prognostic methods and identifying new targets for drugs – so it's extraordinarily powerful."

New Zealand, non-Māori women have the highest

incidence of colorectal cancer in the world with around 2,500 new cases each year.

"One of the big issues is providing better predictive tools. If you can figure out those individuals for whom the disease is particularly aggressive then that may warrant using some of the increasingly expensive new therapeutics.

"By using genomics we would like to be able to personalise the type of treatment the patients get."

His team has identified molecular signatures that can predict outcome and they are now trying to refine those. They have also found that the immune response plays a big role.

"It could be genetically predetermined – for example, some people might be born with a better host immune response and a better immune system – or it could be a function of environment, where an environmental factor is influencing this immune response."

The Cancer Genetics Laboratory has an impressive record in this type of research. For example, colleague Associate Professor Parry Guilford identified a genetic mutation behind high rates of gastric cancer in an extended Māori whanau.

It was then possible to develop a blood test that is now used in a screening programme, picking up those who are susceptible to the disease and also providing peace of mind to those who are not.

Diagnostic and prognostic tools for a range of cancers are being developed for possible commercialisation by Pacific Edge Biotechnology, a publicly-listed technology company set up by the University of Otago.

Clinical applications also include pharmacogenomics – identifying the aspects of an individual's genetic make-up that affect their response to drugs.

Associate Professor Martin Kennedy, the director of the Carney Centre for Pharmacogenomics at the University of Otago, Christchurch, is examining the potential application of this knowledge to the improved treatment of a variety of illnesses.

He and his team have already been involved in the development and application of DNA tests for genes important in the treatment of asthma, inflammatory bowel disease and several other conditions. They have also identified genes and proteins that are involved in cellular responses to antidepressants.

"Pooling equipment and skilled people will engender a critical mass which is going to be really important."

Kennedy says that even something as simple as liver enzymes can affect the rate at which a drug breaks down, but current approaches to prescribing do not easily allow for individual genetic variation, so clinicians largely apply a "one dose fits all" approach.

"All complex diseases – for example, depression, rheumatoid arthritis and Crohn's disease – involve interaction between both genetic and environmental factors."

He says it is important that this sort of pharmacogenomic research takes place in New Zealand with local patient cohorts and control groups that reflect the local population.

"We need to be able to do studies on New Zealand problems and New Zealand populations," he says.

The infrastructure will also help New Zealand's primary sector. AgResearch's animal genomics principal scientist John McEwan says being able to sequence whole animal and plant genomes offers huge productivity gains worth many millions of dollars annually.

DNA sequencing can be used to make vital genetic gains in a variety of animal species and to develop cost-effective genetic tests, making it easier for breeders to improve their stock's genetic productivity.

McEwan has already worked closely with University of Otago scientists to complete the sequencing of the sheep genome, which is now being used to help sheep breeders to improve stock bloodlines.

"As part of this work, we have assembled a mammalian genome in about six months, which is a major leap in New Zealand capacity. It is probably the first to be assembled outside of the United States or Europe," says McEwan.

AgResearch's involvement in the new genomics infrastructure will allow it to develop tests across a wide range of plants and organisms, from deer grasses and crops to aquaculture species.

It will also be able to sequence bacteria, such as methanogens in the ruminant gut, which play a part in global warming, so they can reduce emissions.

Reeve says New Zealand scientists need to be able to keep up with the international play. "The technology in three years will be quite different to what it is now – I can promise you that. It will almost certainly be 10 to 100 times faster than it is today," he says.

"Being left without this technology would be a disaster. There has been such a revolution in the area of genetic analysis we can't do anything else – you either keep up or you give up."

Mark Wright

A beginner's guide to genomics

What is genomics?

Genomics specifically refers to very high-throughput technologies that allow scientists to examine the structure and function of thousands of genes at a time – 15 years ago genes could be examined only one at a time. This has led to the phrase "the genomics revolution". This revolution has given scientists fantastic new tools to examine the genes of complex organisms that include animals, plants, bacteria and humans.

What is the Genomics Infrastructure?

The New Zealand Genomics Infrastructure is about people, not just equipment. It will help make available vital state-of-the-art equipment, but it will also provide specialised people with the ability to analyse the vast amounts of scientific data generated. Over the coming year the infrastructure will become an entity with its own governing board which will have representation from the partners – Otago, Auckland, Massey and AgResearch.

Why is it needed?

Modern genomic technologies are considered vital to advancing research in health, agriculture, horticulture, biosecurity and conservation, as well as contributing to economic growth.

Biomedical scientists will be able to use genetics to better understand inherited causes of disease, providing the opportunity to develop new clinical interventions.

Microbiologists will be able to develop new ways of fighting infections in humans, animals and plants, and discover new species able to synthesise new compounds.

Agricultural scientists will be able to use the genomics facilities to select for improved traits in animals and plants, leaner meat and drought-resistant crops. Botanical geneticists will be able to better understand the genetic make-up of our native flora and fauna. This will aid conservation efforts.

Philosophy for life

PROFESSOR ANNETTE BAIER, THE ONLY NEW ZEALANDER INCLUDED IN A LIST OF THE TOP 100 LIVING GENIUSES, TALKS TO KERRIE WATERWORTH.

IT WAS 10 O'CLOCK on a spring morning in Dunedin when I arrived at the home of renowned philosopher Professor Annette Baier (née Stoop). I was to interview her following the launch of her latest book on the 18th-century Scottish philosopher, David Hume, *Death and Character*. When I commented on a large pillow in front of the living room fireplace, she reflected wistfully how it had been the favourite resting place of one of her two cats who had died the night before. She described it as a "wonderful death" for the cat seemed to know it was about to die and had climbed into her lap before taking its last breath in her arms. I thought what an extraordinary observation to make, but then Annette Baier is an extraordinary woman.

Baier was the only New Zealander to be included in a list of the top 100 living geniuses in the world, published by the British newspaper, *The Daily Telegraph*, in October 2007. The criteria used for scoring were based on paradigm shifting, popular acclaim, intellectual power, achievement and cultural importance.

Baier says she knew nothing about the list until a Christchurch journalist phoned her. "I thought it was a rather silly list. In the course of a professional career one comes to have a pretty fair sense of who are the great philosophers and I hadn't seen myself in that group at all," she says.

Self-deprecating and self-effacing are two words frequently used to describe Baier. The University of Otago's Professor of Early Modern Philosophy, Peter Anstey, says, "Annette's never one to blow her own trumpet or seek accolades, but she is one of the most distinguished graduates of the University of Otago's Philosophy Department. She's a very gifted philosopher and a very gifted writer, and the two don't often go together."

Baier cites Tracy Gibson, an English teacher in Hawera, as her first great influence. "It was 1945 and I remember Mr Gibson took the anthem *God Save the King* and asked 'now, what is this?'. It turned out to have a very silly and limited thought message, but I took to that way of thinking.

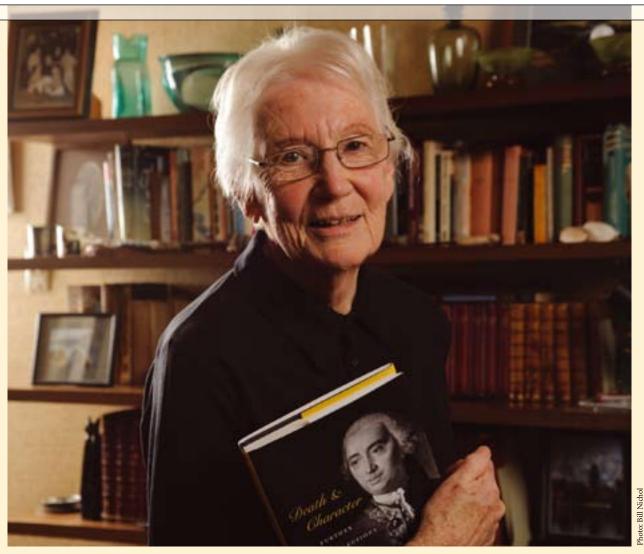
"He also introduced me to Socrates and Socratic dialogue when I was just 15 so, by the time I began university, I knew that I wanted to study philosophy. My parents thought I'd be a lawyer because I was argumentative at home, but I knew philosophy was where the enjoyment of argument could be indulged indefinitely."

Baier received her Bachelor and Master of Arts degrees from the University of Otago. In her first year she studied under Professor David Daiches Raphael. "I learnt about Hume's ethics from Raphael, but I didn't immediately concentrate on Hume as another of my teachers was Dennis Grey who taught Plato wonderfully.

"Plato was really my main enthusiasm when I won a government scholarship to Oxford, but I went on to study both Plato and Hume for the Oxford BPhil degree," she says.

However, it was during Baier's first teaching position at the University of Aberdeen that her focus shifted dramatically and permanently from Plato to Hume. "The Psychology and Psychiatry Departments were conducting experiments to find out what effect or change the drug mescaline had on the mind. I'd never had a consciousness-changing experience so I agreed to take part.

"The experimenters made me talk about Plato, quizzing me the whole time about what I was seeing. I could remember it later and knew I'd been hallucinating. The whole experience was a bad one and took away my confidence in my thinking about Plato. In retrospect, the



Professor Annette Baier: "... I knew philosophy was where the enjoyment of argument could be indulged indefinitely."

experiments shouldn't have happened. If there'd been ethics committees they would and should have forbidden them," she says.

It was Baier's colleagues who got her started on Hume. "The University of Aberdeen held regular reading parties at a stately home close to Aberdeen. I only went to one, but we read Book Two of Hume's *Treatise* in which he talks about the human passions.

"At that time Book Two was often skimmed over when people taught Hume. Usually you read the first book, in which he addresses questions about what we can know, and the third book, in which he talks about morality. It got me wondering what held the *Treatise* together," she said.

On her return to New Zealand she took up a teaching position at the University of Auckland, where former Prime Minister David Lange was one of her introductory ethics

students. She met her future husband, philosopher Dr Kurt Baier, at a conference in Christchurch.

Baier then taught at Sydney University for a year before she and her husband moved to the United States. She taught first at Carnegie Mellon and then at the University of Pittsburgh from 1973 until her retirement as Distinguished Service Professor in 1997.

"Annette had what can only be described as a stellar career in the US, making a very big contribution to moral philosophy," says Anstey. "And Kurt was one of those responsible for rebuilding the Philosophy Department at Pittsburgh which, under his leadership, became and remained one of the top philosophy departments in North America."

Otago's Professor Alan Musgrave agrees. "Kurt wrote a famous book on ethics, *The Moral Point of View*, which,

15

for decades, was required reading in just about every philosophy department in the western world, and Annette became a prolific writer, well known for her contributions to the philosophy of mind and feminist philosophy."

She became interested in feminist philosophy only after she began teaching in America. "As a New Zealander, I had never felt in any way discriminated against as a woman or needing to assert women's rights, but when we moved to the US, and I got to know my women students, I found many of them had to fight to get to university – their parents would pay for sons, but not daughters, to study. Then, at university, their male teachers in philosophy often discouraged them from doing what was seen as the 'men's part' of philosophy – logic and philosophy of science. Some of them were told there was no point trying to do it because they wouldn't succeed," Baier recalls.

"This annoyed me a lot; I started quarrelling with some of my male colleagues and giving talks and writing on the question of women's rights. I became known as a feminist, but I didn't write any straight feminist books, although I did look at Hume and his attitude to women and what he said about them."

In 1990 Baier was elected president of the Eastern Division of the American Philosophical Association delivering her presidential address, "A Naturalist View of Persons", to an audience of thousands in Boston.

"That lecture was one of the most provocatively feminist I ever gave. I knew I was offending a lot of the people who'd voted for me for president based on my previous publications, none of which had been feminist. Afterwards, women in the audience told me they cried with joy, but some men sent me very angry messages."

The essay criticised male philosophers' versions of what it is to be human and was published in the paperback version of her book *Moral Prejudices*.

The following March, Baier delivered the Tanner Lectures on Human Values at Princeton University. These lectures focused on trust, in which Baier suggested men's moral theories had put the emphasis on obligation and on contract, while women had emphasised care. The concept of appropriate trust can bridge the two. These lectures were regarded as very influential, sparking a huge literature on the subject of trust from philosophers, social scientists and economists.

Both Baiers were invited to give the prestigious Paul Carus Lectures to their peers, Annette being the first woman ever to do so. Her three Carus Lectures, "The Commons of the Mind", were delivered at the Eastern Division of the American Philosophical Association meeting in New York, December 1995. She discussed three activities we take to be quintessentially mental ones: reasoning, intending and moral reflection. Newton Garver, the Professor of Philosophy at SUNY Buffalo described "The Commons of the Mind" "as the kind of powerfully-focused philosophical statement that is likely to become a classic".

Since retiring from teaching at the age of 65 in 1997 and moving back to New Zealand, Baier has intensified her study of Hume and her literary output. "I have a book about what Hume wrote about justice coming out with Harvard soon and a book about ethics with Oxford University Press in 2010, so I am keeping busy," she says.

There are, on average, two or three publications about Hume's philosophy published each week, but Baier says she'd never rush into print. "I think you have to be very self-critical when it comes to writing about philosophy, and by that I mean you have to think very hard about what you've written and be prepared to re-write it many times after consulting others for their feedback so that you don't rush into print with ill-considered thoughts."

Anstey describes Baier as having a kind of directness, independence of mind and intellectual courage that characterises her thought and makes her stand out. Despite her being awarded an honorary degree of Doctor of Literature from the University of Otago in 1999, he believes she is undervalued in her home country.

"One reason is because most of her academic life has been spent out of New Zealand and, secondly, we don't appreciate our intellectual heritage here. Most high school students in France and Italy have to study philosophy and know who their philosophers are – both living and dead," he says.

Her enormous influence on philosophical naturalism was recognised by the book *Persons and Passions: Essays in Honor of Annette Baier*, published by University of Notre Dame Press in 2005. However, instead of wanting any sort of recognition for herself Baier would prefer that Dunedin erected a statue of Hume, honouring the man who has been the inspiration for her life's work, and his Scottish heritage.

"Hume was so much in advance of his time when he wrote his *Treatise*," she says. "Even people like T H Huxley wrote a book about Hume because he saw the seeds of Darwin in his work. Hume is remarkable for the approach he took to human nature."

Baier's book *Death and Character* is published by Harvard University Press.

Captain Jack

FORMER OTAGO MINING STUDENT, MALAYAN TIN PROSPECTOR, PRISONER OF WAR AND HEAD OF THE SCHOOL OF SURVEYING, EMERITUS PROFESSOR JOHN MACKIE HAS LED A FULL AND FASCINATING LIFE.

NOW 98 and retired to Nelson, Emeritus Professor John Mackie doesn't get around so much any more, but he's still got a mind like a steel trap, especially when it comes to fondly remembering his numerous colleagues and students.

As instigator and former head of the National School of Surveying at the University of Otago, he has been responsible for training a whole generation of surveyors, with whom he struck up many warm and enduring friendships.

"I got on well with the students because I felt I was one of them – they were my friends," he says.

Wellington's Peter Burgess, who trained as a surveyor under Mackie in the early 1970s agrees. "Jack Mackie is one of those truly memorable guys. He was always dapper, but quite at home at student parties. I remember being at one party when I was a little worse for wear and relieving myself on the lawn. Jack was doing the same while reminding me of the geodesy lecture the following day."

Mackie's career was greatly influenced by his science master at Otago Boys' High School, John Williams. "He was known as Barmy Bill or 'Bammy' as all scientists were then regarded by school boys as mad," Mackie recalls. But his advice that Mackie join Otago's School of Mines was far from crazy because it was here that he really blossomed, achieving a master's degree in Geology

(first class honours) and a Bachelor of Engineering. With only 15 students, the school developed a great sense of camaraderie and the career prospects were very good.

Great emphasis was placed on the practical aspects of mining, with the students obliged to spend a year underground as an integral part of the course. His first job in this line was during the summer vacation of 1929/30 in the Liverpool State Colliery, near Rewanui on the West Coast.

"It was a baptism by fire," he says, as his job was pushing coal trucks to keep up with the miners who were blasting and hewing the coal. The hard and dangerous work engendered a great sense of community.

"Miners are well known for being great drinkers

– it's hard work down there. You'd come up from
underground dirty and thirsty and share the big
bathhouse where you scrubbed each other's backs. It was
quite an experience for a young student," he says.

There were some real hard cases in the mines. With a shortage of experienced people here, the government imported some Italian miners.

"I remember one fellow who was always going on about how great Mussolini was and Kiwis, being Kiwis, couldn't resist teasing him about it. Incensed, one day he burst out: 'You say bugger da Mussolini, I say bugger da Harry Lauder'." There were characters back at University, too, like physics lecturer and pioneer of radio in New Zealand Robert Jack, who was something of a martinet. Mackie recalls one class where someone up the back of the lecture theatre rolled a turnip down the stairs. Undeterred, Jack kept writing on the blackboard, but had counted the steps it had rolled down and was thus able to identify the culprit who was promptly

On completion of his degrees at the end of 1934, Mackie was offered a job tin prospecting in Malaya and, within a few months, he was exploring some extremely remote parts of that country which was in those days a British protectorate. He got to know the country and the people, including the Sakai, a very primitive people who hunted with blowpipes. There was a huge amount of tin mining: on the west coast alone there were, he estimates, over a

debarred from the lecture.

and two hundred dredges.
After just 18 months
prospecting, Mackie then
joined the Colonial Service as
a mine inspector. His main
concern was with mine safety
– collapses were quite common

thousand alluvial gravel mines

- and control of the tailings. "There's a lot of tailings from alluvial mining and, if you don't keep a lid on this, there's one hell of a mess."

Mackie was keen to carry on his student hobby of rifle shooting but, in the absence of a rifle club, the best way to pursue this was to join the army volunteers. So, he joined a Scottish platoon in 1935 where, bizarrely for the tropics, they were issued with double-winter-weight kilts. He rose to the rank of captain.

"The most hazardous part of training was firing the Vickers machine gun. It would sit on a tripod and you'd sit on the ground behind it in your baggy shorts. The hot shell cases would fire out the back and up your shorts. You should have heard the yelling and swearing."

Mackie was home in Dunedin when the war in Europe was announced in 1939 and, by 1941, he was with the British forces trying to defend the Malay Peninsula. After the fall of Singapore, Mackie joined 100,000 other POWs at

the notorious Changi Prison before being transferred, after a year, to a camp in Borneo.

He was kept busy chopping down rubber trees for the cookhouse fires and a make-shift library helped to keep him and his fellow POWs mentally active. The food was atrocious: no meat, very little fruit and the rice was full of weevils. His weight fell from 70 to 41kg.

They kept a secret radio under the hearth of the cookhouse fire. "This was enormously risky for the penalty for this, like that for trying to escape, was beheading," Mackie recalls. They started to get some inkling that the tide had turned in the Allies' favour and this was confirmed in early 1945 when four American B52 bombers flew over.

The Japanese told them about the atomic bombs dropped in Japan which they complained about bitterly as being most unfair. He says that mostly the prison guards were pretty nasty – it was nothing to get a bayonet in the backside or a rifle butt in the ribs.

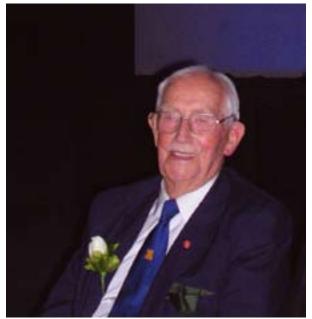
After considerable prevarication they were eventually set free by the Australian Ninth Division. "One thing I shall never forget – freshbaked crust bread with butter – it was manna from heaven. People talk about freedom, but there's nothing like freedom when you've been a POW," he says.

After the war he promptly returned to his old job as a mine inspector. The war had caused a great shortage of tin and he felt honour bound to help to clean up the horrendous mess left by the Japanese.

However, mindful of his father's failing health, Mackie resigned from the Colonial Service once the tin mining was rehabilitated. Resigning was regarded very much as "not the done thing" but he was pleased he did because his father died just a few days after he returned.

He married the late Sue Bacon, of Blenheim, in 1947 and they had two children: Andrew and Marguerite.

Mackie was drawn back to the School of Mines as a lecturer in surveying. "There's a lot of surveying in mining



Emeritus Professor John Mackie: "I got on well with the students because I felt I was one of them – they were my friends."



Mackie (centre) with students Mike Elrick (left) and Dave Scott at Maruia Springs in 1966.

– if you don't know where you are when you're tunnelling, you'll run into all sorts of problems." However, he became aware there was some ill-feeling from the local surveyors and realised that, although he was lecturing in surveying, he wasn't a registered surveyor himself. The only way to do it in those days was to become an articled cadet to an established surveyor. After seven long vacations out in the field and sitting exams set by the Survey Board, he registered as a surveyor in 1956.

An ambitious attempt to turn the School of Mines into a much bigger Faculty of Technology collapsed when it was decided that New Zealand didn't have the home-grown industry to warrant it. It spelt the end of Otago's School of Mines which Mackie describes as a great shame because "their graduates were sought worldwide. It was a very well balanced course in practical and theoretical experience".

Some surveyors could see that under the cadetship system they were getting out of date and a university path was needed into the profession, Mackie says. Conversely, there was a lot of resistance to this from some surveyors who didn't want to lose the cheap labour that cadetships gave them.

Despite the battles, the National School of Surveying was launched in 1963, initially with Mackie as the sole lecturer. Starting with only two diploma students, the school now has more than 1,100 alumni around the world.

Since then Mackie has witnessed a revolution in technological advances in surveying, such as the use of mainframe computers, personal computers and measuring equipment such as GPS.

"Surveying used to be a very mathematical profession, requiring a tremendous number of calculations using logarithms," he says. His book on field astronomy, *Astronomy for Surveyors*, became a standard text throughout the English-speaking world and ran to nine editions.

In retirement he has remained active in community service work for the Territorials and the scouting movement.

In recognition of his contribution to the University of Otago and the surveying profession, Mackie received an Honorary Doctor of Science degree from the University in 2000, and the Institute of Surveyors set up a trust in his name to encourage teaching and research in cadastral surveying. He was also awarded an OBE in 1995.

Clearly Mackie's life experiences were the key to the rapport he enjoyed with his students: "When I started teaching some of the students were ex-war blokes. I'd been in a war too. We used to wear our battle dress in the field because it was warm. That's how I got my nickname – Captain Jack."

Captain Jack is the title of John Mackie's autobiography, published late in 2007 and available from the New Zealand Institute of Surveyors' national office, PO Box 831, Wellington.

Nigel Costley

"There's a lot of surveying in mining – if you don't know where you are when you're tunnelling, you'll run into all sorts of problems."

Achievement standards

PROFESSOR TERRY CROOKS OUTLINES HOW HE BELIEVES NEW ZEALAND SHOULD BE SETTING STANDARDS FOR SCHOOL ACHIEVEMENT.

BEFORE LAST YEAR'S general election, the National Party announced its intention to introduce new requirements for student assessment and reporting in primary and intermediate schools:

- national standards in reading, writing and numeracy that describe all the things children should be able to do by a particular age or year at school, defined by benchmarks in a range of tests
- assessment programmes that compare the progress of their students with other students across the country, by choosing from a range of tests
- parents to have the right to see all assessment information and to get regular reports about their children's progress towards national standards.

In announcing these policies, National Party leader John Key indicated that the main reason for these requirements was his belief that about 20 per cent of children are not achieving basic educational standards, and therefore are poorly placed to succeed in our society and contribute to the nation's productivity. The plan is to ensure that these students are identified and their achievement improved.

Most members of our community would agree that struggling students should receive as much help as possible to achieve at a satisfactory level. But how realistic and appropriate are National's solutions?

First, it is important to understand the problem. There is a large range of achievement in our schools. For 14 years the University of Otago's Educational Assessment Research Unit has conducted assessments, using national samples of schools and students, to show what Year 4 (nine-year-old) and Year 8 (13-year-old) students know and can do.

Over four-year periods, we report achievement in 15 different curriculum areas, from reading and mathematics to art and physical education. With every assessment task,

we find that the best Year 4 students score higher than average Year 8 students and the lowest Year 8 students lower than average Year 4 students. The high and low performers always include students of both genders and all ethnicities. Such variability in student achievement is common in other countries.

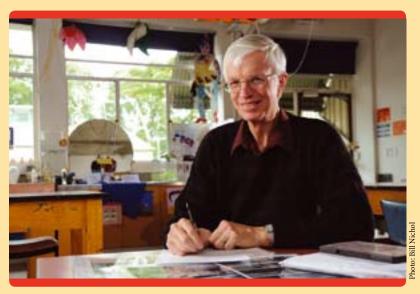
Second, New Zealand has not been oblivious to the need to give extra help to struggling students. Many of our lowest-performing readers have had extra tuition through the Reading Recovery programme, developed in New Zealand, but widely adopted internationally. This gives individual tuition to students in the bottom 20 per cent in reading within their school (a very expensive approach).

There are many other support programmes and most class teachers do their best to help students who are having learning difficulties. These worthy efforts, clearly, are not sufficient, but major improvement will be challenging.

Third, it would be a serious mistake in New Zealand to adopt the approach of setting one target level of achievement for each age level, or year, of schooling. This approach is currently used in the US under the No Child Left Behind Act. Each student is tested annually in reading and mathematics to see whether or not they meet a "proficient" standard.

There is strong evidence that the result will not be "no child left behind". What usually happens is that teachers focus strongly on the particular details of the tests and on the small group of students whose results on the test are uncertain – those the teachers believe to be just above or below the required score level. They focus less on extending students well above or below the required level.

Of course, the required score level could be set low enough that most students meet it, but that is likely to look embarrassingly low. Ten years ago, in the last National-led



Professor Terry Crooks: "We need an approach that encourages the highest possible achievement for all students, in all schools."

government, then Minister of Education Wyatt Creech announced new government policy: "By 2005, every child turning nine will be able to read, write and do maths for success."

That same day, I was phoned by a school principal to say that two of the 12 nine-year-old students that we had randomly selected to participate in our testing were in his school's special needs unit for multiply-handicapped children, and were functioning at the typical level of six- to nine-month-olds. This illustrates well the full range of achievement in our schools.

Fourth, a policy that uses standardised test scores directly to assess and report achievement is dangerous. Available tests of reading and mathematics take a 40-minute snapshot of achievement on just one day and make no allowance for factors that could adversely affect a student's performance on that day (such as illness, family arguments, or a hot or noisy testing environment).

What, then, might be better?

We need an approach that encourages the highest possible achievement for all students, in all schools.

It needs to promote and celebrate improvement, from all starting levels.

It needs to recognise that teachers are central to highquality education, and to appeal to and encourage their professionalism.

It needs to ensure that parents are kept well informed about both the progress and the current level of

achievement of their children.

I propose that teachers should be given clear national specifications for reporting to parents:

- providing comments and evidence of progress (across time)
- · identifying areas of strength
- · identifying areas where improvement is needed and
- suggesting how the teacher and parents can help.

In the key areas of reading and mathematics, these requirements would be supplemented by providing information on how each student is performing in comparison to national patterns of achievement, by placing the students within defined performance bands. These judgements would be based on the overall information that teachers have gained, both from standardised tests and from working with the students all year.

Principals and boards of trustees would need to ensure that the reporting guidelines were followed properly, and compliance would be monitored and assisted through Education Review Office visits.

This would help us advance toward the worthy goal presented almost 70 years ago by Dr Clarence Beeby and then Minister of Education Peter Fraser that every student in New Zealand should have a right to a free education "to the fullest extent of his [or her] powers".

Professor Terry Crooks is co-director of the Educational Assessment Research Unit at the University of Otago College of Education.

Making peace

A \$1.25 MILLION DONATION FROM THE AOTEAROA
NEW ZEALAND PEACE AND CONFLICT STUDIES TRUST TO
OTAGO'S LEADING THINKERS INITIATIVE HAS LED TO
NEW ZEALAND'S FIRST CENTRE DEDICATED TO PEACE.

HOW CAN WE live in a world without violence?

For retired teacher Dorothy Brown, this question is no matter of winter-evening, round-the-fire, armchair philosophy. Peace should be treated with urgency, she insists.

"We need answers, and we need them now. It's the most important, pressing issue that society faces – and it's one of society's most difficult problems. We need the best minds and the best universities actively engaged in finding solutions."

It's a conviction Brown describes as a consequence of "having lived so long". Over the past two years, her memories – the atomic bomb, soldiers sent to war, a litany of "cultural, legal and military breakdowns" – have been her fuel. Along with similarly passionate New Zealanders, including former Human Rights Commissioner Margaret Bedggood, retired businessman Chris Barfoot and Moriori Māori barrister Maui Solomon, Brown formed a trust and embarked upon a single-minded fundraising and lobbying campaign to establish a Centre for Peace and Conflict Studies, led by a chair and hosted at a New Zealand university.

New Zealand is the perfect place to promote these principles at the level of university study, believes Brown. "Peace-making and peace-building are central to our security and foreign policy strategy. Our leadership role in the abolition of nuclear weapons is part of the nation's identity. We have many indigenous traditions of peace to draw upon, including those of the Moriori and at Parihaka."

Frankly, she says, "I was ashamed we did not already have such a dedicated centre".

The University of Otago came to the party through its Leading Thinkers Initiative, both committing to the centre and matching the trust's \$1.25 million donation with equal funding as part of the Government's Partnerships for Excellence framework.

So, when Professor Kevin Clements arrived from Queensland last month to become Otago's inaugural Professor of Peace and Conflict Studies, Brown's goals were officially achieved – for a start.

Inspired by similar centres in Bradford, England, and Queensland, Australia, the centre's goal is to engender the knowledge needed to prevent conflicts – of all descriptions – from becoming violent. Whether these occur on the scale of international warfare or family violence, the underlying issue is the same, says Brown. "As individuals, as a society, what do we do with our anger?"

In this, Brown sees peace studies as being to relationships what preventive medicine is to health care. Clements continues the analogy when he describes the professional peace-building skills he envisages the centre ultimately offering as "akin to a clinical school for medicine".

The University and trust are still seeking funding support to appoint more staff and to offer a full range of under- and postgraduate programmes; their ambition is to develop a workforce of professionally competent peace-builders. Graduates would apply their knowledge

"Peace is based on lessons we learned as children: the need to share, to be kind, to do unto others as you would have done to you. We need to understand how to bring those principles into the adult world, into the realm of organisations and countries." – Dorothy Brown.

in areas from education to diplomacy, prove capable of understanding many sides of an argument and negotiate solutions with wisdom and compassion.

Whereas other academic traditions might aim to investigate their subjects with dispassionate analytic detachment, the centre's goals are upfront. Its work is focused on the pursuit of peace, the non-violent resolution of conflict. "I don't think John Lennon was joking when he sang 'Give peace a chance'," suggests Brown. "We still haven't really tried peace as an underpinning philosophy."

For Brown, the fundamental concepts are simple. "Peace is based on lessons we learned as children: the need to share, to be kind, to do unto others as you would have done to you. We need to understand how to bring those principles into the adult world, into the realm of organisations and countries."

The reality, she acknowledges, is vastly more difficult. "What would enable Israel and Palestine to reach a position where they are prepared to share?"

Finding the answers requires a rich academic environment, in which it's possible to pool efforts from such disciplines as law, politics, economics, psychology, sociology, philosophy, religious studies, gender studies, indigenous studies and history.

For Clements, who has been charged with developing and leading the centre, the opportunity to draw together a community of peace-related researchers from across the University is critical. And the talent is just waiting to be tapped. It ranges from history lecturer Dr Alex Trapeznik's explorations of Russian revolutionary ideology, through to film and communication studies' Professor Hilary Radner's interest in the aesthetics of peace and war. Their work will contribute to the centre's immediate research agenda, which encompasses the origins and resolutions of conflict; development, security and peace-building; inter-religious conflict; and sustainable communities, among much else.

Clements – whose previous roles have included leading a development NGO dedicated to conflict transformation, holding government advisory posts and establishing or directing peace studies centres at three overseas universities – is clear on this point. "Practice must be informed by research and vice versa. It's the only way to achieve workable, well-thought-out policy and practice."

Since leaving New Zealand 17 years ago, Clements' titles have included Secretary General of International Alert, Director for Peace and Conflict Studies at the University of Queensland, Professor of Conflict Resolution and Director of the Institute for Conflict Analysis and Resolution at George Mason University, head of the Peace Research Centre at the Australian National University and Director of the Quaker United Nations Office in Geneva.

Now, he says, "the opportunity to apply this experience in New Zealand was a very easy decision to make".

Clements was raised in Opotiki, the son of a conscientious objector who had been dispatched to the town immediately after World War Two to serve as a Methodist minister. It was there the Clements family encountered the mixed and sometimes hostile reactions of the community. Issues around dissent, the state and society became part of the fabric of the family's identity. Questions of how to pursue constructively pacifist convictions, while respecting the values of those who were not, remained a motivating force for Clements.

He tentatively began a career in the Ministry, but was drawn to development studies, seeking to understand what made non-violent social transformation possible.

His drive to engage fruitfully in the burning issues of the time saw him appointed as a member of the 1985 Defence Committee of Inquiry into New Zealand's anti-nuclear policy. Not only did he become conversant in alternative military technologies, he came to focus increasingly on strategies and tactics that would prevent countries from ever needing to press the red button. In particular, Clements wanted to understand how to move states and nations from unilateral concepts of national security to more inclusive ideas of co-operative security.

He talks of peaceful structures, and peaceful processes; the centrality of human rights and justice; the ability of individuals to participate in decisions that affect them, find spaces for true dialogue, identify avenues for achieving change that don't resort to bloodshed.

Democracy? Yes, but ...

His work in Vanuatu, Clements reveals, raises doubts about a one-size-fits-all electoral process. "What we have heard from a number of community leaders is that adversarial electoral processes have created divisions where previously there were none."

Clements' current research explores concepts of "political hybridity" – that is, "ways in which different types of political organisation in developing countries combine traditional and modern elements in innovative and interesting ways".

"Instead of working 'against the grain' of custom and tradition, there are many new initiatives that enable people to think creatively about their future while standing firmly on historic sources of integration and social resilience.

"Organisations such as the Malvatumauri, National Council of Chiefs, in Vanuatu, for example, draw on custom to play positive roles in relation to the creative nonviolent resolution of conflict, community development and good governance."

Clements believes in the need to pursue peace at a variety of different levels – general individual, group, community, national, regional and global. And he sees a critical first step to generating peaceful processes as "a need to widen empathetic awareness".

He is troubled that "the tragedy of 3,600 deaths in the World Trade Centre attacks could generate such an outpouring of grief in the Western world, yet the 3.8 million people who have died in the conflict in the Congo in the last 10 years barely arouses notice", and cites the work of political philosopher Judith Butler who posed the question: "Who are you willing to grieve for?".

"What's required," Clements believes, "is a wider sense of species consciousness." It's an issue he intends to explore in a book he longs to write, "on enlarging the boundaries of compassion". He calls for "cosmopolitan humanism" as a guiding secular moral framework that focuses on the interdependence of all peoples, avoids simple dualisms of right and wrong, and expands notions

of political accountability as being not just to our selves or immediate communities, but to all others with whom we share the planet.

Inspired by his experiences with Tutsi and Hutu women in Burundi, whom he witnessed extending extraordinary compassion to one another following the ethnic conflict they endured, Clements is also interested in researching further the role of women in peace-

building.

"Without wishing to promote any simplistic essentialist arguments, women do tend to be more intuitively peaceful than men. There is quite a lot of research, for example, suggesting that women have a more relational view of security. Their security is achieved through the quality of relationships rather than the assertion of self."

Meanwhile, he suggests, the financial crisis is providing some cause for hope in terms of stimulating higher levels of co-operative behaviour. "Crises do focus the mind. What we are seeing is an awareness on the part of many political leaders that there is no unilateral solution to global economic problems. They will only be resolved with higher levels of intentional, analytical, collaborative processes."

Imagine if such efforts were turned to achieving peace. "Peace and conflict studies

focus a lot of their attention on ways of generating higher levels of tolerance, co-operation and collaborative problem solving."

Is world peace possible?

"Yes," says Clements. "But only if people want it. It won't happen spontaneously and it won't happen through wishful or idealistic thinking. It will happen through a combination of heart and intelligence by applying the best minds to analysing the sources of violence and by generating realistic non-violent alternatives. Peace is a never-ending process, one that must be worked at afresh by each generation."

What Dorothy Brown and the Aotearoa New Zealand Peace and Conflict Studies Trust can rest more easily about is that now, in New Zealand, we might have the ability to learn how to do this.

Nicola Mutch



Professor of Peace and Conflict Studies Kevin Clements: "Peace is a never-ending process, one that must be worked at afresh by each generation."

To make a donation or bequest to the University of Otago, please contact the Office of Development and Alumni Relations.

Tel 64 3 479 8834 Email leadingthinkers@otago.ac.nz

The acid test

HOT ON THE HEELS OF GLOBAL WARMING IS A NEW AND PRESSING PROBLEM: OCEAN ACIDIFICATION.

ASSOCIATE PROFESSOR ABBY SMITH'S WORK IS AT THE FOREFRONT OF UNDERSTANDING THE THREAT THIS POSES TO MARINE LIFE AND THE OCEAN ECOSYSTEM.

WHEN ABIGAIL (Abby) Smith was at high school in her native Boston, her fellow students laughed at her when she said she wanted to be an oceanographer.

Her then boyfriend told her she didn't have a chance because she was a "short girl with glasses", but Smith, now an Associate Professor of Marine Science at Otago, paid no attention. She went on to complete a degree in geology at Colby College in Maine, forgot about oceanography for a while, and "just took the papers I wanted to take".

But then fate intervened – she damaged a hip walking on winter ice and was temporarily confined to a wheelchair. She'd decided to do a postgraduate degree, but didn't want to go too far from home while she was disabled.

So she applied to the prestigious MIT (Massachusetts Institute of Technology) where her father was a professor of electrical engineering. She was accepted, ended up working in a joint programme with Woods Hole, one of the world's finest oceanographic institutes, and graduated with a Master of Science in 1984.

"It was quite a serendipitous, but good result," Smith says. "That one fall on the ice sort of pushed me in the direction I went and changed my whole life because I certainly would not have been in Boston and met my husband at the time and [eventually] moved to New Zealand."

Her husband-to-be was New Zealander Hamish Spencer, now head of the Department of Zoology at Otago, who was studying at Harvard at the time. Smith was seemingly set for an academic career from early on. Her mother was a teacher as well, and she fondly recalls many times sitting around the dinner table solving maths and science problems.

"I was destined to be a nerd from a young age," she says. However, as it turned out, she took a break from academia for five years while her husband completed his PhD, working in a variety of jobs from medical researcher to primary school science teacher.

Then in the late 1980s she and Spencer decided to return to New Zealand and she enrolled for a Doctor of Philosophy at Waikato University. The couple stayed there for three years until Spencer was offered a job at Otago.

Smith took up a job in the Department of Marine Science, a position she has held part-time since 1993. She's a biogeochemist – a scientist who investigates the mineral composition of inorganic material produced by organisms: shells, bones and teeth. Her work focuses on temperate reefs and sediments formed by marine creatures, with a special interest in bryozoans – coral-like animals that live on coastal shelves around New Zealand and Australia.

She describes them as forming an "oasis of structure" on the flat continental shelf, providing a nursery for fish and other marine creatures.

Much of her research focuses on bryozoans on the Otago Shelf, near Dunedin, that harbours up to 100 species of the "colonial" animals who vary enormously



in shape and size, ranging from the size of a "pinhead to as big as your head".

For years Smith saw her research into the mineral composition of bryozoan skeletons as basic, "blue skies" research – of scientific interest, but with no obvious practical use.

But now her work is at the forefront of research into a new problem: increasing acidification of the sea and the threat it poses to marine life and the ocean ecosystem.

The villain of the piece, as with the more familiar scenario of global warming, is rising levels of carbon dioxide in the atmosphere.

Smith says CO₂ dissolves in the ocean and, since industrialisation, seawater has absorbed about one third of industrial emissions.

Put another way, the ocean soaks up 4kg of the 11kg of the greenhouse gas produced by the average person daily.

This tends to soften the effects of global warming, but comes at a price. Rising CO₂ levels are altering the chemistry of the ocean, reducing its pH, and creating an increasingly acidic environment that could spell bad news for marine animals, especially those which make shells.

Smith explains that, while research on the effects of acidification is in its early stages, it is likely that rising carbon dioxide levels in seawater will make it difficult for animals such as coral, oysters, mussels and some shelled plankton to absorb enough calcium carbonate to build strong shells and skeletons. This could make them thinner and more fragile, and the greater acidity could dissolve them.

Smith says you don't have to be a scientist to know how much we rely on shelled animals.

"You only have to think about shelled plankton, that form the basis of the marine food chain, which are very small and are going to be very susceptible to changes in seawater chemistry, to realise that the food web itself is under threat."

This could have profound implications for the future of inshore and deepwater fisheries. Then there are potentially catastrophic effects on aquaculture – with mussels, scallops, lobsters, shrimp and crabs among the vulnerable species – and on coral reefs, which millions of people worldwide depend on for food, coastal protection and tourism.

Smith points out that the problem of acidification comes on top of the increasing warming of the oceans, overfishing, trawling, and pollution by herbicides and pesticides that are already stressing marine life.

She says ocean acidification is perilously close to being irreversible and the worst case scenario could be that we're looking at the extinction of mineralised fauna.

The Southern Ocean, including New Zealand, could be especially hard hit because it's already slightly lower in pH than the rest of the world, owing to circulation patterns and cold-water temperatures.

Smith says it's only since a major report in 2005 by the UK-based Royal Society that scientists have become aware of the extent of the threat to marine life.

"We haven't had a lot of time to react so people are increasingly beginning to run this kind of research where we're taking organisms ... like those from the bryozoan thickets on the Otago Shelf, and trying to see what lowered pH does."

She says this is where the University of Otago is positioning itself nicely, as it has significant expertise in this field.

As well as her, there's Marine Science colleague Dr Miles Lamare who is investigating the effects of pH on larvae, and Associate Professor Catriona Hurd (Botany) who is studying the chemistry of calcification in algae.

Then there's Professor Keith Hunter and colleagues in the Department of Chemistry, in association with NIWA and the Centre of Excellence in Marine Chemistry, who are interested in the chemical changes occurring when carbon dioxide dissolves in seawater.

Smith has been studying the geochemistry of shell material for 20 years. Two aspects of her work are relevant to acidification: their mineralogy – what they're made of – and how small pieces of skeleton respond to being put in lowered pH water.

In her mineralogical work, she's discovered which species of bryozoan are made from which kind of material and, therefore, most vulnerable.

"And I think we can argue that we can find something to act like a canary in a coalmine, that the first signs of ocean acidification will be on the very delicate, finely branched, very thin bryozoan materials. So we're hoping to use this as a sentinel to know that damage is coming."

However, by putting different samples in acid and examining the time it took for them to dissolve, she's found the shape and size of a skeleton is even more important than what it's made of in determining how vulnerable or resistant it is to dissolving in lowered pH.

"So a delicate net-shaped colony dissolves faster than a solid disc-shaped colony, but a disc formed from a more soluble mineral dissolves faster than one formed from a more stable mineral."

She says the interplay between morphology (size and shape) and composition could be used to produce models that predict which colonies will be hardest hit when ocean acidification begins to have its effect.

Ultimately, Smith would like to develop an inventory of the mineralogy of all the main sea-floor invertebrates around New Zealand, to see which species are most at risk, and start modelling ecosystems from the point of view of a range of organisms.

She says this information could be used to monitor ecosystems more carefully, looking for the onset of the effects of ocean acidification.

"I'm hoping to make it so we can understand its effects better, so we can predict and be able to detect them when it starts to bite."

Smith has an obvious passion for her work. She loves processes – "how things go from here to there" – and

collecting and analysing data, which she describes as getting "the same feeling misers must get when they collect gold ... it's that I know I'm collecting something that's going to be of value".

Her other loves include her family – she has two sons – singing and cricket. She sang in the City of Dunedin Choir for a number of years, is currently a member of the Southern Consort of Voices and conducts her church choir. A friend at Waikato sparked her interest in cricket and she's now an administrator at North-East Valley Junior Cricket Club and a qualified junior cricket coach.

You could say Abby Smith's life has had a few sea changes since her early days back in Boston, but she wouldn't have had it happen any other way.

"Twenty-five years ago I wasn't a Kiwi, a scientist or a mum. I didn't know where New Zealand was, I had never heard of a googly, a bryozoan or Marmite, and nobody thought the world's surface ocean would become acid enough to worry shell-forming critters. It just goes to show we all change."

Grant McIvor

★ We're planning a party. So spread the word ...

In 2011 Home Science/Consumer and Applied Sciences commemorate 100 years at Otago.

If you are a graduate with a Home Science or Consumer and Applied Sciences degree, a BSc or BA degree majoring in one of our CApSc disciplines (Clothing and Textile Sciences, Community and Family Studies, Design Studies, Food Science, Human Nutrition, Dietetics) then we want to hear from you.

No celebration would be complete without our alumni, former staff, and supporters, so please visit www.otago.ac.nz/capsc/centenary/index.html or write to us with your contact details and news at:

Consumer and Applied Sciences Centenary PO Box 56 Dunedin 9054

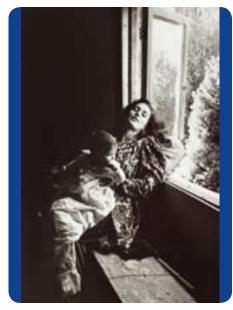
Where were you in 1970?

And B. McLeod (Guthrie), M. Tompkins, L. Guy (Wenham), J Subritzky (Bekesi), where are you now?



From left: Princess Anne, B. McLeod (Guthrie), M. Tompkins, L. Guy (Wenham) In background, J Subritzky (Bekesi)





Adrienne Martyn, *Briar*, 1978, silver gelatin print, Hocken Pictorial Collections. Gifted by the photographer, 2008.

A moment in time

HEAD RECLINED, throat exposed, a saucy smile upon her face, *Briar*, *1978* is no modern remake of Madonna and Child: this portrait is all about the mother. Young and theatrical, bathed in light, her gaze is quite steady, her thoughts quite elsewhere. The baby, mermaid-like in her abundant gown, wriggles and blurs.

Adrienne Martyn became a leading light of portraiture through the 1980s and 1990s, creating warm, crisp, intellectual images of New Zealanders including Milan Mrkusich, Cilla McQueen and Louise Henderson.

Martyn has long since lost touch with Briar (sister of artist Jacqueline Fraser) and her daughter Berenice. But when contacted to ask for her recollections of this portrait, she remembered it well.

Despite it not being a well-known work, it's one of those images that just keeps on resurfacing.

Indeed, she says it was the photo that made her decide to take portraiture seriously. She had attended Otago Polytechnic School of Art and was experimenting with photography, "mostly taking pictures of my friends".

This image became "a source of energy, a huge boost of confidence. It was really then that I thought, 'Yes, I could be a serious art photographer'."

Whether it's the 1970s styling or the exploratory phase of her career, *Briar*, *1978* is breezier than her later work. Martyn captures the qualities of natural light, relating it to the form of the woman and the fall of the fabric.

As would become a hallmark of Martyn's work, the image is simple enough, but full of clues for a narrative. The ornate christening gown and heavily brocaded jacket speak of a great occasion – that's just happened or taking place in another room. While photography is famed for capturing a moment in time, Martyn draws attention to the way the sense of action in time is constructed, suggested and manipulated.

Adrienne Martyn has recently gifted a large collection of her photographs to the Hocken Collections, including a celebration of characters from Dunedin in the 1980s. Now, looking over the legacy of her work, time after time stands still. These moments in both Martyn and her subjects' lives are at once immortalised as art and left behind.

And from this remarkable contribution to New Zealand photography, Briar's stare remains compelling and present, if three decades old.

Nicola Mutch

Hocken Gallery Exhibitions

Until 28 March: Dunedin Design: Art and Industry
This exhibition explores the history of the Dunedin
School of Art through the art of David Con Hutton, the
first principal of the school and his students.

Until 28 March: A Fine Fellow: Ralph Hotere This exhibition focuses on art that Ralph Hotere produced during his time as the Frances Hodgkins Fellow at the University of Otago.



Professor Gary Wilson and Associate Professor Daphne Lee: They are digging deep to find out what New Zealand was like 23 million years ago.

Exposing a warmer NZ

CRYSTAL-BALL GAZERS and media pundits may guess about how climate change will affect New Zealand, but Department of Geology researchers prefer to rely on science.

A team led by Associate Professor Daphne Lee and Professor Gary Wilson will be digging deep to find out exactly what New Zealand was like in a much warmer world – some 23 million years ago.

They have a three-year Marsden grant to drill a core into the site of an ancient volcanic lake near Middlemarch. The undisturbed lake filled up over time, depositing and preserving anything that fell or blew into it, creating a time capsule that is only now being opened.

The sediments should give a perfect record of climate for a period of up to 200,000 years, as well as revealing exquisitely preserved fossils of plants and animals.

"Already we have found what could be only the second and third fossil orchid remains in the world," says Lee.

"It's a very unusual site, likely to give us unbroken records for thousands of years. Similar sites have World Heritage status, so we are lucky to have discovered this one on our back doorstep."

The team, including paleobotanist Jennifer Bannister, geophysicist Andrew Gorman, and sedimentologist Jon Lindqvist, will combine this new land-based information with marine data from Antarctic coring research to model a record of southern hemisphere climate change.

Then it might be possible to paint an accurate picture of what is likely to happen to New Zealand's climate during the current period of global warming.



Dr Simone Celine Marshall: "It's ... intriguing to think that something so old has so many similarities with the latest methods of communication."

The look of the book

HOW MUCH of the meaning of written communication is in the content, and how much in the visual design?

Dr Simone Celine Marshall, of the Department of English, plans to find out – with the help of a 500-year-old manuscript.

"We keep hearing about how the digital age has changed the way we read, but I suspect maybe things haven't changed as much as we might think," she says.

Marshall will travel to Cambridge, in the UK, to study the visual design of a book dating from the early 15th century.

"It's a very odd manuscript, with four separate texts running side by side. It seems to me that the way it is designed must have some effect on its meaning. A professional scribe made a deliberate decision about how it was going to be laid out, and for a reason."

The manuscript comprises Boethius' *De Consolatione Philosophiae*, Geoffrey Chaucer's Middle English translation known as the *Boece*, Nicholas Trivet's commentary on Boethius' text, and explanatory notes.

"Here we have a 500-year-old book that looks like a modern magazine or website," says Marshall. "How are we supposed to read it?"

Literature scholars tend to look at the meaning of early books, while art historians study their design. Marshall hopes to break new ground by combining these traditional study methods to unlock the mysteries of the medieval manuscript.

"It's an important new direction of study and intriguing to think that something so old has so many similarities with the latest methods of communication."



Professor David Green, Dr Ming Zhang, Professor Gareth Jones and Professor Mark Stringer with the anniversary edition of Gray's Anatomy.

Otago staff contribute to *Gray's Anatomy*

OTAGO RESEARCHERS have made their mark on the recently published 150th anniversary edition of the world's most iconic medical textbook, *Gray's Anatomy*.

Four Department of Anatomy and Structural Biology staff members acted as international reviewers, making corrections and comments on more than 30 chapters in the book.

Professors Gareth Jones, David Green and Mark Stringer were among the specialist reviewers scrutinising the book, while Dr Ming Zhang was both a reviewer and a contributor.

Zhang contributed a section dealing with a structure in the neck, known as the cervical fascia, which incorporated ground-breaking research undertaken by him and his team.

Their findings have helped resolve the debate about the depth required for local anaesthetic injections for neck surgeries, such as removing plaques in carotid arteries.

They determined that a particular structure previously thought to exist was not actually present. This new information means that only superficial injections are required for certain surgeries, avoiding the risk of complications created by deeper injections.

Zhang says contributing to the 40th edition of the textbook was a highlight of his career.

He says the research, which has appeared in several significant journals, was made possible through the world-leading techniques and facilities developed at the Department of Anatomy and Structural Biology over many years.

"The department's excellent plastination and confocal microscopy facilities allowed us to closely observe and describe the structures involved right down to the cellular level."



Research Fellow Zandra Jenkins, PhD student Margriet van Kogelenberg and Professor Stephen Robertson: They have found a genetic link between a bone-formation disorder and Wilms tumour.

Cancer clue

IN A SERENDIPITOUS series of events, Professor Stephen Robertson and colleagues have discovered a surprising link between a rare bone-formation disorder and the childhood kidney cancer Wilms tumour, with implications for the understanding of genetics in the development of cancer generally.

A clinical geneticist who holds the Cure Kids Chair in Child Health Research, Robertson's research focuses on rare genetic conditions affecting the formation of the skeleton, face and limbs.

In 2004, he was approached by the clinician of a young American girl to shed some light on her condition. Recent advances in technology have now made this possible and have revealed a defect in her X chromosome.

"It is a significant deletion of DNA and that was the steer to this one gene – a critical clue – and we have now found abnormalities in this gene in 25 other individuals with this same condition."

It also reveals clues about the genetic cascade that can lead to cancer.

"This finding surprised us by showing that a boneformation disorder was caused by the same genetic defects that are found in Wilms tumour, which affects about one in 15,000 children," he says.

"The critical difference is that mutations in the kidney tumours are confined to the cancer, whereas the mutations leading to the bone disease are in every cell throughout the body.

"Why individuals with the bone disease escape getting cancer is a puzzling paradox, but the answer seems likely to lie in the order and timing of the genetic steps along the pathway to the establishment of tumours."



Dr Will Sweetman: He has found a crucial Hindu text that had been lost for three centuries.

Religious treasure rediscovered

INDIANA JONES and the *Da Vinci Code* may be fictional, but academics really do have their moments in solving ageold mysteries in exotic locations.

Dr Will Sweetman, of the Department of Theology and Religious Studies, has finally tracked down a crucial text that had been lost for three centuries.

The manuscript is the key to vindicating the work of Bartholomaus Ziegenbalg, the first Protestant missionary to India, and the author of an unusual book about south Indian Hinduism.

The book is remarkable, firstly, for arguing that, despite all appearances, Hindus ultimately believe in only one supreme being and, secondly, for citing a wealth of Hindu texts. Most authors of the time relied on personal observations and dubious interpreters.

Sweetman had a hunch that Ziegenbalg's 1713 work was based mainly on a Tamil text that had never been published, or even referred to, in either Indian or European scholarly literature for 300 years.

He set Indian scholar R Ilakkuvan on the hunt for the missing manuscript. After 10 months scouring government, temple and private archives of palm-leaf manuscripts, Ilakkuvan triumphed.

Studying the rediscovered treasure is complicated as the Tamil words run together without breaks and most vowels are not marked. But Sweetman has already been able to confirm that Ziegenbalg's view of Hinduism as essentially monotheistic is not the projection of his preconceived ideas, but is based on his close study of Hindu religious literature.

"Finding this text transforms our view of Ziegenbalg," says Sweetman. "There was nobody at the time who was engaged in such scholarly work."



Joanne Sanders: "Only nine per cent of patients administered ethanol developed infections in the blood ..."

Ethanol reduces infection

CHRISTCHURCH research nurse specialist Joanne Sanders has produced a surprise study result likely to improve radically catheter-associated blood stream infection rates in immunosuppressed patients.

As part of her Master of Health Sciences, Sanders has shown, for the first time, that when diluted ethanol (pharmaceutical grade alcohol) is used as a disinfectant, intravenous catheter-associated infection rates are four times lower in chemotherapy patients.

"This has generated a lot of interest, both here and overseas, as bloodstream infections can be life-threatening for patients who've been immunosuppressed during chemo for leukaemia, or for those having a bone marrow transplant," she says.

The research looked at two groups of patients: 34 had ethanol locked into their central venous chest catheters for two hours every day to prevent catheter-associated infection, while 30 were given conventional treatment using a heparin saline solution.

"Only nine per cent of patients administered ethanol developed infections in the blood, but four times as many – 37 per cent – of those who had the heparin saline solution developed bloodstream infections.

"These patients then have to be treated with antibiotics or have the catheter removed and a new one put in, which is more problematic in patients who've had their immune systems suppressed."

Sanders says ethanol works well because it attacks all bacteria in the biofilm on the inside of the catheter, unlike conventional antibiotics which kill only some bacteria. It is also inexpensive at about \$4 per patient per day; cheaper than trying to deal with infections in seriously ill patients.



Julia Albrecht: "Whether or not [tourism development] goals are achieved ultimately depends on the commitment and interest of all stakeholders involved."

Best-laid plans ...

IT'S A Robbie Burns cliché that the best-laid plans of mice and men can go awry. But how about those of tourism planners?

Department of Tourism assistant lecturer and PhD candidate Julia Albrecht's thesis investigated how two New Zealand communities responded to plans to promote tourism and development.

Albrecht's interest stems from personal experience. As a planning consultant in her native Germany, she wondered why so few projects were followed through.

Moving to Otago in 2005 for postgraduate work, Albrecht was welcomed by the Catlins community as it prepared to implement plans to manage tourism development in the area.

"All the groups involved were very helpful in providing the information I needed for my research," says Albrecht.

She followed through to early 2008, attending meetings, interviewing stakeholders, Department of Conservation and councils in the Southland and Clutha districts, and researching archives. Her second study – on Stewart Island – differed in that planning was already 10 years old and, rather than being a community-based initiative, the tourism strategy was prepared by the New Zealand Tourism Board.

Despite the differences, Albrecht's conclusions tended to follow the same pattern. "Overall, for both the top-down and the bottom-up planning cases, strategy implementation was found to be dynamic and highly dependent on the actors at the grassroots level," she says. "Whether or not goals are achieved ultimately depends on the commitment and interest of all stakeholders involved."

Albrecht hopes to extend her research from rural communities into how tourism plans work in practice at regional and national levels.



Associate Professor Elaine Reese: "Drawing meaning from life events is not easy ... so it will be interesting to see when the ability starts in adolescents."

Adolescent stories

WHILE MANY parents find getting teenagers to talk about their lives nearly impossible, Associate Professor Elaine Reese (Psychology) has three years and a Marsden grant to do just that.

She will be gathering data on adolescents' sense of identity and their ability to tell coherent stories about their lives.

Research shows that adults who make sense of lifeshaping experiences are more likely to feel better about themselves and enjoy more success.

Does the same hold true for adolescents, who have had less time to develop tools to analyse life events and have fewer experiences to draw on – and are there cultural differences?

Reese will be interviewing equal numbers of European, Māori, and Chinese New Zealanders, aged 12, 16, and 20, aiming to find links between their life stories and their wellbeing.

It has been established that Māori average the earliest childhood memories at 32 months, while Europeans average almost a year later and Chinese later still.

"The first memories might be considered the first chapter of your life," says Reese, "so it's possible that Māori will have an advantage in creating a coherent life story.

"It's also possible that early experiences of self-analysis might be unsettling, especially for the youngest adolescents in all cultures.

"Drawing meaning from life events is not easy – we still struggle with that as adults – so it will be interesting to see when the ability starts in adolescents."

Unlike parents, Reese is confident teens will talk to her. "We've found that adolescents really enjoy someone hanging on their every word."



Professor Julian Crane and Dr Kristin Wickens: "... it shows that the beneficial effects of probiotics vary considerably depending on which probiotic is used."

Probiotic reduces eczema

RESEARCH by Professor Julian Crane (Department of Medicine, Wellington) and colleagues in Wellington and Auckland may help to prevent eczema in young children.

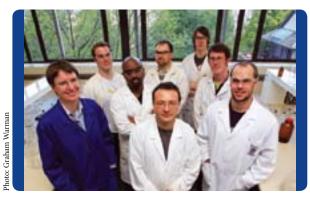
They have found that giving a probiotic supplement, *L. rhamnosus*, to pregnant women and babies reduces the rate of childhood eczema by 50 per cent at the age of two.

"This is an exciting and interesting result because we've compared the effect of two different probiotics in the same study and show that one has an effect while the other [Bifidobacterium lactis] is no different from placebo," he says. "This is important because it shows that the beneficial effects of probiotics vary considerably depending on which probiotic is used."

The skin disease eczema affects 30 per cent of infants in New Zealand by the age of two. Severity varies from a small patch of scaly dry skin to large weeping areas covering much of a child's body. There is no way to prevent it, and treatment relies on skin moisturising and corticosteroid creams. The prevalence of eczema is increasing, although the reasons are not clear.

Probiotics are naturally-occurring microbes found in the intestines of infants but, in recent years, their natural occurrence has decreased, which may explain why there has been an increase in eczema.

It is not known how they work. One theory is that they alter an infant's developing immune system in a way that reduces allergy; another is that some probiotics may alter the early infant intestine so that allergens cannot pass so easily into the circulation and set up allergic reactions.



Professor Sally Brooker and her Department of Chemistry team are working to develop nanoswitches that provide greater capacity for storing information.

Smaller and smarter

UNIVERSITY of Otago chemists are cooking up new recipes in the constant quest for smaller, smarter computing power.

Professor Sally Brooker heads a Department of Chemistry team investigating ways of building better technology from the ground up.

"Physicists and engineers are making great advances in silicon chip technology," says Brooker, "but we're approaching the problem from the other end, with the ultimate aim of creating nanotechnology that could work in a way that's more like the human brain."

The project, which has attracted a three-year Marsden grant, involves developing tiny nanoswitches with three potential states, rather than the current two potential states of yes/no binary systems. Three-state switches would provide more permutations and greater capacity for storing information. Working at a molecular level, Brooker's team will use temperature, pressure, magnetic fields, and/or irradiation to switch the molecules between states.

Systematically modifying and characterising the molecules should allow the researchers to fine-tune the chemical cooking to a point where they can predict the molecules' behaviour. "This is something that has eluded scientists to date, but we have to have predictability if research is going to move forwards from just getting lucky to a designer approach to creating new materials," says Brooker.

International collaborators are already looking at possible applications of Brooker's molecules, although there is a long way to go before such technology is likely to appear in everyday devices and computers.

"It's one thing to develop nanotechnology that might work like the brain, but we have to remember that even the brain is not perfect."



Dr Rogelio Guedea: "I'm hoping to establish a strong cultural bridge between New Zealand and the Hispanic world."

Poetry in translation

NEW ZEALAND'S remote geographical location may make it difficult to visit, but also helps give the country the allure of the unknown.

Now Dr Rogelio Guedea has discovered Aotearoa and he's keen to share some of its treasures with the Hispanic world by translating New Zealand poetry into Spanish.

Guedea, a Mexican lawyer, academic, author and poet, has childhood memories of his father saying New Zealand was one of the best countries in the world.

The University of Colima, where Guedea taught in Mexico, also has close links with Otago so, when the time came to travel overseas, the choice was obvious.

He joined the Department of Languages and Cultures, and he and his family have been enjoying Dunedin for four years. Guedea, who recently won the international poetry prize Adonais, is also enjoying New Zealand poetry and is translating Spanish versions to enable it to spread far and wide.

"Advertisements on Mexican television show the beauty of the landscape, caring for the environment, the lifestyle and friendly people, but New Zealand culture is practically unknown," he says.

"I'm hoping to establish a strong cultural bridge between New Zealand and the Hispanic world."

Guedea's translation of a Ron Riddell anthology has already been published in Spain, he's completed a translation of Janet Frame's poems and is working on a contemporary New Zealand collection for a Mexican publisher.

"Translating poetry is always the most difficult thing to do because the meanings can be so ambiguous," says Guedea. "But, as a poet myself, I have an advantage in being better able to understand the language of poetry."



Dr Vicki Browning: Her findings show that service organisations need to train staff in how to deal with difficult customers.

Staff behaving badly

CUSTOMERS' experiences with frontline employees are pivotal to how they feel about an organisation's quality of service and, too often, these can be negative – even distressing.

An exploratory study into New Zealand's hospitality industry, funded by a University of Otago Research Grant, has found that bad or "deviant" behaviours by frontline staff, directly aimed at customers, is becoming a pervasive problem within the service sector.

"These behaviours range from being rude or uncivil, to ignoring, abusing or even assaulting customers," says Dr Vicky Browning (Management). "We also found indirect behaviours, such as sabotaging food or making racist comments out of earshot."

However, the study showed that customers' own behaviour was generally the trigger. "Employees report mirroring the behaviour of customers who are rude, abusive, overly demanding or unreasonable," says Browning. "This is known as emotional contagion. But even undecided or timid customers, or those of particular nationalities can be targeted."

It was also found that many managers do not support service values, nor provide adequate resources or discretion for employees to do their jobs properly.

"The findings show that not only do service organisations need to provide resources and support for their employees, but they need to train them in how to deal with difficult customers. They also need to manage better the expectations and behaviour of their customers. The mantra that the customer is always right is not necessarily true."

Further research will explore behaviours in a larger sample of service industry staff and how a strong service culture might affect this.

Chancellor farewelled

LINDSAY BROWN HAS STEPPED DOWN AFTER 16 YEARS ON THE UNIVERSITY COUNCIL.

BESUITED AND BENIGN, Lindsay Brown sits at a table in a windowless meeting room, every grey inch of which fits with the stereotypical image of the accountant Brown was for 30 years.

And, on the surface, Brown fits it too. Mild-mannered, diplomatic and, no doubt, exceedingly good with numbers; all helpful attributes in someone who was a partner in the Dunedin branch of international accountancy firm Deloitte for three decades.

But Brown is not just an accountant – albeit a topranking, Otago-trained one. For after 16 years on the University Council, including five at its helm, Brown is world-famous in Dunedin for being the 17th University of Otago Chancellor. Rather he was, until stepping down at the end of December 2008, hard on the heels of the honorary Doctor of Laws awarded to him at a pre-Christmas graduation ceremony.

Being on the receiving end of a degree was a change for Brown who, in his five years as Chancellor, officiated at 42 graduation ceremonies and capped or congratulated more than 15,000 graduates and diploma-holders. It's this part of the role – "the most fun", he says – which he will miss when he hangs up his mortarboard and gown.

"I wasn't used to being a public performer, but I've become very relaxed in the role. I do try and put students at ease, to catch their eye and send the message, 'hey this is fun'," says Brown, who is quick to smile and, one imagines, adept at doing just as he says.

Indeed he recalls many "amazing moments" on that stage, in addition to the spontaneous hugs and kisses from friends, acquaintances and even total strangers. Some of these include the gift of a heavily-scented lei crafted from more than 100 fresh carnations made by a Pacific Islands graduand and her family, and a folded \$5 note pressed into his palm by another mystery graduate.

"I don't know who he was and I don't know why he felt he had to give me a \$5 note," laughs Brown, who had no idea what had been passed to him until after the ceremony had ended. "I wondered if it was part of a bet, or if he thought he should give me a tip, or maybe he had a guilty conscience about an unpaid library fine!"

Brown, who studied part-time for much of his BCom degree while working full-time, does not seem to be the kind of person to leave unpaid library fines at his *alma mater*. So, nearly 30 years after graduating, when the chance came to join its Council as a ministerial appointee, he was keen to give something back to the institution which had set him on the path to his own career.

Following a "settling-in" period, Brown was appointed to the chair of several council committees and University company boards, and in 1999 became Pro-Chancellor to then Chancellor Eion Edgar.

In 2001, with the likelihood of election to the chancellorship following Edgar's term, he retired from his position at Deloitte to enable him to focus on University commitments and other personal appointments as a company director and trustee. Brown was elected unopposed at the end of 2003 and re-elected every year thereafter until stepping down at the end of 2008 on reaching the maximum permitted term on Council.

"There's no job description for the role," quips Brown, who proceeds to flesh out a pretty detailed one himself, pointing out that in addition to the ceremonial role there is a "public relations" aspect to his job, which sees him hosting some alumni events and attending significant University functions, as well as a "business" side which revolves around University governance through his Council and committee work.

"In my first year in the job I kept a record of the hours and it tallied to around 600 or 700, but after that I didn't bother," adds Brown in a most unaccountant-like way. The role is not remunerated on a par with the company directorships with which it is perhaps most readily compared; it is something undertaken out of commitment to the University.

This depth of feeling for the University among its alumni is something Otago has in spades, Brown says, and may well be unmatched, he believes, by other New Zealand universities. It's something he has experienced first hand at alumni events all over the world.

"You can feel it in the warmth of the people, their genuinely strong feelings for the University and their absolute gratitude and wish to see the University be strong. There's no doubt that there's something about the experience of being a student [at Otago] that's special."

Brown also experienced first-hand the longstanding tradition of student protest at Otago, including occupations of the Clocktower aimed at protesting rising tuition fees. He remembers "running the gauntlet" along a narrow corridor lined with chanting students, but points out that, on a later occasion, his decision to remain in the Council Chamber as long as the students were there, rather than making a "getaway", worked in his favour.

These days, Brown notes, student protest has evolved into more creative demonstrations, such as a more recent carnivalesque event held outside the Clocktower during fee-setting, complete with bouncy castle and candy floss.

"I would say there is more recognition among students that some increases are necessary to keep up the quality of education," says Brown, whose greatest anxiety as he steps down from the position remains "the perennial" question of funding.

"It's easy to say we need more money, but the reality is we do," he says. "The last Labour government came to the party to some degree, but everybody knows that costs increase more than their funding increase of 2.6 per cent, and we're restricted with the amount we can put student fees up. So you're trying to squeeze more and more juice out of the same orange. It's going to dry up eventually.

"The concern is that unless you keep putting enough money back in, then obviously the quality of the education, and the experience you deliver, is going to diminish over time. That's not good for anyone."

Brown is heartened by initiatives such as Leading Thinkers, in which the government matched private donations to establish 27 projects, most of which are professorial chairs. This, he says, has been a "stunning success". He says he will watch with interest the newly formed National government's stance on tertiary funding.

But he says his term as Chancellor has been "even more exciting than he expected it to be," and will always be the highlight of his working life.

"I get excited about what it is a university tries to achieve, which is basically the spreading of knowledge and the creation of new knowledge. You can't get more exciting than that."

Rebecca Tansley

John Ward took over as University Chancellor at the beginning of this year (see page 40).



Lindsay Brown: His term as University Chancellor has been the highlight of his working life.

Centre for Reproduction and Genomics launched

RESEARCH TEAMS from AgResearch and the University are coming together under one roof, as part of the new Centre for Reproduction and Genomics at the Crown Research Institute's Invermay campus, near Dunedin.

The centre is housed in purpose-built premises and was officially opened in December.

The director of the centre is Professor Neil Gemmell, who was appointed to the AgResearch Chair in Reproduction and Genomics at the University as one of the University's Leading Thinkers initiatives.

Gemmell says the scope for the new centre is very broad and its strength firmly based on existing collaborations.

"New Zealand is undoubtedly a world leader in the fields of animal health and breeding and genomic technology. I think we can build on that, and take information from decades of work in livestock and



Director of the new collaborative Centre for Reproduction and Genomics Professor Neil Gemmell outside the Christie building at AgResearch's Invermay campus.

translate it into other areas of animal and human health," he says.

Vice-Chancellor Professor David Skegg says the centre heralds a new era for co-operation between the University and AgResearch.

"The two organisations' history in collaboration dates back almost four decades. In the late 1970s it started off as an informal network of University and Invermay staff who met regularly to discuss scientific issues, but later it became a formal collaborative effort between Invermay and the University's Biochemistry Department."

Lotteries Health funding

UNIVERSITY RESEARCHERS gained more than \$1.6 million in grants from the Lotteries Grants Board for health research in 2009.

The 21 grants for new or ongoing health research projects and shared research equipment were announced late last year. The grants went to researchers from the University's campuses in Christchurch, Dunedin and Wellington.

The projects range from studying acute back pain, to heart disease research, to early detection of kidney failure, to investigating aqua aerobics in reducing falls in adults with osteoarthritis.

Green light for Otago Institute of Design

A PLANNED Otago Institute of Design can now go ahead following the Government's offer in October of \$12.5 million in funding towards the initiative.

The institute is a collaboration which will bring together the very best of applied learning from Otago Polytechnic and the significant design research and teaching of the University.

The Otago Institute of Design building will house some 800 students, more than 100 design and design research staff from both institutions along with product-development facilities that will be available for all industries locally, nationally and internationally.

The University has purchased the Wickliffe Press site – situated on the block bordered by Clyde, Albany and Forth Streets – and the building will occupy about a quarter of the area

While the University and Polytechnic departments will continue to operate separately, they will share workshop areas, classrooms and some equipment. It is hoped that building will commence within the next two years.

Vice-Chancellor Professor David Skegg said the case for collaboration was compelling.

"It allows us to use scarce resources wisely. It also gives our students and staff a better opportunity to connect with industry at both the applied and research levels."

Medical School gains highest accreditation standard

THE UNIVERSITY'S Faculty of Medicine was recently awarded the maximum period of accreditation possible by the Australian Medical Council (AMC).

All medical schools in Australasia are required to undergo regular accreditation processes for their medical student teaching programmes.

In addition to awarding the faculty the full six-year period of accreditation, the AMC accreditation assessment team also recommended consideration of extension for up to a further four years, subject to a comprehensive report at the end of the fifth year.

Pro-Vice-Chancellor of Health Sciences and Dean of the Faculty of Medicine Professor Don Roberton said the faculty was very pleased with this outcome.

"It represents a significant achievement and shows that our medical curriculum is of the highest international standard."

Hunter Centre opened

THE UNIVERSITY'S new teaching and learning facility for Health Sciences students was officially opened in September.

The new Hunter Centre has a covered atrium, small-group teaching facilities, clinical teaching spaces, a cafeteria and social areas for students.

The centre was named in recognition of the late Professor John Hunter, who was a major figure in the development of the Otago Medical School and the Division of Health Sciences. Several members of his family attended the opening.

The centre, which is located on the corner of Great King and Frederick Streets, won the sustainability and public architecture categories in the recent Southern Architecture Awards. As well as providing a hub for Health Sciences students in the south campus area, the centre has the flow-on effect of freeing up space in medical school buildings, providing more space for postgraduate students and research.

Burns Fellows revisit Otago

ALMOST ALL of the University's living former Robert Burns Fellows gathered at the University to celebrate the 50th anniversary of the fellowship in October.

Thirty-three of the 36 fellows attended the anniversary, which was timed to coincide with the Otago Festival of the Arts.

Events included a reunion dinner, the unveiling of a commemorative plaque at the foot of the Burns statue in the Octagon, panel discussions and readings, and a visit to the University's Department of English.

The Robert Burns Fellowship is New Zealand's premier literary residency and was established to commemorate the bicentenary of the Scottish poet's birth. The fellowship aims to encourage and promote imaginative New Zealand literature.



Former fellows gathered to celebrate the 50th anniversary of the Burns Fellowship.

Appointments

John Ward (BCom 1975) as University Chancellor. Mr Ward is a company director with strong community associations in Otago and Southland. Formerly Pro-Chancellor, he takes over the role from Lindsay Brown, who recently retired from the University Council after 16 years of service, the last five of which were as Chancellor University Chancellor (see pages 36-37).



John Ward.

Stuart McLauchlan (BCom 1980) as University Pro-Chancellor. Mr McLauchlan is a managing partner of the chartered accountancy firm, G S McLauchlan and Co and has been a member of the University Council since 2004.

Professor Andrew Bradstock to the new Howard Paterson Chair in Theology and Public Issues. He comes to Otago from the University of Cambridge, where he was co-director of the Centre for Faith in Society at the Von Hūgel Institute.

Professor Paul Glue to the Hazel Buckland Chair in Psychological Medicine at the Dunedin School of Medicine. A 1980 MB ChB graduate, Professor Glue returns to Otago following an extensive research and clinical career in the UK and US. Most recently, he was head of Pfizer Inc's Clinical Pharmacology and Neurosciences Group.

Professor Elizabeth Matisoo-Smith as a Professor in the Department of Anatomy and Structural Biology. Professor Matisoo-Smith is a leading biological anthropologist who studies the DNA of domestic and other animals to map the migration paths of Pacific peoples. She comes to Otago from the University of Auckland.

Professor Ian Morison to the Chair in Pathology at the Dunedin School of Medicine. He was previously a senior research fellow in the University's Cancer Genetics Laboratory.

Professor **Pauline Norris** to the newly established Chair in Social Pharmacy. Professor Norris was previously a senior lecturer in the School of Pharmacy. In her new role she will lead research and teaching into society's access to and use of

Professor Mark Stringer to the University's Chair in Anatomy and Structural Biology. Professor Stringer is a clinical anatomist who came to Otago from the University of Leeds in 2007. His research focuses on disorders of the liver and bile ducts and he is the author more than 200 peerreviewed publications.

Professor Gary Wilson to Otago's Chair in Marine Science. Formerly based in the Department of Geology, he will work to bring together the various strands of marinerelated research across the University and facilitate its advancement.

Joanna Orwin as the University of Otago College of Education Children's Writer in Residence for 2009. She is a distinguished writer of children's and young adults' literature as well as non-fiction for adults.

Achievements

Professor Philippa Howden-Chapman (Public Health, Wellington) received the Dame Joan Metge Medal and the Liley Medal in recognition of her ground-breaking research into housing and health.

Dr Angela Wanhalla (History) is the University's 2008 Rowheath Trust Award and Carl Smith Medal recipient. The award and medal recognise outstanding research performance of early career staff.

Dr Phil Bishop (Zoology) won Auckland Zoo's inaugural Conservationist of the Year award in 2008. He received the honour for his extensive work in frog research and communicating the importance of frog conservation to the community.

School of Pharmacy Dean Professor Ian Tucker was awarded the Australasian Pharmaceutical Science Association's 2008 medal for his ongoing contribution to pharmaceutical sciences and pharmacy education.

Dr Mark Hampton (Pathology, Christchurch) received the Invitrogen Life Science Award for emerging excellence in molecular biology. His research focuses on unravelling the molecular details of the signalling pathways activated inside cells during exposure to oxygen free radicals.

Emeritus Professor Peter Holland (Geography) won the New Zealand Geographical Society's Distinguished Geographer Gold Medal in recognition of his outstanding research, teaching, and professional and community accomplishments.

Professor Henrik Kjaergaard (Chemistry) was awarded the New Zealand Institute of Chemistry's Maurice Wilkins Centre Prize for his significant contribution to developing and using theoretical chemistry in studying atmospheric processes.

Postdoctoral researcher Dr Tina Summerfield (Biochemistry) won the New Zealand Society of Plant Biologists' Roger Slack Award for outstanding contribution to the study of plant biology by a young scientist.

Recent Otago graduate Dr Timothy Williams received the Royal Society of New Zealand's Hatherton Award for producing the best paper by a PhD student at any New Zealand university in the physical sciences, earth sciences, and mathematical and information sciences.

The Otago University Students' Association named Dr **Rhiannon Braund** (Pharmacy) as Teacher of the Year for 2008, while Associate Professor **Mike Colombo** (Psychology) was named Supervisor of the Year.

Fellowships/scholarships

Associate Professor **Jim McQuillan** (Chemistry) and Faculty of Dentistry Dean Professor **Greg Seymour** were recently elected as Fellows of the Royal Society of New Zealand. They were recognised for important work in surface chemistry using spectroscopy and the immunology of periodontal diseases, respectively.

Emeritus Professor Lawrence Jones (English), Professor Alan Musgrave (Philosophy) and Emeritus Professor Erik Olssen (History) were elected as Fellows of the New Zealand Academy of Humanities. This honour was awarded for distinguished achievement in research regarding New Zealand literature, the philosophy of science and New Zealand social history, respectively.

School of Physiotherapy academic staff Dr **Leigh Hale**, Dr **Gillian Johnson** and Dr **Margot Skinner** were made Fellows of the New Zealand College of Physiotherapy.

Dr **Sarah Young** (Microbiology and Immunology) gained the Health Research Council's Sir Charles Hercus Health Research Fellowship to study the use of virus-like particles as vaccines and therapies against cancers.



Rhodes Scholarship recipients: Laura Fraser (left) and Peter Cox

Peter Cox and Laura Fraser were named as Rhodes Scholars for 2009. Dr Cox, who graduated MB ChB in 2007, plans to undertake a DPhil in cardiovascular medicine at Oxford University, while Miss Fraser, who

completed BA and LLB(Hons) degrees this year, will pursue a Bachelor of Civil Law followed by a master's degree in environmental change and management.

Honorary Doctorates

Leading New Zealand architect **Ted McCoy** and retiring University Chancellor **Lindsay Brown** received honorary

Doctor of Laws degrees in December in recognition of their respective outstanding contributions to the University and wider community.

Newprofessors

Nine University of Otago academics were promoted to full professorships in December. They are Professor David Bilkey (Psychology); Professor Gregory Cook (Microbiology); Professor Katharine Dickinson (Botany); Professor Keith Gordon (Chemistry); Professor David Grattan (Anatomy and Structural Biology); Professor Lyall Hanton (Chemistry); Professor Anthony Kettle (Pathology, Christchurch); Professor Henrik Kjaergaard (Chemistry); and Professor Richard Porter (Psychological Medicine, Christchurch).

New Year Honours

A number of University of Otago staff and alumni were recognised in the 2009 New Year Honours list.

Distinguished Companion of the New Zealand Order of Merit (DCNZM): Professor **David Skegg** for services to medicine.

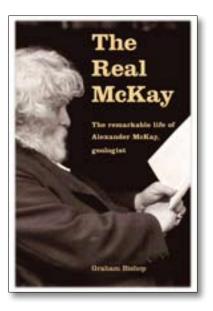
Companion of the New Zealand Order of Merit (CNZM): Dr **Ronald Goodey** for services to otolaryngology; Emeritus Professor **Jocelyn Harris** for services to education; Professor **Ronald Jones** for services to women's health; Emeritus Professor **John Werry** for services to child and adolescent psychiatry.

Companion of the Queen's Service Order (QSO): Ward Clarke for services to education; Professor Philippa Howden-Chapman for services to public health; Lester Taylor for services to education.

Officer of the New Zealand Order of Merit (ONZM): Professor Harlene Hayne for services to scientific and medical research; Professor Graham Hill for services to medicine; Professor Gareth Parry for services to neurology; Associate Professor Bridget Robinson for services to medicine; Dr Robert Welch for services to biotechnology; Professor Geoffrey White for services to sciences, in particular psychology.

Member of the New Zealand Order of Merit: Dr Lesley Rothwell for services to medicine; Julie Stufkens for services to dietetics and paediatric nutrition; Nathan Twaddle for services to rowing; Professor Georgina Zellan-Smith for services to music.

The Queen's Service Medal: Dr **Eleanor Carmichael** for services to the community; **Ashley Day** for services to education; **Lloyd Esler** for services to the community.



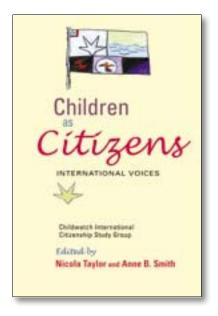
The Real McKay The remarkable life of Alexander McKay, geologist

Graham Bishop, November 2008

ALEXANDER MCKAY, a self-educated explorer who rose to the position of government geologist in 1892, is the hero of New Zealand geology. He was a key figure in laying the foundations for the reputation New Zealand geological science enjoys internationally. He was a pioneer of the telephoto lens and photomicrography.

The Real McKay is the first biography of this Scottish immigrant (1863) who collected more than 100,000 fossils during his career. McKay explored and reported on many regions of the country and was the first geologist to document horizontal movement during an earthquake. His ideas about mountain building laid the foundations for advanced thinking by the next generation and the birth of the discipline of neo-tectonics.

Author Graham Bishop who, as regional geologist with the New Zealand Geological Survey, spent much of his career following Alexander McKay's footsteps, "who always seemed to have been there first". He has a strong interest in environmental issues, and has been a member of the Mt Aspiring National Park Board and the Kawarau River Conservation Tribunal. This is his seventh book.



Children as Citizens: International Voices

Edited by Nicola J Taylor and Anne B Smith, February 2009

THE RIGHTS of children as citizens are increasingly focusing international attention as the 20th anniversary of the UN Convention on the Rights of the Child is celebrated this year. Entitlement to respect and recognition, opportunities for belonging and meaningful participation in society, the right to express an opinion and have it taken into account, and the fulfilment of duties to others are all key components of this.

This book reports on research with children and young people by the Childwatch International Citizenship Study Group in Australia, Brazil, New Zealand, Norway, Palestine and South Africa. The children and young people held many common ideas – obeying the law, respecting and helping others, working hard – but it was also found that the features of different nations, whether inequality in Brazil, migration and multiculturalism in Australia, or conflict and occupation in Palestine, were reflected in how the children interpreted their rights, responsibilities and citizenship.

Children as Citizens is the latest of many publications researched and/or edited by members of Otago's Children's Issues Centre. Dr Nicola Taylor is a senior research fellow with the centre, and chaired the study group that carried out this research. Emeritus Professor Anne Smith was the inaugural director of the Children's Issues Centre from 1995 to 2006. She is a joint editor of Advocating for Children: International Perspectives on Children's Rights (2000) and with Nicola Taylor and Megan Gollop of Children's Voices: Research, Policy and Practice (2000). The Childwatch International Research Network is a global, non-profit, non-governmental network of institutions engaged in research for children.

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

Otago University Press turns 50

OVER THE SUMMER, running until 27 March, an exhibition in the Central Library's Special Collections de Beer Gallery will be celebrating "A Record of Achievement: The 50th Birthday of the Otago University Press". The Press was established in 1958 and the imprint first used in 1959. Initially it was a part-time, unpaid task performed by the University librarian, with limited technologies and producing modest monographs. A full-time managing editor was appointed in 1993, and the Press now has staff, spacious quarters, a website, international distribution and an expanding and diverse list of publications.

Many of these developments followed ongoing technical changes in the book and print trades. Photo-setting and galley proofs were eventually replaced by direct imaging, and production timeframes were compressed.

The role of the Press has also changed. Slim publications – often used as presentation copies or sold at a nominal cost – have given way to substantial works, many illustrated in colour, that are sold beyond the academic environment. Books are printed in Hong Kong as well as New Zealand, and there is a greater emphasis on marketing books through distributors, local and overseas conferences and book-fests, and direct sales initiatives. In 1999, a distinctive University of Otago Press logo was created by design studies student Anneloes Douglas and, in 2006, there was a subtle name change – to Otago University Press.

Crucial in the Press's development have been the University librarians (such as Peter Havard-Williams and W J McEldowney) and later editors – Dr Bill Sewell, Dr Iain Lonie, Dr Helen Watson White and Wendy Harrex. Acting editors at various times were Professors Jocelyn Harris and Alan Horsman. The Dunedin firm of John McIndoe Ltd was another vital component, printing and marketing the books to the trade until 1993.

In its 50 years, the Press has published some 310 books, as well as journals such as Landfall (acquired in 1994) and Childrenz Issues (established in 1997). The books range from T B L Webster's Greek Art and Literature 700–530 BC (1959), G J Fraenkel's The Example of Joseph Lister (1959), Erik Olssen's John A Lee (1977) and the first English translations of Dr Louis Thiercelin's Travels in Oceania. Memoirs of a Whaling Ship's Doctor, 1866 (1995), to Neville Peat and Brian Patrick's Wild Dunedin (2002), David Young's Our Islands, Our Selves: A History of Conservation in New Zealand (2004), two works by alumnus Sir Geoffrey Cox, including a reprint of his classic Defence of Madrid (2006), and Professor Helen Leach's The Pavlova Story (2008).

The list of publications is varied, with strengths in natural history, New Zealand and Pacific history, including southern Māori history, social sciences, and poetry.

"A Record of Achievement: The 50th Birthday of the Otago University Press" offers an overview of the wide variety of publications produced, those involved in the making of the books, and the events that have shaped its development.

Recently published books of Otago alumni

High Country Lark: An Invitation to Paradise, by Neville Peat, Longacre Press, 2008.

"Thou Shalt Not Love": What Evangelicals Really Say to Gays, by Patrick M Chapman, PhD, Haiduk Press, 2008

No Ordinary Man: The Remarkable Life of Arthur Porritt, by Dr Graeme Woodfield and Joseph Romanos, Trio Books, November 2008.

Hostile Shores: Catastrophic Events in Prehistoric New Zealand and their Impact on Māori Coastal Communities, by Bruce McFadgen, Auckland University Press, October 2007.

A Word in Season: Reflections on Spirituality, Faith and Ethics, by Richard Randerson, Matai House, August 2008.

Te Ope Whakaora: The Army that Brings Life, edited by Harold Hill, Flag Publications, 2008.

The Making of the French Pass Road in the Marlborough Sounds, by Ian Dougherty, No Ordinary Life, 2008.

The Independent Expatriate: Academics Abroad, by Julia Richardson, VDM Publishers, May 2008.

The Complete Recovery Room Book, Fourth Edition, by Anthea Hatfield and Michael Tronson, Oxford University Press, October 2008.

Christian Criticisms, Islamic Proofs: Rashid Rida's Modernist Defence of Islam, by Simon A Wood, Oneworld, 2008.

Freedom to Read: a Centennial History of Dunedin Public Library, by Mary Ronnie, Dunedin Public Libraries/Association, 2008.

Alumni: If you have written a book lately email the editor at *mag.editor@otago.ac.nz*

A word from the Head

THE BEGINNING of 2009 has seen some important changes for the Alumni and Development Office. On 1 January we joined with the Development Office to form

a new entity, the Office of Development and Alumni Relations, which sits within the Office of the Vice-Chancellor. The new team is led by Associate Professor David Gerrard, an Otago alumnus, who is well known as one of New Zealand's leading authorities on sport and exercise medicine. We believe the merger heralds an exciting new era in alumni relations.

Associate Professor Gerrard takes over as Director of the University's Development activities from Dr Clive Matthewson, who retired at the end of 2008. Dr Matthewson was instrumental in raising \$25 million for the University through the highly successful Leading Thinkers initiative, a sum matched by funding from the Government's Partnerships for Excellence framework. His

tireless work in promoting the University was matched by a deep appreciation of the importance of alumni, demonstrated through his sustained and generous support of our activities.

Another eminent member of the Otago community who

has contributed much to alumni relations over the years also stepped down at the end of 2008. Dr Lindsay Brown, Chancellor of the University of Otago from 2003 to 2008, will be fondly remembered by many alumni for his participation in numerous alumni functions in New Zealand and overseas. We hope that, as an Otago alumnus himself, he will continue to have a lively involvement in alumni activities.

Love is in the air this month. To mark St Valentine's Day we feature a story for romantics, telling the tale of how love blossomed for three young couples brought

together by the University of Otago. Our thanks to Chris and Frances, Vivian and Willie and Matt and Klara for sharing their stories.



Alison Finigan

Upcoming University celebrations

2009 Knox College centenary
 Department of Computer Science 25th anniversary
 Cumberland College 20th anniversary
 City College 10th anniversary
 Department of Tourism 20th anniversary
 Otago University Rugby Football Club 125th
 jubilee

2010 Hocken Library centenary

2011 St Margaret's College centenary
Department of Home Science and Consumer and
Applied Sciences centenary
Studholme College centenary
Department of Preventive and Social Medicine
centenary
Department of Pharmacy centenary
50 years since the University of Otago became
autonomous from the University of New Zealand

Warden celebrates 20 years

During 2009 Dr Peter Norris will be celebrating his 20th anniversary as warden of St Margaret's College. St Margaret's alumni and friends are invited to join him at the college at 4pm on Friday 20 March to mark his contribution to the college. For further information visit www.smc.ac.nz

Otago University Rugby Football Club 125th jubilee, 29–31 May 2009

Celebrations and festivities have been organised to take place over Queen's Birthday Weekend. All former players, coaches, managers, administrators and friends of the club are invited to attend. For further information and to register your interest visit www.ourfc.co.nz or contact John Burke at jburke@business.otago.ac.nz

Knox College centenary, 7-9 August, 2009

Knox College, the second oldest residential college affiliated to the University, celebrates its centennial in August. The weekend of celebrations includes a ball and a formal dinner. Plans are under way to launch a history of the college, tentatively titled *A Living Tradition*, written by historian Dr Alison Clarke. The college has already received a large number of enquiries from those intending to join the celebrations. For information visit www.knoxcollege.ac.nz, phone 03 473 0107, or email alumni@knoxcollege.ac.nz

Department of Computer Science 25th anniversary, 11–12 September 2009

The Department of Computer Science celebrates its 25th anniversary in September. It is hoped that as many alumni as possible will gather for a weekend of activities centred on the past and present of the department. If you have any memorabilia, photographs or stories you wish to share, please email willem@cs.otago.ac.nz. With your consent,

they will become part of the book on the history of the department being written for the anniversary celebrations. To register your interest in the event, or for further information, contact Lizzy Lukeman, email lizzy.lukeman@otago.ac.nz

City College 10th anniversary, August and November 2009

City College was opened on 25 March 2000. The first decade of operation is being celebrated with an anniversary ball in August and a reunion function at the college on Friday 20 November. For further information contact Joy Crawford, phone 03 479 5592, or email joy.crawford@stonebow.otago.ac.nz

Department of Tourism celebrates 20 years

The Department of Tourism is celebrating 20 years of excellence in 2009 with events and functions to be held around New Zealand and internationally. All alumni and friends of the department are welcome to be involved in these celebrations. For information visit www.otago.ac.nz/tourism or please contact diana.evans@otago.ac.nz

St Margaret's College centenary, 28–30 January 2011

Visit *www.smc.ac.nz* to receive information on upcoming functions and the 2011 reunion.

Department of Home Science and Consumer and Applied Sciences centenary, February 2011

Please visit *www.otago.ac.nz/caps* to register your interest, or write to Consumer and Applied Sciences Centenary, PO Box 56, Dunedin 9054.

Reunions

"Friendship is the source of the greatest pleasures, and without friends even the most agreeable pursuits become tedious."

In November last year the Governor-General, The Honourable Anand Satyanand, used this quote from St Thomas Aquinas to sum up what is best about living in a University Residential College. As a former resident of Aquinas (1964), the Governor-General gave the keynote speech at the dinner celebrating 51 years since the founding of Aquinas College and 20 years of University ownership. At the conclusion of the reunion, a committee was formed to start planning for another reunion within three years.



Their Excellencies, Hon Anand Satyanand (second left) and his wife Susan Satyanand (left), with the head of Aquinas College, Scott Walker, and his wife Raewyn Tuffery.

Photos and a review of the reunion by Reverend Kevin Toomey can be viewed at www.otago.ac.nz/alumni/reunions/aquinas. A booklet containing memories of Aquinas has been compiled: please contact lizzy.lukeman@otago.ac.nz



Members of the MB ChB Class of 1959 and 1960 and their partners gathered at the Bayview Wairakei Resort early last year. Among the group of 55 guests, some of whom had travelled from Australia, Canada, US and the UK, was a former Prime Minister, a world champion athlete and a number of authors. The next gathering for this class group is planned to be held in the South Island and will include celebrations marking 50 years since their graduation.



Members of the MB ChB Class of 1977 recently gathered in Queenstown for the 31st anniversary of their graduation. Thank you to this class for their generous donation towards Annual Appeal scholarships. The donation will support a number of students starting their studies at Otago in 2010.

Homecraft Teachers' Class 1959

27 February–1 March 2009, Mount Maunganui Contact: Heather Culling-Smith at *hmcs@clear.net.nz*

MB ChB Class of 1963

Planning underway for March 2009, Auckland Contact: Lynda Leng at *lrleng@xtra.co.nz*

Sextet of 1959, 50th anniversary

14-16 May 2009, Dunedin

Contact: John Burton at jburton@actrix.co.nz

MB ChB Class of 1950

4-6 August 2009, Dunedin

Contact: Alwyn Beasley at alwynbeasley@hotmail.com

MB ChB Class of 1964

Planning underway for late 2009/early 2010 Contact: Peter Law at peter.law@xtra.co.nz

Studholme College residents 1981

January 2010, Dunedin

Contact: Phil Seddon at phil.seddon@otago.ac.nz

For help organising reunions contact Lizzy Lukeman at 64 3 479 5246 or email *lizzy.lukeman@otago.ac.nz*

Reducing our carbon footprint

There are a number of options for receiving communications from our office. Rather than sending a hardcopy of the *Otago Magazine* we can send you an email at the time of publication with a link to the magazine online. We can also arrange for a "household" copy to be sent if you have a number of alumni living at the same address. Please let us know the most convenient way for you to receive communications from us.

Regional alumni networks

There are a number of alumni groups around the world who get together for a variety of activities. Each of these groups is co-ordinated by local volunteers who work with the Development and Alumni Relations Office in Dunedin.

For information about regional networks in your area visit the Alumni and Friends website. To register your interest in becoming a regional contact or co-ordinator contact Alix Cassidy at 64 3 479 5649 or email alix.cassidy@otago.ac.nz

Alumni events 2009

Events have been confirmed for the following cities:

Nelson March 20 Melbourne April 1 Hamilton April 21 Tauranga April 23

San Francisco Date to be advised London Date to be advised

Sydney August 14
Gisborne November 5
Napier November 7

For further information about these or events yet to be confirmed, please email functions.alumni@otago.ac.nz, telephone Alix Cassidy on 64 3 479 5649 or visit the Alumni and Friends web page www.otago.ac.nz/alumni/functions

Giving to the University of Otago

Annual Appeal Scholar awarded a Woolf Fisher Scholarship

Congratulations to Andrew Haines (below), a 2005 Annual Appeal scholar, who has been awarded a Woolf Fisher Scholarship to support his research at Cambridge University. Andrew completed his BSc (Hons) in physics and mathematics at the end of 2008. He travels to the UK in October and plans to study for a PhD with the NanoPhotonics group at Cambridge.



Alumni events 2008

Toronto, Faculty Club of the University of Toronto, September









New York, Yale Club, October









Kuala Lumpur, Petroleum Club, Petronas Towers, October









Kuching, Crowne Plaza Hotel, October









Wellington, Shed 5, November









Christchurch, Christchurch Art Gallery, November









University of Otago in America, Inc

Established in 2002, to advance the University's interests in the US, the University of Otago in America, Inc has had a productive year with a number of successful meetings held during 2008. Led by Professor Murray Brennan, the board has been augmented by four new directors bringing the board membership to eight. We thank the directors for the contribution of their time and expertise to the University and look forward to the activities planned for 2009.

Annual Appeal update

Thank you to all alumni who generously supported the 2008 Annual Appeal. Your help has allowed us to fund scholarships for 11 students beginning their first year of study in 2009. This brings the total number of students supported through the Annual Appeal scholarship programme to 62 since 2003. We would also like to welcome David Ayre, who was awarded an Annual Appeal scholarship in 2005, to the Otago alumni community. David graduated in December 2008 with a BA/BSc.

In addition to funding undergraduate scholarships, donations over the past year have also been allocated to the following four research projects: The Centre for Entrepreneurship, The Centre for International Health, The Centre for Science Communication and The Centre for the Study of Agriculture, Food and Environment.

If you wish to make a contribution to the Annual Appeal you can do so by visiting the Alumni and Friends web page www.otago.ac.nz/alumni or contact Jude McCracken, email annualappeal@otago.ac.nz

The following messages of thanks have been selected from the many received from the students awarded Annual Appeal scholarships.



I would like to thank you for letting me have the most fantastic time without the burden of financial worries that so many students have. I look forward to next year with great anticipation as I enter another year as an Otago student and carry on my studies. Thank you so very much.

Clare Gwynne, Annual Appeal scholarship holder, 2008



Thank you to the Alumni community of Otago University who so generously donated money to the University for scholarships. In the future, I will also endeavour to give generously to Otago University for future student scholarships and for other developments.

Kate Perniskie, Annual Appeal scholarship holder, 2008



I cannot thank you enough for giving me this scholarship. It is hard to describe what a relief it is to not worry about fees. The scholarship really allowed me to focus on my work.

Thank you so much.

Chloe McDonald-Nairn, Annual Appeal scholarship holder, 2008

KEEP IN TOUCH

Address for correspondence:

Development and Alumni Relations Office

University of Otago PO Box 56 Dunedin 9054 New Zealand

Street address: Alumni House

103 St David Street

Dunedin
Tel 64 3 479 5246
Fax 64 3 479 6522

Web www.otago.ac.nz/alumni Email alumni@otago.ac.nz The Alumni and Friends website carries information on what's happening for alumni around the globe. Via the website you can:

- · receive updates about what's on for alumni
- register for alumni events
- update your contact details so you continue to receive publications from Otago
- view information on how to contact other Otago alumni
- find out how you can support the University.

Alumni stories

February is the month of St Valentine and we couldn't let this go by without acknowledging the fact that many alumni meet their future partner during their student years. Here are some tales of Otago romances generously shared by three happy ex-scarfie couples!



Chris and Frances: music as the "X factor"

Chris and Frances Norton (née Oakley) were both first-year music students at Otago in 1970. Chris, now an internationally-fêted composer of music for children, had various youthful enthusiasms, among them the music of Prokofiev. He frequented the music library and listening room in Marama Hall and discovered a recording of Prokofiev's Sinfonia Concertante for cello and orchestra, with Mstislav Rostropovich as soloist. Having got to love the piece, he was anxious to share it. At that moment, fate - Frances Oakley - walked in. She agreed to listen to the recording and appeared to appreciate the music in the same way. Thus, one of Otago's love stories began. Their subsequent double-act as pianist and page-turner for a local production of I Pagliacci cemented the deal. Decades later, having moved to the UK, Chris and Frances travelled to London from York to hear Rostropovitch play the same piece at the Festival Hall. How many great love stories have Prokofiev as that X factor? – 36 happy years of marriage later, it's still there! Frances is now head of the Wellcome Library in London. Chris continues to write music and travels the world as a performer, lecturer and adjudicator.

Vivian and Willie: skipped class to get married

On June 9, 1995, two Otago MBA students skipped a lecture for a much more important occasion: a date at the Dunedin Registry Office, where they were married in a simple but memorable ceremony. The story started in February 1994, when Vivian Kwok and Willie Pang came from Hong Kong to begin the Otago MBA programme. They didn't know each other, but both were looking forward to experiencing life in New Zealand. As classmates engaged in a tough and demanding course, Vivian and

Willie sometimes found themselves arguing and a serious conflict nearly put an end to their blossoming relationship. Fortunately, their home-stay landlady, Mrs Yu, intervened.



Her excellent advice helped them to look at each other with new eyes. To cut a long story short, Willie made his feelings known and was delighted to find they were reciprocated. Vivian and Willie tied the knot in Dunedin on that winter's day and are now living happily with their 10-year-old son in Hong Kong.

Matt and Klara: right place at the right time

Matt Belk and Klara Musilova met when Matt, an Otago graduate, started his MCom research at the University of Economics in Prague. He was not making as much progress as he would have liked, so went looking for help and found himself in Klara's office where she worked as an assistant to the Vice-Rector for International Relations. She used her contacts to set up research interviews and corrected a few misguided assumptions in Matt's project. He cheekily made a few more assumptions - a few dates and 11 days later he'd moved into her flat. By the time it came for Matt to return to Dunedin he'd convinced Klara to come too. Just as she arrived, a position became available as a student exchange advisor at Otago. Klara duly applied and was successful again right place, right time! In 2006, after a year together in Dunedin and a few months in Dublin, Ireland, they were married in the Czech Republic. They are currently living in Prague where Klara works for ExxonMobil and Matt works for Honeywell as a credit manager.



Dare to be disobedient: whatever happened to student protest?

IRREVERENCE, Mark Twain once said, is the champion of liberty, and its only sure defence. His compatriot Thomas Jefferson believed the spirit of resistance to be invaluable to government. Even Oscar Wilde, with archetypal perspicacity, pronounced disobedience to be the key to progress.

"Agitators are a set of interfering, meddling people, who come down to some perfectly contented class of the community and sow the seeds of discontent," Wilde observed. "That is the reason why agitators are so absolutely necessary. Without them, in our incomplete state, there would be no advance towards civilisation."

As is fitting for an institution that prides itself on nurturing independent thought and expression, the tradition of "agitation" at the University of Otago is one of which Wilde himself would have been proud.

Organised groups emerged in the politically conservative 1930s, as fora for alternative political views and platforms for debate about issues such as pacifism and freedom of thought. Following World War Two the vein of protest at Otago ran deep with anti-nuclear, anti-Vietnam War and anti-Springbok tour sentiment.

These days, however, student protest on campus is more likely to take the form of a stunt aimed at drawing media attention to mounting student debt or a marijuana smoke-up than an anti-war march. And, while vocal minorities still demonstrate passion for a cause other than their own, many believe the prevailing motivation for protest is fuelled by self-interest rather than loftier political ideals.

So does the torch of student protest at Otago still burn brightly with something akin to Jefferson's spirit of resistance, or has it been commandeered by groups interested purely in their bank balances or banned substances?

Past student presidents seem divided on the subject. Company director Alistair Broad, OUSA president in 1976 and a veteran of both bursary-related and anti-nuclear protests in his day, argues that today's students need to protest more about ideas and spend less time whining about money. He believes the shift towards internal assessment has reduced the student body's capacity for high-minded protest.

"Internal assessment has turned them into high school students," he says, "by turning their education into a year-round process that keeps students doing silly tests and assignments instead of focusing on wider matters and learning how to excel when it matters."

OUSA general manager Ross Blanch, who as student president in 1986/7 organised protest marches about userpays and North Dunedin land re-zoning, agrees internal assessment has negatively affected Otago students' protest capability because today's students have less free time.

Coupled with this, he says, is the increased pressure – when the costs are so high – to pass, as well as an often vital need to work part-time during term time to supplement income. The overall effect is less time available for other pursuits, whether that be protesting or partying.

"The irony is that students fought for and advocated [internal assessment], because it would be fairer," says Blanch. "But no one realised the impact it would have on student participation in the extra-curricular activities with which Otago scarfies, in particular, have come to be associated, such as capping revues and protests."

Lawyer Rachel Brooking, OUSA president in 1997 and one of the principal organisers of the Clocktower occupations aimed at protesting tuition fee increases in 1995 and 1996, believes the shifting emphasis of student protest also reflects the evolving political and social environment.

"New Zealand foreign policy has become very neutral, so there isn't anything to get too worked up about. You can protest in New Zealand about the US going into Iraq, but who is going to listen?"

On the other hand, she suggests, issues such as the student loan scheme – particularly in its initial, interest-bearing format – were perceived as not just about individual financial hardship, but also a fundamental inequity.

Higher education, as she and her fellow protesters tried to point out, has a societal value over and above



September 1993, students protest outside the Clocktower over tuition fees.

the betterment of the individual. And in a user-pays environment, she also suggests, many students have a tougher time just getting by. "Maybe," she quips, "[previous students] didn't have so much to worry about."

Blanch concurs. "My recollections are that the '81 Springbok tour protests were the last big 'wider issue' protests on campus. By the mid-80s there was a sense that we were directly under attack from the user-pays policies of the Labour government. This reflected such a change to the education status quo, and was perceived as such a threat to student and university culture, that it demanded a significant response. Student activists and associations had to focus their resources on opposing it at the expense of activism on wider issues."

Blanch points out that wider-issue activism continues on campus, albeit championed by a smaller core of people. Both he and Brooking believe students are not more self-interested than their predecessors, just caught in a different social environment in which pressures on students are greater.

Broad, on the other hand, thinks students are in need of a leader with ideals, and that today's students will need to "re-train" in order to create protest groups that can effect meaningful change. He suggests students challenge the perceived inevitability of rising fees, which are all too easily

attributed to government policy, by targeting courses on which to drive fees down.

Brooking is proud of the effectiveness of the occupation protests with which she was involved. "The most difficult thing was controlling the media coverage and keeping the issues focused on the national agenda," she recalls.

She acknowledges that in a media-saturated world, student protest now has to be creative to get its point across, and utilise a wider range of action.

Blanch agrees: "Protests of the 'rallying' kind are only effective if they are big," he observes. "If 3,000 students march over to the Clocktower to complain about something the University is doing then the Vice-Chancellor might pay attention. When 300 turn up to wave placards he just dismisses it as a few radicals.

"As a result, we now see student politicians using other methods to promote change: well-researched submissions, use of the media to present arguments, negotiations behind closed doors, lobbying through ongoing dialogue and relationship-building with those in authority. All of these were common in my day as well – and arguably more effective than protests even then – but few things grab the spotlight better than a really big protest march!"

Rebecca Tansley



www.otago.ac.nz/study/postgraduate_study

postgrad@otago.ac.nz

Research is the lifeblood of any great university. In fact, Otago now stands as New Zealand's top-ranked university for research quality¹. This means a lot to us, but it can mean even more to you, because as a postgraduate student at Otago you'll be surrounded by leaders in academia and have access to support and facilities unrivalled in New Zealand. And with more than 200 scholarships available, there is of course financial assistance to help you concentrate on your studies.

The University of Otago is where you'll find the future you've been looking for. It's where you'll discover your place in the world.

Contact us for a copy of
Otago's Postgraduate Prospectus
or to talk through your options
(NZ) 0800 80 80 98
(AUST) 1800 468 246



¹ Tertiary Education Commission. PBRF Quality Evaluation 2006. (Wellington, 2007)