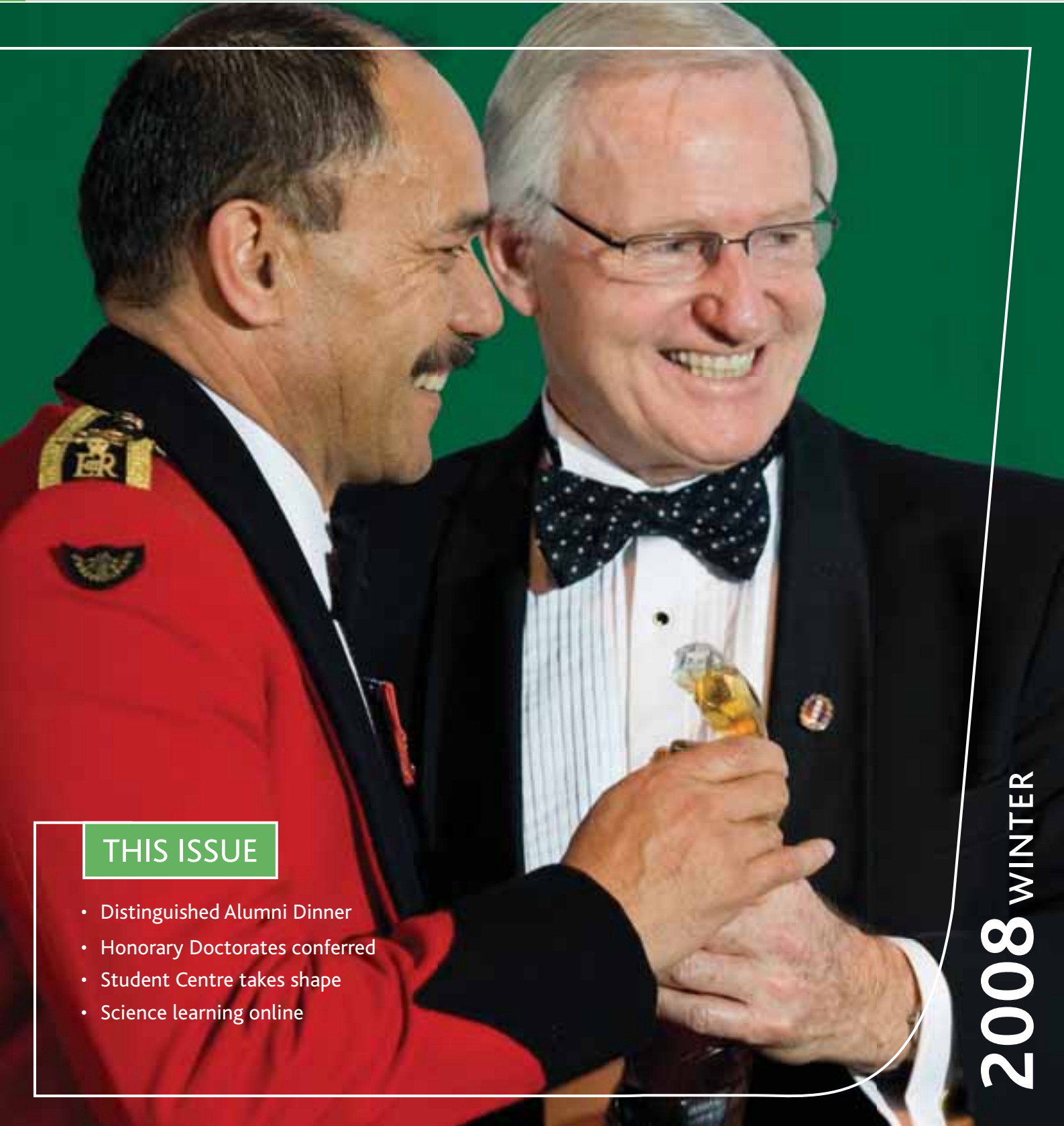




# Off Campus



## THIS ISSUE

- Distinguished Alumni Dinner
- Honorary Doctorates conferred
- Student Centre takes shape
- Science learning online



THE UNIVERSITY OF  
**WAIKATO**  
*Te Whare Wananga o Waikato*

## VISION

Tēnei te Whare Wānanga o Waikato e whakatau nei i ngā iwi o tea o roto i te riu o te awa e rere nei, ki runga i te whenua e hora nei, ki raro i te taumaru o ngāmaunga whakaruru e tau awahi nei.

Nau mai, haere mai, haere mai.

(Introductory mihi from the University of Waikato Charter)

## MISSION

To combine the creation of knowledge through research, scholarship and creative works with the dissemination of knowledge through teaching, publication and performance.

The Vision for the University of Waikato, informed by our existing high quality teaching and research, is to:

- deliver a world-class education and research portfolio
- provide a full and dynamic university experience which is distinctive in character
- pursue strong international linkages to advance knowledge

The over-arching themes of the Vision are:

- Excellence
- Distinctiveness
- International Connectedness

2008 WINTER

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Cover picture: The Chancellor, the Rt Hon. Jim Bolger, congratulates Lieutenant General Jerry Mateparae.

The University of Waikato Te Whare Wananga O Waikato

Tel ..... +64 7 856 2889  
Course enquiries ..... +64 7 838 4466  
Fax ..... +64 7 838 4300  
Web ..... www.waikato.ac.nz  
Email ..... info@waikato.ac.nz

Gate 1 Knighton Road | Hamilton 3240  
Private Bag 3105 | New Zealand

### Public Relations & Marketing

Tel ..... +64 7 838 4144  
Email ..... unipr@waikato.ac.nz

### Alumni Office

Freephone ..... 0800 258 664  
Tel ..... +64 7 838 4575  
Fax ..... +64 7 838 4545

## ➤ *Achieving our Vision*

*It is my pleasure to welcome Alumni and Friends of the University of Waikato to this new edition of "Off Campus". In it you'll read about some of the outstanding achievements of our researchers, the wide-ranging successes of our graduates and the recent activities of the University.*



PROFESSOR ROY CRAWFORD

The previous 12 months have been challenging for the University in many respects, and I am very proud of the way in which we have collectively risen to those challenges. In response to a range of both external and internal factors, we have had to be particularly creative and innovative in identifying strategies to ensure we are on target to achieve our Vision and Way Forward. We have performed extremely well in a number of very significant areas. We are maintaining a strong momentum, and I am confident the University will achieve even greater successes over the next few years.

Student enrolments continue to be strong. Very importantly, new enrolments, both domestic and international, are much higher this year and they will have a positive "pipeline" effect as students carry on through the subsequent stages of their degrees.

Last year, our main focus was on developing our Academic Plan, which now serves as an important guide to the University in the achievement of our Vision and Way Forward. It represents a clear and agreed basis for well-informed strategic investment decisions, which are aligned with the needs and demands of our stakeholders and which support the overall strategic objectives of the University and government.

We are well on track with many of the commitments that we made in our Academic Plan. Major projects already underway include the development of a Research Plan, a Māori Strategy, an International Strategy and an Operations Plan. The University invested almost \$4 million in six strategic research projects. A regular cycle of academic programme reviews is in train. A major review of the Faculty of Arts and Social Sciences will be undertaken and concluded before the end of the year.

Students and visitors to the campus are aware of the major construction programme currently in progress. It promises some

wonderful results. The already completed renovations of the office space of the Pro Vice-Chancellor (Māori) and her staff, Te Āhurutanga, are stunning. Construction of our new Student Centre, to be attached to the library, is scheduled to begin by the end of August, and the central retail area is being redeveloped at the same time. They are just some elements of the University's 10-year campus development plan, which takes into account current and anticipated trends, the international education market, awareness of sustainability issues, the advantages of city-campus integration, expressions of bi-cultural identity and multi-cultural needs.

I have had the pleasure of meeting a number of you at University events over recent months, particularly in Hamilton and also Tauranga. The achievement of our strategic goals depends heavily on our international links and with this in mind, the Chancellor, the Rt Hon. Jim Bolger, and I also participated last year in a number of overseas events, including a very successful Friends and Alumni event which we hosted at the New Zealand Ambassador's Residence in Washington DC. This year, we are planning similar events in the UK, China, Australia and elsewhere. These events are valuable not only in terms of enhancing and extending our links with our alumni, but also because of the potential opportunities that they bring with respect to industry and endowment funding. The active support and engagement of our alumni, in New Zealand and overseas, is becoming increasingly critical to the success of this University, and I am grateful to all those of you who contribute to that success.

With my best wishes

A handwritten signature in black ink that reads "R. Crawford". The signature is written in a cursive, flowing style.

Professor Roy Crawford  
VICE-CHANCELLOR



## Advancing the University

Welcome to this issue of our "Off Campus" publication, my first as Director of Development.

Since taking up the appointment last year, I have spent a lot of time listening and learning about the University of Waikato, and looking at ways we engage with you, the University's many friends, and our broader communities of interest.

My role represents a shift of focus for the University - a firming of our commitment to develop effective partnerships, domestically and internationally, and private sector fundraising for the benefit of future generations of students and staff.

You may ask yourselves why we need private investment in our universities, which are already publicly funded. Both public and private investment in our universities has an excellent rate of return. Universities underpin New Zealand's economic growth, turning out thousands of highly trained graduates each year, and generating new ideas and knowledge, which in turn create new industries and jobs.

Fortunately new tax rules which came into effect on April 1, provide incentives for both individuals and companies to support universities and other non-profit organisations. This represents a significant step forward in promoting philanthropic giving in New Zealand (story page 8). I am grateful to be working with the University of Waikato's Foundation Trustees, led by the Chair John Gallagher and Deputy Chair Alastair Calder, to raise money for the University's strategic priorities.

I would like to take this opportunity to acknowledge the recent generous gift of Jill Waddington and her family, in memory of husband and father Richard, who worked assiduously for many years to help found the University and fundraise for it (story page 7). The Waddington family exemplify the spirit of philanthropy which is of immense value in advancing the University's objectives.

Our alumni are equally important to us, so much so we have instigated an annual Distinguished Alumni Awards Dinner.

These awards recognise graduates who have moved on to stellar careers and who are making a difference in their chosen fields. I would like to congratulate all of them (see story page 10).

I would also like to congratulate the winner of the Ted Zorn Waikato Alumni Award for Management Communication and the two recipients of Waikato Graduate Women Merit Study Awards for Doctoral Study, also featured in this issue.

We have held a number of events for friends and alumni in recent months, including a series of musical receptions in Hamilton and Tauranga, and a 25th anniversary dinner for the Class of '82. Events such as these are an excellent opportunity to renew University friendships and to network. Further afield, New Zealand's Ambassador to the US, His Excellency Roy Ferguson, the Chancellor, the Rt Hon. Jim Bolger, and the Vice-Chancellor, Professor Roy Crawford, hosted a reception at the Ambassador's Residence in Washington DC for over 60 friends and alumni. Among the guests were Drs Zorana and Aleksander Jelenak, who completed PhDs at Waikato in physics, and are now working at the US National Oceanic and Atmospheric Administration in the Center for Satellite Applications and Research. We feature them on page 9.

There are now some 40,000 University of Waikato alumni but we have contact details for only 27,000 of you. We would like to reconnect with all of our alumni so spread the word and, if you are changing your address, please let our Alumni Office know by emailing [alumni@waikato.ac.nz](mailto:alumni@waikato.ac.nz).

I am looking forward to working with you and to celebrating the University's many achievements together.

Christine Brabender  
DIRECTOR OF DEVELOPMENT



CHRISTINE BRABENDER

### University of Waikato

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## Businessmen brothers honoured

*John and Bill Gallagher, two of the Waikato's most well-known businessmen, have been honoured for their outstanding contribution to the University and the community.*



JOHN (LEFT) AND BILL GALLAGHER

The University bestowed its most prestigious award, an Honorary Doctorate, on both of the brothers in March. The doctorates came as Gallagher Group marked the 70th anniversary of the founding of the family-owned electric fencing manufacturing and engineering firm in Hamilton that Bill Gallagher, with the support of his brother John, has built into the internationally-competitive Gallagher Group.

The brothers were honoured at a dinner at the University's WEL Academy of Performing Arts involving Gallagher family members, Gallagher Group staff, and University of Waikato representatives.

The University has benefited in many ways from its ongoing relationship with the Gallagher Group through Bill and John Gallagher. The Performing Arts Centre and the Gallagher Great Race are two significant University initiatives due in no small part to the sponsorship and involvement of the Gallagher Group. Ongoing projects include research contracts and student placements, while Bill Gallagher also serves on the Board of WaikatoLink, the University's commercialisation arm.

As Chairman and Chief Executive of the Gallagher Group for more than 20 and

30 years respectively, Bill Gallagher has led its development into the largest and most successful private company in the Waikato, and a major employer in the region. Gallagher Group has become a significant international player in the animal management systems and security industries, with annual sales exceeding \$NZ100 million, and customers in more than 130 countries worldwide.

John Gallagher has been a director of the Gallagher Group for more than 30 years and, having supported his brother Bill to turn the company into a successful international operation, he has committed much of his time to building a rich and vibrant Waikato community for present and future generations.

During his outstanding career, Bill Gallagher has served on numerous prestigious and influential organisations, including TradeNZ, the Auckland and Waikato Manufacturers Associations, the NZ Manufacturers Federation R&D committee, the Ministry of Agriculture and Fisheries Agricultural Strategy Council, the Ministry of Commerce's manufacturing advisory group, Telarc, and the NZ Standards Association, the NZ Meat Research Foundation, the Regional Health Authority, and Port of Tauranga Ltd.

He is a Fellow of the Institute of Professional Engineers of New Zealand, a Fellow of the NZ Institute of Management, a Distinguished Fellow of the Institute of Directors, and was inducted into the National Business Review Hall of Fame in 2004. He is also an Honorary Fellow of the Waikato Institute of Technology.

On a wider stage, Bill Gallagher was made a Member of the British Empire in 1987, awarded the Queen's Commonwealth Medal in 1990, and became a Companion of the New Zealand Order of Merit in 1998.

John Gallagher has made a huge contribution to community governance in the Waikato, with a long history of serving on numerous boards, both commercial and relating to the wider community. Presently, this includes Habitat for Humanity, the Order of St John and Enterprise New Zealand at both local and national levels, and a host of local organisations. Previously, he has been a Waikato Regional Councillor and a Hamilton City Councillor of some 12 years standing, including a term as Deputy Mayor, and was also elected to the WEL Energy Trust for nine years. He was the founding President of Tourism Waikato and has also served as a Justice of the Peace for many years.



## ► Honorary Doctorate for Brian Perry

*Businessman and benefactor Brian Perry, founder of one of the region's largest and most successful corporations, has been awarded an Honorary Doctorate in recognition of his vision and overwhelming generosity and support for the Waikato community.*

Brian Perry's name is well-known throughout the Waikato. He founded Brian Perry Limited in the 1960s, which diversified over the years into The Perry Group, which he chaired until 2002.

The Perry Group, which has Waikato-based interests in construction, property development, quarrying, aggregate mining, metal protection and manufacturing, is a major contributor to the prosperity of the region.

Before reaching the age of 30, Mr Perry established a charitable trust and foundation with monies entirely generated from his business profits - a move as comparatively unique today as it was more than 40 years ago.

The monetary contributions made by Brian Perry's trust, foundation and businesses over the past five decades are regarded as unprecedented in the Waikato. His giving also extends further, with many communities benefiting throughout New Zealand. In 2007, about \$30 million was awarded in grants to worthy organisations.

A long time supporter of education, and particularly the University of Waikato, Mr Perry's fundraising efforts and contributions date back to the 1960s. In 1994, he received the University of Waikato Medal, which is reserved for those who have provided distinguished service to the University and its communities.

Today, the Perry Foundation helps individual students achieve excellence through the Brian Perry Business Management Scholarship, the Perry Foundation Scholarships in Science and Engineering, and the Sir Edmund Hillary high performance scholars.

In addition, the Perry Foundation has contributed to the University's flagship facility, the WEL Energy Trust Academy of Performing Arts, and is also a sponsor of the annual Great Race rowing regatta.

For more than 40 years, Mr Perry has donated not simply money, but his own time. However, he avoids personal recognition, remaining



BRIAN PERRY  
AT THE RECENT CONFERRAL OF HIS HONORARY  
DOCTORATE FROM THE UNIVERSITY OF WAIKATO

modest and humble. He is highly respected for his integrity, his kindness and his passion to help fellow New Zealanders.

## ► Master weaver's life work honoured

Renowned Māori weaver, Diggeress Rangituatahi Te Kanawa, followed in the footsteps of her mother Dame Rangimarie Hetet with the award of an Honorary Doctorate from the University of Waikato for her dedication to keeping the traditions of fine weaving alive.

Conferring the degree, the University Chancellor, the Rt Hon. Bolger, said an Honorary Doctorate was the highest accolade the University could bestow.

"It acknowledges your knowledge and your commitment to excellence in the fine art of weaving and your key role in maintaining Māori weaving traditions. It's a great honour and pleasure for me to confer this degree on you," he said.

Co-founder of Aotearoa Moananui-a-Kiwa Weavers' Association, Mrs Te Kanawa is renowned at local, regional, national and international levels as a Tohunga Raranga, Master Artist, and continues to receive recognition and awards at all levels. Her work is exhibited and held in collections



THE CHANCELLOR, THE RT HON. JIM BOLGER, CAPS DIGGERESS RANGITUATAHI  
TE KANAWA ON CONFERRAL OF HER HONORARY DOCTORATE

in Europe, the United States and New Zealand, with a recent work commissioned for Te Arikiniui King Tuheitia. Mrs Te Kanawa is the recipient of a number of awards including the 1988 Air New Zealand Travel Award, the Sir Kingi Ihaka Award (2001), and in 2003 was made an Icon Artist by the Arts Foundation of New Zealand. She is also the author of *Weaving a Kakahu* – the formal expression

of a life committed to weaving. With her daughter Kahutoi, she is holder of the elite Toi Iho registered mark of quality and authenticity awarded to artists for their production and promotion of Māori art. Diggeress Rangituatahi Te Kanawa is of Ngāti Maniapoto and Ngāti Kinohaku descent. She acknowledges the art passed down to her from Dame Rangimarie.

## University honours “bug man”

*New Zealand’s king of the creepy-crawlies, Ruud Kleinpaste, has been awarded an Honorary Doctorate from the University of Waikato.*

Ruud, commonly known as the “bug man”, said it was fantastic to be recognised by his scientific peers.

His Honorary Doctorate was conferred in April as part of the University’s graduation ceremonies at the Founders Theatre in Hamilton, which saw more than 1600 students graduate.

Ruud holds an MSc honours degree in silviculture (trees), animal ecology and conservation from Wageningen University in his home country, the Netherlands. However, he had no idea the University of Waikato was planning to honour his work on insects in such a way. “It came out of the blue; I was stunned. It’s really brilliant.”

He said it was a huge honour because it came from his peers and also because his work in “popularising something everybody hates” had sometimes been viewed as dumbing down entomology.

However, using enthusiasm and the media to communicate with, and involve, people was key to raising awareness, he said. “I still believe that it’s the way to do something for the environment, and for the next generation.”

Over many years, Ruud has positioned himself as one of New Zealand’s leading science communicators, utilising media such as his popular radio talkback show Ruud’s Awakening and a range of television roles, as both a presenter and a narrator, to educate listeners and viewers about the importance of insects, and to challenge some popular misconceptions.

He has written regular columns and articles for New Zealand’s leading newspapers and magazines, and has published two books – *Scratching for a Living* in 1997, and *Backyard Battlefield* in 2005.



RUUD’S SHOCK: RUUD KLEINPASTE WAS SHOCKED BUT HONOURED TO BE CONFERRED WITH AN HONORARY DOCTORATE FROM THE UNIVERSITY OF WAIKATO

Recognised worldwide as an expert on ecology and insect behaviour, Indonesian-born Ruud, who moved to New Zealand in 1978, has hosted internationally-syndicated television programmes for the Discovery Channel and Animal Planet, including *The World’s Biggest and Baddest Bugs*. He’s also a regular on the Jay Leno show.

Ruud also works closely with researchers at the University of Waikato to prepare material for his public and media presentations, and acts on the University’s behalf as a science ambassador at events such as Fieldays.

He hopes his Honorary Doctorate will inspire young people to take up science as a career,

and says he is looking forward to becoming even more involved with the University.

Despite his busy lifestyle, Auckland-based Ruud maintains his research activity and stays at the forefront of his subject area. He regularly works as a consulting entomologist for government departments and private companies, lectures on ecology and entomology, and is deeply involved in New Zealand’s conservation efforts.

He is a trustee of Project Crimson; the Little Barrier Island Supporters’ Trust; Bank of New Zealand Kiwi Recovery Trust; and the Zoo Charitable Trust; as well as being a patron of Keep New Zealand Beautiful.

### Honorary Fellowship

The University has awarded an Honorary Fellowship to Anthony Percy Upton Millett in recognition of almost 40 years’ dedication to creating and developing the University Library.

As well as being involved in the physical design and development of the new library in the 1970s, he was equally immersed in the creation of collections that contributed, and still contribute, to the excellence of the University’s teaching and research.

He has held a number of roles including Head of Acquisitions, Deputy and Acting University Librarian, Business Services Manager,

and most recently Business and Development Services Manager.

Tony is an inaugural member of the Library and Information Association of New Zealand Aotearoa Copyright Taskforce, and was primarily responsible for drafting its copyright “Guidelines for Librarians.” He was also a member of the New Zealand Vice-Chancellor’s Standing Committee on Copyright and for some time, the University of Waikato’s Copyright Officer.

He is an Honorary Life Member of the Library and Information Association of New Zealand.

## Waddington legacy carries on

*Jill Waddington, the widow of a former member of the University Council, has made a generous gift to the University in memory of her late husband Richard Bristowe Waddington.*

The gift from Mr Waddington's estate and from the sale of a Colin McCahon painting has been used to develop the Leisure Centre in College Hall, which will be renamed The Richard Waddington Leisure Centre.

The Waddington family, who had owned the McCahon work, *Canterbury Landscape*, since 1992, has been associated with the University for more than 50 years. This began with Richard Waddington's membership of the University of South Auckland Society, which was formed in 1956 and he was the early champion of the concept of a university in Hamilton.

As the representative of the Service Organisations of the Waikato, Mr Waddington was part of the group of business leaders who worked on the plan to establish the University and in 1963 was a member of the group who travelled to Wellington to discuss the passing of the Waikato University Bill with the then Minister of Finance, Rob Muldoon.

From this time he was an avid fundraiser, particularly for the University Halls of Residence, and was a Government Appointee



MRS JILL WADDINGTON SPEAKING AT THE OPENING OF THE RENOVATED RICHARD WADDINGTON LEISURE CENTRE.

on the University Council from 1976 – 1986. Not surprisingly, he was awarded an Honorary Doctorate in 1971 for his significant services to the University.

College Hall serves approximately 330 students at the University. The Waddington donation will offset some of the construction and renovation costs required to extend the Leisure Centre to provide a

higher level of recreation, social, and study amenities for College Hall residents. The extension project includes converting current television rooms into a computer lab providing up to 16 workstations, and a study room used for meetings, group study and tutorials.

Disability access ramps will be constructed at the front and rear of the building and decking at the rear will be raised to provide easier access into the administration and dining block, the computer laboratory, and the Leisure Centre. Glass electronic opening doors will be installed at the front entrance, providing easier disabled access as well as a more welcoming environment for students, conference delegates and the public.

Mrs Waddington said she was very happy there would be a lasting tribute on the campus to her husband's memory.

"Richard had a vision to establish a university in Hamilton and he worked tirelessly with other business and community leaders to achieve this goal. I am sure he would be as delighted as I am to see the centre named after him."

University Vice-Chancellor Professor Roy Crawford said he was moved by the generosity of the Waddington family gift.

"We already owe a real debt of gratitude to Richard Waddington and other Waikato business people who did so much in the early days to establish this University.

"He was part of the informal local think tank, fundraised before and after the University opened, sat on Council for 10 years, and his family continue to support us after his passing with this generous donation.

"He saw the benefits to the region of the University and worked hard to make it a reality."

Although Mrs Waddington now lives in Wellington, the family's close connection with the University continues; daughter Mary-Jane Waddington is the Manager of Postgraduate Studies Assessment and Graduation.

The renovated Richard Waddington Leisure Centre was officially opened on the 16th June.

## Tauranga manager a new face on Foundation Board

*Tauranga businessman John Revington has been co-opted to the University of Waikato Foundation. Mr Revington, who has a Bachelor of Engineering (Civil) from the University of Canterbury, is a Director of Beca Corporate Holdings Ltd and regional manager for Beca in Tauranga, with responsibility for the Bay of Plenty.*

He will be on the Foundation Board for up to three years as a co-opted trustee. He is then eligible for re-appointment for a further three years. He joins Tauranga businesswoman Adrienne von Tunzelmann on the Board, which is chaired by Hamilton businessman John Gallagher.

The other board members are the University's Chancellor, the Rt Hon. Jim Bolger, the Vice-Chancellor, Professor Roy Crawford, and Hamilton businesspeople Terry Booth, Alastair Calder, Sharon Taylor and Ken Williamson.

The University of Waikato Foundation – Te Pou Taunaki is an independent charitable trust, formed to support and fund the University of Waikato, to help it take new New Zealand ideas to the world.

It raises funds to support the strategic objectives of the University and, during its last campaign, raised \$11 million for the Academy of Performing Arts, the UniRec Centre, student scholarships and other projects.



JOHN REVINGTON

## Tax incentives for giving

*New tax rules aimed at boosting the level of donations to philanthropic organisations came into effect on April 1. The incentives provide tax benefits for both individuals and companies.*

The University's Director of Development, Ms Christine Brabender, welcomed the move, saying the tax incentives represent a significant step forward in promoting philanthropic giving in New Zealand.

"The reality is that government funding for the tertiary sector has declined in real terms in the last few years, and that fund-raising by institutions like ours is part of the landscape to help support capital projects, scholarship and research, which will be of benefit to future generations of students and the country," she said.

Under the new incentives, the current caps on the dollar amount of donations eligible for tax relief will be axed. Individuals, companies and Māori authorities will be able to claim rebates and a deduction up to the level of their annual net income.

Individuals will no longer be restricted by the current \$1890 a year donation limit eligible for tax rebates, and the five percent limit for tax deductions for companies and Māori authorities will also be removed.

The company deduction is also being extended to unlisted companies with five or fewer shareholders. Given that 97 percent

of New Zealand businesses are SMEs (small to medium-sized enterprises), the potential of this change is significant.

The incentives apply to gifts of money to so-called "approved donee organisations," not just charities. This includes entities that use their funds wholly or in part for charitable, benevolent, philanthropic or cultural purposes in New Zealand, and also a number of listed entities.

Announcing the package, the Minister of Revenue, the Hon Peter Dunne, said it represented "a significant and radical departure from the previous policy approach," designed to foster a stronger culture of charitable giving within New Zealand.

The Government is now exploring further incentives including voluntary payroll giving schemes similar to those in Australia and the UK, and options for reforming the tax treatment of reimbursements and honoraria paid to volunteers.

Under the new rules, individual taxpayers can claim a tax rebate calculated at 33.3 percent of the amount donated. Formerly, the tax rebate rate was capped at \$630, available for gifts up to \$1,890 a year.

With the axing of the \$680 cap an individual donor, with a taxable income of \$50,000, who makes cash donations of, for example, \$10,000 in a year will be able to claim a tax rebate of \$3,333. The net cost of donations to the lender will be \$6,667.

Large and small companies will be affected by two key changes which impact on the concessionary tax deduction for gifts of money to approved organisations. Tax relief on philanthropic donations will be extended to companies controlled by five or fewer people. In addition, companies will be able to claim the concessionary deduction each year for gifts of money up to the amount of their net income.

For example, an unlisted company with a net income of \$100,000 will be able to make a cash donation of \$10,000 and claim a tax deduction for that amount. The effective cost of the donation to the company would be \$7000, given the company tax rate of 30 percent.

For more information go to:  
[www.taxpolicy.ird.govt.nz](http://www.taxpolicy.ird.govt.nz)

## Ted Zorn Award

*Waikato Management School graduate Alice Clements was the winner of this year's Ted Zorn Waikato Alumni Award for Management Communication, which recognises graduates who are excelling in their profession.*

Since graduating in 2001, Alice has turned her hand to researching and writing a book on the history of Auckland Airport and has lectured in PR and communication at the Royal Melbourne Institute of Technology University.

Recently, she took up the role of PR and Marketing Manager for Melbourne-based health charity Marie Stopes International Australia, handling everything from advocacy issues to sales of Vixen condoms, which are a fundraiser for the charity.

The annual Ted Zorn Alumni Award celebrates MCom graduates outstanding achievements in communication management roles. Graduates are encouraged to nominate themselves, classmates or professional colleagues who have achieved academic qualifications in MCom and have distinguished themselves in serving their profession and society.

Professor Zorn, who funds the award, says there is a need to better connect with alumni and to recognise their success in implementing the principles taught.



ALICE CLEMENTS

## Waikato visits Washington DC

The New Zealand Ambassador to the United States, His Excellency Roy Ferguson, joined the Chancellor, the Rt Hon. Jim Bolger, and the Vice-Chancellor, Professor Roy Crawford, in welcoming guests to a cocktail reception in October at the Ambassador's Residence in Washington DC.

Sixty-eight guests, including US-based alumni, corporate leaders, and higher education experts attended the reception, held to introduce and celebrate the University of Waikato's teaching and research excellence, and its commitment to building international links.

Following a warm welcome from the Ambassador, Mr Bolger spoke about the important international dimension of universities in dispelling fear by educating world citizens.

Professor Crawford highlighted the University's number one subject rankings in the independent Performance-Based Research Fund (PBRF) assessment, and its leadership in Computing and Mathematical Sciences, and Management. He also noted Waikato's very favourable research performance, measured in terms of commercial licence revenue generation per research dollar spent, when compared with Stanford and Harvard Universities.



UNIVERSITY OF WAIKATO CHANCELLOR, THE RT HON. JIM BOLGER, THE NEW ZEALAND AMBASSADOR TO THE US, HIS EXCELLENCY ROY FERGUSON AND WAIKATO ALUMNUS CRAIG NEVILL-MANNING AND HIS WIFE KIRSTEN, BOTH OF GOOGLE

Among the alumni present were: Svetlana and Jeff Edmeades of the World Bank and International Centre for Research on Women, respectively; Andrew Cross of International Finance Corporation; Dr Martin Chandler of Washington Suburban Sanitary Commission; Xi Fong of the Library of Congress; Dr Graeme and Dorrie Hancock of the World Bank and University of Maryland, respectively;

Drs Aleksander and Zorana Jelenak of the Center for Satellite Applications and Research at the US National Oceanic and Atmospheric Administration; Ian Nield of the Reserve Bank of New Zealand; Craig and Kirsten Nevill-Manning of Google; Lara Raney of the World Bank; and Michelle St Jane of Kairos Philanthropy.

## Planetary watchdogs

When Aleksander and Zorana Jelenak completed doctorates in physics at the University of Waikato, they had no idea they would both find themselves working at the US National Oceanic and Atmospheric Administration (NOAA), based in Washington DC.

"Our careers did indeed turn out to be more interesting than we ever dreamed of and it is our PhDs from Waikato that have enabled us to venture into this area of work," says Zorana.

The Jelenaks were among guests at the cocktail reception in Washington DC for alumni and friends of the University (see story above).

Both are NOAA staff scientists, Aleksander in NOAA's Satellite Meteorology and Climatology Division (SMCD), and his wife Zorana in the Satellite Oceanography and Climatology Division (SOCD).

SMCD conducts research and develops new satellite products to improve and expand the use of satellite data for monitoring

and predicting global weather, climatic and environmental conditions. The division conducts an end-to-end programme, ranging from planning new satellite instruments to developing advanced satellite products and applications for NOAA's operations.

Projects include remote sensing of atmospheric aerosols, heavy rain and flash flood forecasting, climate and agricultural monitoring, detection and assessment of drought, and snow mapping.

SOCD provides the research and development of remote sensing data on the world's oceans. It carries out research on sea surface temperature and winds, sea surface height, ocean colour, sea ice and sea surface roughness.

Satellite data is transformed into high quality, state-of-the-art products and information on the oceans, for example, to locate and identify harmful algal blooms ("red tides"), to locate and assess the extent of sea ice to help hurricane prediction.



WAIKATO ALUMNI DRs ALEKSANDER AND ZORANA JELENAK AT THE WASHINGTON DC RECEPTION

Both Aleksander and Zorana say it is very exciting to be working alongside some of the world's top scientists in this field who are at the cutting edge of research, knowledge and innovation.

## ➤ Distinguished Alumni Awards held



RT HON. JIM BOLGER, LIEUTENANT GENERAL JERRY MATEPARAE, PETER VELA AND VICE CHANCELLOR PROFESSOR ROY CRAWFORD.

Guests at the recent Distinguished Alumni Awards were in excellent company at the dinner hosted by the University's Chancellor, the Rt Hon. Jim Bolger and Vice Chancellor Professor Ray Crawford at the WEL Energy Trust Academy of Performing Arts.

This year's distinguished alumni are the Chief of the Defence Force Lieutenant General Jerry Mateparae, ONZM; businessman Peter Vela, ONZM; and Solomon Islands Prime Minister Dr Derek Sikua. They were honoured at a dinner in July, which was attended by community leaders, friends and supporters.

The Distinguished Alumni Awards recognise and celebrate alumni who have made an outstanding contribution to their profession, to the community, to the arts or sport, or to more than one of these areas since graduation from Waikato University.

The inaugural awards were held last year, acknowledging former Telecom CEO Theresa Gattung, Deryck Shaw and Clare McTamney.



LIEUTENANT GENERAL MATEPARAE WITH HIS WIFE, JANINE



PATRICIA AND MICHAEL CRAWFORD



JOHN HUNTER, SIR PATRICK HOGAN, DAVID ELLIS AND PETER VELA



ATA TE KANAWA OF TUI MAGAZINE WITH MASSEY ORMSBY



HONORABLE GEORGINA TE HEUHEU, HAMILTON CITY MAYOR BOB SIMCOCK AND WIFE, ANTHEA, AND ELEANOR BARTON



BILL AND JOAN FLOWER



LIEUTENANT GENERAL JERRY MATEPARAE

The University of Waikato has much pleasure bestowing the award of 2008 Distinguished Alumni on Lieutenant General Jerry Mateparae in recognition of his exemplary career in the New Zealand Defence Force, and his contribution to the military and the wider New Zealand community.

Lieutenant General Mateparae is a distinguished soldier and scholar, and holder of the highest military rank in New Zealand. He is both the youngest person and first Māori – of Ngāti Tuwharetoa descent – to be appointed Chief of the New Zealand Defence Force.

He graduated from the University of Waikato in 1996 with a Master of Arts in International Relations and Strategic Studies and is a fellow of the New Zealand Institute of Management.

Having enlisted in the Army aged 18, Jerry Mateparae rose through the ranks commanding infantry units of increasing size before being appointed to a series of general staff positions.

He has held two operational postings to peace support missions in Southern Lebanon and Bougainville as well as serving as Joint Commander for New Zealand Forces in East Timor. In 1999 he was awarded the New Zealand Order of Merit for his work in Bougainville.

Lieutenant General Mateparae brings additional mana to his position, representing the Defence Force and New Zealand with credibility and dignity.

*(abridged citation)*

*Lieutenant General Mateparae brings additional mana to his position.*



PETER VELA

The University of Waikato has much pleasure bestowing the award of 2008 Distinguished Alumni on Peter Vela in recognition of the vital role he has played as a business owner and founder of key regional enterprises, contributing significantly to the well-being of the Waikato and the nation.

Peter Vela is a highly regarded businessman who maintains a low profile despite his leading role in New Zealand's thoroughbred breeding, bloodstock and fishing industries. He graduated from the University of Waikato in 1971 with a Bachelor of Social Sciences, and two years later completed his Master of Social Sciences.

He has served on various racing boards and in 2002 was named an officer of the New Zealand Order of Merit for his services to the racing and bloodstock industries. Peter Vela is pre-eminent in his chosen fields and has made outstanding contributions to New Zealand in a dignified and professional way. This Award acknowledges his business leadership role, his professionalism and his commitment to innovation and sustainability in his industry sectors.

*(abridged citation)*

*This Award acknowledges his business leadership role, his professionalism and his commitment to innovation and sustainability in his industry sectors.*



DR DAVID DEREK SIKUA

The University of Waikato has much pleasure bestowing the award of 2008 Distinguished Alumni on the Honourable David Derek Sikua in recognition of his commitment to successful teacher education and the critical contribution he has made to education in the Solomon Islands.

Dr Sikua, Prime Minister of the Solomon Islands and former Minister of Education, is both a distinguished educationalist and politician whose ties with this University highlight the relationship between the region and the Pacific Islands. He graduated from the University of Waikato in 2003 with a Doctor of Philosophy (PhD) from the School of Education.

Derek Sikua held the most senior position in education in the Solomon Islands, Secretary for Education, when he took leave to become a mature postgraduate student at the University of Waikato. Following his return to the Solomon Islands, Dr Sikua stood for Parliament and became Minister of Education and, in 2007, Prime Minister. He is committed to bringing stability to his country that has a population spread across many islands, limited infrastructure, great poverty and 87 languages.

This Award acknowledges his scholastic and political achievements, and the high regard in which he is held by educationalists in both New Zealand and the Solomon Islands.

*(abridged citation)*

*He is committed to bringing stability to his country that has a population spread across many islands, limited infrastructure, great poverty and 87 languages.*

## ➤ Musical feast for friends

*A series of musical receptions for alumni and friends in Tauranga and Hamilton showcased the University's musical talent, while providing guests with an opportunity to network and to hear about the University's future vision.*

### Waikato on the Waterfront

In March, about 140 alumni and representatives of the local business community were guests of the Vice-Chancellor, Professor Roy Crawford, at a cocktail reception, Waikato on the Waterfront, held at the Sebel Trinity Wharf Hotel in Tauranga. During the reception they were entertained by two members of the New Zealand Chamber Soloists, James Tennant, cello, and Lara Hall, violin, both from the School of Music.

Guest speaker was University Council member Todd Muller, Chief Executive Officer of Apata Ltd, a New Zealand owned company that provides quality post-harvest services to kiwifruit and avocado growers. Mr Muller, who graduated from the University in 1992 with a Master of Social Science, began his career as executive assistant to the then Prime Minister, the Rt Hon. Jim Bolger, later joining Zespri International Ltd in Tauranga.

### Springtime 2007 Concert and Reception

Guests of the University of Waikato Foundation were treated to fine performances by 12-year-old child cello prodigy Santiago Canon Valencia. A concert at the WEL Academy's Gallagher Concert Chamber, widely considered by both national and international artists to be the best venue in

New Zealand for its acoustics, featured double concertos in which staff and students paired up, a performance of Haydn by Valencia, and performances by voice students.

The occasion provided an opportunity for the University's friends and benefactors to meet the new Chair of the University of Waikato Foundation, John Gallagher, and the newly appointed Director of Development, Christine Brabender.

### Seeds for the Future

The Hamilton concert was the inspiration for a second concert held at the Tauranga Art Gallery in December. About 100 friends of the University, including representatives of the Bay of Plenty Polytechnic, local government, industry and philanthropy, joined Mr Gallagher, Foundation Trustee Adrienne von Tunzelmann and the Vice-Chancellor, for an event that showcased the New Zealand Chamber Soloists and cello prodigy Santiago Canon Valencia.

Mr Gallagher, a former Chancellor of the University, outlined the role of the Foundation in fundraising for the University's strategic priorities, which he said would ultimately benefit staff and students at both Campuses.

Professor Crawford said such occasions gave the University the opportunity to demonstrate



CELLO PRODIGY SANTIAGO CANON VALENCIA

how much it valued its supporters in the Bay of Plenty and to share some of the University's "cultural gems".

He highlighted the importance of the Western Bay of Plenty and the University's relationship with the Bay of Plenty Polytechnic, the Tauranga City Council and other stakeholders, particularly in the joint approach to the Tertiary Education Commission (TEC) to create a strong tertiary base in the region.

## ➤ Class of '82



25TH ANNIVERSARY REUNION

Alumni and staff, who were at the University in 1982, enjoyed an evening of reminiscing and renewing friendships at the 25th Anniversary Reunion Dinner, held in November.

Guests were welcomed by the Deputy Vice-Chancellor, Professor Doug Sutton (centre), who highlighted recent developments and achievements at Waikato. Rugby personality from 1982, Andrew Strawbridge, was the guest speaker.

## Projects receive \$1.4m in Marsden funding

*The way the brain simultaneously processes colours, textures, shape and context, and combines information to identify what's familiar, is known as the "binding problem," and it is one of the greatest challenges of neuroscience.*

Associate Professor Moira Steyn-Ross and Dr Alistair Steyn-Ross at the Department of Engineering, together with Waikato Hospital clinical anaesthetist Professor James Sleigh of the University of Auckland, are testing a radical new theory to explain how the brain combines disparate information to recognise objects.

The study is one of three University of Waikato research projects which won a total of \$1.4 million in the 2007 funding round from the highly competitive, prestigious Marsden Fund for "blue sky" research.

The researchers, who have been awarded a Marsden Fund grant of \$620,000 over three years, are investigating if the answer lies in the "gap junction" connections between the nerve cells, which allow electrical impulses to flow between cells, helping them to communicate. Recent research suggests that gap junctions are far more abundant in the brain than previously thought.

The team believes the electrical energy flowing between gap junctions might work alongside the better understood chemical communication between nerve cells to create networks of interconnected neurons.



DR IAN DUGGAN

### Protecting freshwater habitats

Freshwater invasive species ecologist Dr Ian Duggan, from the Department of Biological Sciences, received \$170,000 over two years to investigate whether reservoirs are more readily invaded by exotic, invasive organisms than natural ecosystems.

The introduction of non-indigenous species is a major threat to biodiversity globally, and he will investigate whether "seeding" man-made aquatic habitats with native species is an effective tool to reduce the establishment rate and spread of non-indigenous organisms.



ASSOCIATE PROFESSOR MOIRA STEYN-ROSS AND DR ALISTAIR STEYN-ROSS

Extensive construction of reservoirs has occurred in New Zealand and around the world in the last century. In New Zealand, by 1987, 20 percent of North Island lakes with a surface area greater than 0.1 square kilometres were manmade. Further new lakes for energy generation and filling of disused mines are planned. Research commonly shows that reservoirs appear to be the first lakes to be invaded by passively dispersing non-native zooplankton, plants and algae.

Dr Duggan will test the theory that introducing native organisms into new aquatic habitats at an early stage of reservoir fillings may accelerate their development and provide biotic resistance to invasion by non-native species at a particularly vulnerable time.

### Songbird dialects

Professor Joseph Waas of the Department of Biological Sciences and Dr Laura Molles of Lincoln University were awarded \$655,000 over three years to examine why song dialects are important to kokako and other songbirds.

Their research will ultimately help to improve the success of captive breeding programmes, boost the efficiency of efforts to create diverse populations of kokako, and allow wildlife managers to conduct transfers

in a way that maximises the preservation of kokako cultural diversity.

Translocations of the endangered North Island kokako (*Callaeas cinera wilsoni*) to create new populations and to augment small populations are providing a unique opportunity to study the cultural evolution of song dialects.

Like people, songbirds learn their vocalisations and, in many species, this creates powerful geographical variation or "dialects." Dialects are a focus of scientific interest because they powerfully influence communication, which mediates all social interaction such as mate selection and territory defence.

The research will examine whether song dialects influence the ability of kokako pairs to defend their territories or their choice of mate, and

whether they impact on the settlement patterns of birds moved to new habitats.

Dr Waas's research builds on previous work on kokako singing behaviour in co-operation with the Department of Conservation, which resulted in an "acoustic anchoring" method with song playback to attract translocated kokako.



DR LAURA MOLLES

## FORST-funded projects contribute to economic growth

*Four cutting-edge ICT projects expected to contribute significantly to the development of New Zealand's knowledge economy received grants in the latest Foundation for Research, Science and Technology funding round.*

Researchers in the School of Computing and Mathematical Sciences, ranked first in the country in last year's independent PBRF (Performance-Based Research Fund) assessment, receiving \$6.47 million in FORST grants.

Two projects in the School of Science and Engineering, which topped national research quality rankings in chemistry, ecology, evolution and behaviour, and molecular, cellular and whole organism biology, were awarded a total of \$4.29 million. One of the projects received the largest ever single FORST grant to a University of Waikato researcher (see separate story this page).

Vice-Chancellor Professor Roy Crawford says the grants are further evidence of the very high quality of research being undertaken in both the School of Computing and Mathematical Sciences, and the School of Science and Engineering.

"The FORST grants are highly sought after and are awarded only to academics who are leaders in their fields. Each of the projects has the potential to make a significant contribution to national economic and policy goals through transforming and diversifying ICT technology, and innovation in other important sectors."

Dr David Bainbridge in the School of Computing and Mathematical Sciences received \$2.2 million over four years to develop new systems and tools capable of driving world-leading, innovative, multi-media content management.

The research programme, which will leverage the globally successful Greenstone digital library software also produced by the Waikato team, aims to develop technology to enable high quality, user-friendly mixing of media types into a rich collection of accessible information.

Associate Professor Tony McGregor received \$1.5 million for a four-year project to develop autonomous network technology, which is expected to make a major contribution to diversifying and transforming New Zealand's economy through ICT, with direct sales potential of NZ\$1 billion over 15 years.

Autonomous computer networks are "self-healing and self-managing" and two core technologies – computer network performance analysis and machine learning – are needed to make them a reality. Waikato's Computer Science Department has the strongest research team in New Zealand and is considered an international leader in this field.

Software to automate the processing and quality control of chromatographic data will be developed with the support of a \$1.7 million grant over four years to Associate Professor Geoff Holmes. Chromatography is an analytical tool used in a wide range of industries including agriculture, biotechnology, medicine and pharmaceuticals.

Software to automate the production and delivery of practice exercises for overseas students learning English will be developed with the support of a \$962,500 grant by a team headed by Professor Ian Witten, an internationally acknowledged world leader in the field of digital libraries.

The three-year project is expected to create a world-class reputation for New Zealand in innovative techniques for Teaching English to Speakers of Other Languages (TESOL), while the new paradigm of library-enabled education will increase New Zealand's international competitiveness in offshore education.

### School of Science and Engineering wins grant of \$3.7m

One of the largest ever single FORST grants to a University of Waikato researcher was won by a project to improve the energy efficiency of the dairy sector, New Zealand's biggest exporter.

Professor Peter Kamp at the School of Science and Engineering received \$3.7 million for a six-year project to improve energy efficiency by an average 3-5 percent in milk powder production plants.

Improved energy efficiency in the dairy sector will increase the cost competitiveness of New Zealand's largest exporter. It will also result in reduced use of gas, coal and hydro fuel types, contributing to security of energy supply for the country, and a reduction in greenhouse gas emissions.

Associate Professor Deliang Zhang, also in the School of Science and Engineering, received \$550,000 over three years to develop novel processes for producing low-cost titanium alloy powders from industrial waste products and, potentially, New Zealand iron sands.

The process aims to convert titanium oxide, aluminium, titanium and

vanadium-rich slag, which is a waste product of the New Zealand Steel Ltd's iron sand-to-steel process, into titanium alloy powders for manufacture into ingots, sheets and extrusions for sale to export customers.

The work is in collaboration with an industrial advisory group comprising New Zealand Steel Ltd, South Auckland Forgings Engineering Ltd and Titanox Development Ltd in consultation with New Zealand Trade and Enterprise.



PROFESSOR PETER KAMP

## Special grant marks International Polar Year

The University of Waikato has received almost \$1 million in funding to research the ecosystems of the Dry Valleys in Antarctica, one of only six special grants awarded to mark International Polar Year.

Professor TG Allan Green of the Department of Biological Sciences and his team received a grant of \$991,667 over three years for research focused on terrestrial ecosystems in the Ross Dependency, aimed at improving New Zealand's capacity to meet its current and future international obligations in managing Antarctic terrestrial ecosystems.

The project brings together researchers from Canterbury, Massey and Waikato universities and international collaborators, who will use the latest molecular techniques to look at the biocomplexity of sites in the Dry Valleys, describing the organisms, their communities and linkages.

A GIS/biodiversity database model will be developed which links biodiversity, landscape and environmental factors in a form that is easily understood and taken up by end users. The tool will be used to describe locations of plants and animals, and to identify keynote



PROFESSOR TG ALLAN GREEN

species, helping to predict the effects of climate change and other impacts. Professor Green says Antarctic terrestrial research is going through a major paradigm shift.

"The current understanding of these extreme communities is that they are nutrient poor, biodiversity and biomass low, slow growing and very old. But using modern molecular techniques we find a different story."

The Antarctic projects are being funded by a special three-year, \$4.5 million contestable fund, announced by the Government last

May and administered by the Foundation for Research, Science and Technology.

International Polar Year actually runs for two years from March 2007 to March 2009. It is an initiative led by the International Council for Science and the World Meteorological Organisation to begin a new era in polar research.

The last such year, 50 years ago, was marked by the funding of Scott Base and the beginning of New Zealand's co-operation with the United States science programme in Antarctica.

## University wins three Top Achiever Doctoral Scholarships



MATTHEW JERVIS

Top Achiever Doctoral Scholarships recognise and reward excellence. They are keenly sought after. University of Waikato doctoral students won three of these keenly sought after Scholarships awarded nationally by the Tertiary Education Committee.

Matthew Jervis in the School of Computing and Mathematical Sciences is developing a "smart filing cabinet."

Nēpia Mahuika, a lecturer in history in the Faculty of Arts and Social Sciences, will record the oral histories of different



NĒPIA MAHUIKA

generations of Ngāti Porou on New Zealand's East Coast. His objective is not to simply document tribal history, rather to consider various ways in which individuals construct perceptions of the self.

The third scholarship recipient, Marisa Till, in the School of Science and Engineering, will examine the activity of two enzymes from the bacterium, *Clostridium proteoclasticum*, commonly found in New Zealand cows. Her work will lead to better understanding of how microbes



MARISA TILL

break down the animals' forage material within their digestive system, releasing energy and nutrients.

Vice-Chancellor Professor Roy Crawford congratulated each of the recipients on their success. "There is strong competition for these prestigious scholarships. Not only do the scholarships provide valuable financial support, they acknowledge New Zealand's best and brightest scholars. We are very proud of them."

## ➤ Honours music student wins coveted NBR operatic award

*Sir Edmund Hillary Scholar, Julia Hill, an Honours student in music, was one of the winners of the NBR New Zealand Opera's 2007-08 Price Waterhouse Coopers Dame Malvina Major Emerging Artist Award. Here she talks about her musical journey so far.*



JULIA HILL

Soprano Julia Hill is a striking centerpiece in NBR New Zealand Opera's line-up of its latest award-winners. Given her success, it may seem strange that she did not fully commit to singing until her third year of study at Waikato.

"I'd had a bit of success in competitions and such," Hill says, "and, believe it or not, played Audrey in our high school's production of *Little Shop of Horrors*, but it was just something I did.

"I've always been rather cynical about the likelihood of having a career (in singing). I think I was a little afraid to set my sights too high. Now I realise that the passion outweighs the risks and I feel it's something I have to do."

When she talks, Hill doesn't sound quite Kiwi. Although her parents are from Morrinsville, she was born in Canada where she has spent most of her 23 years.

Aged three, she began to learn the violin, followed by the piano and ukulele. But opera made a vivid impact on her as a child when she was taken to the Queen Elizabeth Theatre in Vancouver and caught Harold Prince's production of *Madame Butterfly*.

"I remember when Cio-Cio-San kills herself at the end and an enormous piece of red silk spilt onto the stage; it was just incredible. That was my first experience of being moved by opera."

Hill says many people have guided her on her musical way, including her brother James, and primary school teachers Jamie Thomas and Peter Luongo. She also credits her University music lecturer David Griffiths with inspiring her by his ability to teach, compose and perform, and to impart his professional experiences as an opera singer and concert performer.

"He has gently guided me throughout my four years' study with him and is always encouraging and sensitive towards my development as a person and singer," she says.

Mr Griffiths also made it possible for her to take the lead role of 'Mahina' in his 2006 opera, *The White Lady*, a highlight of her four years at the University.

"It was a unique experience to be learning a role for a premiere performance and to discuss ideas with the composer, writer, and director... it's just a rare opportunity that I am hugely grateful for."

Hill says she was also fortunate to win last year's inaugural University of Waikato Aria competition and to perform with the University Orchestra. This was followed by appearances in Hamilton and Rotorua, singing with the Waikato Symphony Orchestra, with critics praising Hill as being "in fine form".

In applying for the NBR New Zealand Opera Award, Hill says it was a matter of setting her goals high.

"In terms of where I am now - my age and ability - the NBR New Zealand Opera is the best place to be for exposure, learning and networking. I didn't think I was ready to audition so had decided to wait another year until after I'd finished my Honours, but I received an invitation to audition so it enticed me to try earlier than planned.

"I kept things in perspective and took away what I could from the experience thinking it would end there. Needless to say I was a little shocked when I received a letter of congratulations in the mail."

As a Price Waterhouse Coopers Dame Malvina Major Emerging Artist, Hill has a busy year ahead of her understudying roles and playing some smaller parts in the NBR New Zealand Opera's 2008 productions.

## ➤ Second gift for NZ Chamber Soloists

An anonymous benefactor has given the New Zealand Chamber Soloists a substantial gift for the second year running.

The donor recently gifted the ensemble \$25,000. It follows on from a \$20,000 gift made last year in memory of his mother.

Cellist James Tennant says the gift is extremely generous and will be used in a number of ways, including the funding of a recently recorded CD of Russian and Eastern European works, to be released in June.

The CD features piano trios by Rachmaninoff, Shostakovich and Babadjanian.

The gift will also be used to commission new work from composers, and to help support a planned concert tour early in 2009 to England, France, the United States and South America.

Tennant, a US cellist with an international reputation, says he and his partner Katherine Austin usually tour every second year.

"But this gift is really exciting because it gives us the opportunity to expand the tour and to take other musicians with us."

The New Zealand Chamber Soloists, formed in 2006, draws together musicians who teach, or have taught, performance music at the University of Waikato.

They include Katherine Austin (piano), James Tennant (cello), Lara Hall (violin), Rachel Griffiths-Hughes (harpsichord), David Griffiths (voice), Ingrid Culliford (flute), Peter Scholes (clarinet) and Jessica Shaw (recorder).

All are nationally recognised musicians who have performed together in various combinations in the past.

## Early NZ music makes history

*Waikato University's new Writer-in-Residence aims to make history within the year by publishing a record of the early development of music in New Zealand.*



WRITER-IN-RESIDENCE TO EXPLORE HISTORY OF EARLY POPULAR MUSIC. PHOTO: WAIKATO TIMES

Chris Bourke, a former producer for National Radio, took up the position of Writer-in-Residence at the University in February.

Bourke will use the year to write a history of the early development of popular music in New Zealand from 1918 to 1963. The project, which has a working title, *Blue Smoke*

*Gets in Your Eyes*, aims to fill an essential gap in the history of New Zealand popular culture, combining research that has never been collated with archival material and first-hand accounts from the period.

Bourke has already completed a full year of research on the project with the support of a 2006 National Library Research Fellowship.

A writer, editor and radio producer for 25 years, Bourke will spend this year collating his research and writing about how popular music evolved before the rock 'n' roll era from music hall, performance in dance halls and in the home, to the birth of the modern music industry. Narrative themes in the book will be interspersed with profiles of the unsung heroes of New Zealand popular music.

Bourke says the project stemmed from his time studying music at Victoria University when he realised there was very little reference material about the early days of music in New Zealand. He says "It's a real gap in our history."

While the history of New Zealand music and artists from the 60s and onwards is well-documented, he will "look at the people who inspired them".

Bourke has written and produced many radio documentaries on the country's musical history, as well as being Arts and Books Editor of the *NZ Listener* and Books Editor of *North & South*.

His published work includes a biography of New Zealand's most successful songwriter, Neil Finn, entitled *Crowded House: Something So Strong* (Pan Macmillan Australia), and has work collected in: *First Past the Post* (Random House); *Listener Bedside Book 4* (Wilson and Horton); *Dictionary of New Zealand Biography vol V* (AUP); and *Epitaph II* (Random House).

He has a Bachelor of Music (history and literature) from Victoria University and a Diploma in Journalism from Wellington Polytechnic. In 2005, he was a Reuters Foundation Fellow at Oxford University.

A previous Waikato University Writer in Residence, award-winning novelist and film director Peter Wells, wrote his latest book, *Lucky Bastard*, during his year at Waikato – published by Random House NZ.

## String of successes

Cello students are taking a string from the bow of teacher James Tennant, earning prizes and recognition at a number of recent competitions in New Zealand.

Two of his students, Masters student Callum Hall and first-year student Edward King, were the only New Zealanders to make the semi-final round of the Gisborne International Music Competition, with King, accompanied by Maria Mo, winning 3rd prize in a very closely contested final with two Australian students.

In the national PACANZ Instrumental Contest, another cellist from James Tennant's class, Jisun Kim, came second and, immediately after competing, made her debut as a concerto soloist, performing the Elgar Cello Concerto with the Bay of Plenty Sinfonia under James Tennant's baton.

In November, three Waikato ensembles competed for the Royal Overseas League's

Chamber Music Scholarship, an event which was held at the WEL Academy of Performing Arts for the first time, attracting eight of the leading chamber music groups from universities around New Zealand.

Of the three Waikato groups, the piano and cello duo of Maria Mo and Edward King came runners-up in the main competition, with the other two ensembles being placed fourth and fifth, putting the spotlight on the Department of Music's excellent and thriving chamber music programme.

Tennant, originally from the US, joined Waikato in 2001. He is one of the country's leading cellists and was last year presented a sought-after award by the University for teaching excellence.

The Top Teaching Award recognises his inspirational work with cello students, as well as his significant contribution to other musical activities, including



CELLIST JAMES TENNANT AND PIANIST KATHERINE AUSTIN

conducting the University's Chamber Orchestra and directing the outstanding chamber music programme.

The University's Department of Music was ranked the leading school of music in New Zealand in last year's independent Performance-Based Research Fund assessment by the Tertiary Education Commission.

## Student Centre takes shape

*The University has embarked on an ambitious \$29 million capital works programme to build a landmark, one-stop shop student centre at the heart of the campus.*



AERIAL VIEW SHOWING SOUTH/WEST FACADE

The complex will provide a world-class, student-centred learning environment combining traditional library resources with high-tech IT facilities, as well as a social and meeting area for students and staff.

Vice-Chancellor Professor Roy Crawford says the University is building a legacy for future generations of students.

"The project represents a major investment in the University Campus which will be of enormous benefit to students," he said. "Our goal is to construct a building with

outstanding design qualities, which will become a University icon and a showcase facility for Hamilton City," he said.

The 10,600 square metre complex will house an "information commons" with space for 1000 computers and the provision of wireless technology. The existing central library will be refurbished and integrated with the new facilities.

The complex will also bring together a wide range of food outlets and cafés, and existing and additional retail shops.

A student information mall will incorporate a range of student services including enrolment, counselling and disability services, learning support, international student services, and job search and accommodation advisory services.

The design by project architects Warren and Mahoney Ltd opens up the centre of the campus to north-facing views of the lake and landscape beyond, and the sun,

employs environmentally sustainable principles and reflects the University's bicultural heritage and its special relationship with Tainui.

Design team leader Alec Couchman says making the campus a more attractive place for students is a key driver of the project.

"The nicest part of the campus is in front of the shops looking out to the lake. It's sunny and you have a lovely view of the trees. What we want to do is extend that feel," he says. »



SOUTH/EAST ELEVATION

## Building pays tribute to bicultural heritage

Reflecting the University's bicultural heritage and its special relationship with Tainui forms an important part of the brief to the project architects.

Rewi Thompson, Māori cultural adviser to the project team, says the challenge is to incorporate elements within the landscape and building design which resonate with Māori but also have universal appeal.

"It's easy to use traditional elements within a marae setting, where the symbolism is well-understood, but this is not so simple in a public building visited by people of many cultures.

The secret is to take traditional design elements and incorporate them in such a way that people can relate to them in different ways," he says.

The project team is considering a range of options to incorporate natural elements

such as water and stone, which have universal appeal and significance, into natural terracing, planting and lighting of the south side of the site.

The building itself will be "wrapped" on the east side in stylised "tukutuku" panels of aluminium, which draw on the design of traditional woven panels in a meeting house, or a woven cloak, which confers both mana and protection from the elements.

Also being considered is a large sculpture or "te koohao o te ngira". This would be a "needle" on the corner of the east-south entry of the library building, large enough to allow everyone to be "threaded through the eye of the needle" when entering the building.

Within the building, columns, symbolising "ngā hau e whā" or people from the four winds or corners of the earth,

may be used to organise spaces.

Acknowledgement of the ownership of traditional symbols will be reflected in the use of traditional design such as "nihoniho" and "he piko he taniwha", as well as Pasifika designs, as repetitive motifs throughout the building.

Tikanga, or customary practice, will be reflected in areas set aside for pōwhiri (formal greetings) or for housing taonga (cultural treasures). A water feature is being considered as part of the entry to the building.

The east wing extension will be progressive in design and symbolic of change, providing an opportunity to celebrate and look forward. The library will house the New Zealand and Pei te Hurinui Jones Literary Collections, strongly acknowledging the indigenous and exotic cultures and heritage.



WEST/SOUTH FACADE

» Bennetts Bookshop will be relocated from its present site to create a large, open plaza between the library and L block on the north side which will incorporate cafés and a bar, looking down towards the lake and shops. Covered walkways will help to protect pedestrians from the weather, and pathways currently concentrated on the cold, south side of buildings will be redirected to the north side.

The retail shops will get a makeover, with a higher, wider roof, and glazing on both sides of the building to create space, light and views right through to the lake when people get off the bus.

The library will be transformed into a student-centred facility. The building will be opened up internally and to the views outside so that

on entry it “makes a statement” about being a one-stop shop. This will be the first point of contact for all students new to the campus.

The redesigned library building will incorporate and update the existing library, and include a café, north-facing decks, and wireless internet access in designated areas. In addition, the information commons, currently at level one on the south side, will be relocated to a new eastern wing on the building to provide more workstations, study spaces and meeting rooms.

“Our experience shows that if you provide students with a nice place to work and ‘hang out’, they stay all day and all night. It’s about creating a social and learning complex right in the middle of campus,” says Mr Couchman.

## ✦ Incorporating leading-edge design

Leading-edge Environmentally Sustainable Design (ESD) has been incorporated into the design by Warren and Mahoney principal, Alec Couchman, working closely with local Hamilton firm, Maunsell/Aecom.

“ESD is more than just making buildings use less energy. It also reduces their so-called carbon footprint,” he says. “It is about making the built environment healthier and safer as well as demonstrating how buildings can be self-sufficient.”

A key part of ESD is to ensure buildings are economically, environmentally, culturally and socially sustainable. The University is committed to reducing its carbon footprint thereby leading all tertiary institutions in ESD.

To achieve this, some of the ESD issues targeted by Warren and Mahoney, and the Maunsell design team include:

- Low energy use
- Non-PVC materials throughout
- Materials with low or zero volatile organic compounds
- Low energy light fittings
- High levels of natural daylight wherever possible
- Double glazing and extensive sun screens to reduce glare

- Balconies and study spaces with views out to the north, east and west
- All rainwater collected from roof, stored on site and recycled through the toilets and irrigation
- Re-use of existing structure, services and plumbing fittings
- All new plumbing fittings to be low-water use
- Use of timber certified by the Forest Stewardship Council
- Materials such as carpets and ceiling tiles and furniture to have maximum recycled content
- Low maintenance materials such as glass, aluminium and rough cast concrete
- Improved disabled access across the site, and within the buildings
- Improved outdoor spaces with extensive new planting and gardens
- Photovoltaic array on the roof generating energy for the building
- New vertical wind turbine generating energy for the building
- Energy generating lifts connecting to energy grid supply.

The new building is to be submitted to and independently rated by the New Zealand Green Building Council with the aim of achieving a 5 star rating. If successful, this 5 Green Star rating will be a first for an education building in New Zealand.



## Google dream comes true for top computer science student

*Research into the development of 3-D digital books won PhD student Veronica Liesaputra a coveted three-month internship with the giant search engine, Google, in California.*



VERONICA LIESAPUTRA

Veronica, who graduated from Waikato with a Bachelor in Computing and Mathematical Sciences with First Class Honours, was invited by Professor Ian Witten in the Department of Computer Science to fast-track to her doctorate, working in the Digital Library Laboratory.

In June, Veronica visited Google in California to give a seminar on her Realistic Book Project. Google was so impressed with her work they invited her back to work in their book department on a confidential assignment.

Professor Witten is delighted—and also impressed.

"Veronica is an outstanding student and the invitation from Google to work with them is

acknowledgement of the calibre of her work. A Google internship is the dream of many research students in computer science internationally and to be invited into one is a very rare honour indeed," Professor Witten said.

Veronica is one of only two students in New Zealand to have won a Google scholarship to support her PhD research (the other one is also at the University of Waikato). She opted to study at Waikato because, "it is the best place to do computer science research", and said the chance to work with Google was very exciting.

"I will be able to apply my university knowledge in the real world and it will be excellent for making new contacts in the industry."

Her research is focused on developing realistic books on-screen. She will simulate physical representations of books, encyclopaedia and personal digital libraries, and evaluate information retrieval by users against conventional two-dimensional digital representations.

Already she has developed and trialled a computer program that enables a single document to be read as a 3-D book. Using the mouse, a reader can "grasp" the "paper" at the corner and turn the "page". The on-screen format is quick and easy to use, responding immediately to the page-turning action.

She is now working on a program that can be used to access information in a book format from the web encyclopaedia, Wikipedia, and to test scalability she will later apply the model to personal digital libraries.

Veronica says accessing information via PDFs or scrolling on the web has limitations, and most people print off information to read. She believes a digital book format will be more engaging for users.

Expert opinion is divided over the use of a 3-D environment over a 2-D environment. But, she says, little research has been done on whether a reader's ability to gather information and whether their experience improves compared with current computer interfaces. Her work aims to test this question.

She says the 3-D environment has practically overtaken the video gaming industry, and people find it easy to navigate without any training.

"It seems users in future will get used to the idea of navigating simulated space."

The University's School of Computing and Mathematical Sciences was ranked number one in New Zealand in the last Performance-Based Research Fund (PBRF) assessment by the Tertiary Education Commission.

Web link: Realistic books that Veronica has produced can be viewed at: <http://www.nzdl.org/books>

## Funding boost for strategic ICT research

*The University of Waikato has been awarded \$3.2 million, in association with the University of Auckland, to develop national research in information and communications technology (ICT).*

The grant, allocated through the Tertiary Education Commission's Building Research Capability in Strategically Relevant Areas (BRCSRA) fund, is to build the ICT research community within New Zealand, with a particular focus on excellence shown by young and emerging researchers.

Computer science has a relatively short history of research in New Zealand despite the phenomenal growth of the discipline in recent years. The ICT industry contributes five percent of gross domestic product (GDP), around \$6 billion a year, but the number

of new ICT graduates is not meeting demand, resulting in an industry low in research skills.

Professor Mark Apperley, Dean of Waikato's School of Computing and Mathematical Sciences, says he's very pleased the Government is investing in ICT research, which is seen as a strategically important area – economically and socially – for the country.

"We are looking forward to working with Auckland and other researchers. This fund will help to develop a strong ICT research infrastructure and environment throughout New Zealand," he said.

## Antarctic voyage tracked on Science Learning Hub

*A unique collaborative project enabled information from the National Institute of Water and Atmospheric Research's (NIWA) research vessel, "RV Tangaroa", to be accessed online via the Science Learning Hub during this summer's New Zealand International Polar Year - CAML voyage to Antarctica.*



RESEARCH VESSEL TANGAROA IN THE ROSS SEA, ANTARCTICA, IPY-CAML VOYAGE 2008.  
PHOTO CREDIT: PETER MARRIOT, NIWA

Visitors to the website were able to follow the eight-week voyage to the Ross Sea in February and March. Weekly updates included stories from the scientists and crew, as well as audio, video and still imagery from the voyage and daily data collected by scientists on board.

Tracking the Antarctic voyage was one of the latest developments on the Science Learning Hub, the brainchild of the University of Waikato's Wilf Malcolm Institute of Educational Research (WMIER) and its Centre for Science and Technology Education Research (CSTER).

Funded through the Ministry of Research, Science and Technology, and developed in collaboration with educators and the science sector, the hub explores New Zealand's world-class science sector, and provides resources to support fresh thinking in science teaching and learning in schools.

In less than a year since its launch, the Science Learning Hub was shortlisted in October in two education categories at the prestigious Telecommunications Users Association of New Zealand (TUANZ) awards.

The New Zealand IPY-CAML voyage to the Ross Sea is part of a multi-national research project involving 23 countries in 11

co-ordinated voyages to survey marine life and habitats around Antarctica. It represents a major collaboration between Land Information New Zealand, the Ministry of Fisheries, the Ministry of Foreign Affairs and Trade, Antarctica New Zealand, Te Papa, NIWA and New Zealand universities.

The Census of Antarctic Marine Life (CAML), one of many international research programmes that fall under the IPY umbrella, aims to determine marine species across all oceans and depths by 2010. The voyage is also part of the Oceans Survey 20/20 – a New Zealand Government ocean mapping project.

Dean of the University of Waikato's School of Education Professor Alister Jones says being able to follow the IPY voyage on the hub was quite a coup and very exciting as it is a top international research project. But it's just one of the developments on the site since it was launched last year.

Initial content on the Science Learning Hub focused on four science contexts – earthquakes, icy ecosystems, body imaging, and science in sport, and was aimed primarily at year 9 to 10 students.

"They were a taster to get started, but we have been constantly revising and revamping

since then. We are continually trying to get more content up, and to enhance teaching and learning in other ways, for example showing how science ideas are connected across the site."

The addition of science-related news stories from a range of sources, including Radio New Zealand's science programme, Our Changing World, is another development. All content on the site is quality checked by members of the project team, which includes science educators from The University of Auckland, the University of Canterbury, the Royal Society of New Zealand and the University of Waikato.

Professor Jones says ongoing feedback is crucial to future development of the hub. International experts from Melbourne's Monash University have reviewed the site, and the project team is working with teachers nationally to regularly review it.

The original concept for the Science Learning Hub was based on the highly successful Biotechnology Learning Hub, also developed by the University over the last three years.

The Biotech Hub has recently been revamped to make navigation easier and content more accessible.

## ➤ Mau Moko – The World of Māori Tattoo

*The cultural and spiritual issues surrounding Māori moko – facial or body tattoo – are investigated in a new book, Mau Moko, by University of Waikato scholars.*

*Mau Moko*, published by Penguin Group NZ Ltd, recently named winner of the Lifestyle and Contemporary Culture category at the Montana NZ Book Awards, it examines the use of moko by traditional Māori, drawing on historical material, including manuscripts and unpublished aural sources, and links the art to the present day.

The book is by Professor Ngahua Te Awekotuku and Linda Waimarie Nikora, Director of the University's Māori and Psychology Research Unit, and student researchers, Mohi Rua, also from the Unit, and Rolinda Karapu, of the Centre for Māori & Pacific Research and Development.

*Mau Moko* explores the cultural and spiritual issues surrounding moko and relates dozens of powerful stories from wearers and artists.

Professor Te Awekotuku says in the traditional Māori world the moko was part of everyday life.

"Everyone had some patterning on their skin. Men wore elaborate designs on their faces while women's moko were usually less complex but elegant. Both sexes had extensive body tattooing.

"After almost dying out in the 20th century, Māori skin art is now experiencing a powerful revival, with many urban Māori displaying the moko as a spectacular gesture of ethnic pride and identity."

The book is the culmination of five years' work. The project was supported from 2001-2005 by a prestigious Marsden Fund grant.

*Mau Moko*, described as the closest to a "complete" book on moko, includes images from early European encounters, traditional

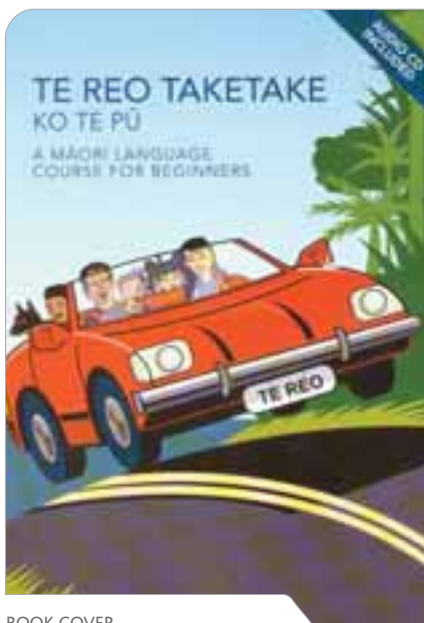


PROFESSOR NGAHUA TE AWEKOTUKU

Māori representations and new colour photography by award-winning photographer Becky Nunes, commissioned for the book.

## ➤ Te Reo Taketake – Ko Te Pū

*A new resource for secondary school teachers and learners of the Māori language was launched recently by the School of Māori and Pacific Development.*



BOOK COVER

The book, *Te Reo Taketake – Ko Te Pū*, written by Dr Rapata Wiri and published by Raupo Publishers, covers areas such as basic pronunciation and greetings, family

genealogy, nominal or non-verbal sentences, counting and time as well as verbal sentences. Illustrations help explain sentence patterns, engage visual and aural senses and are visually appealing to the learner.

*Te Reo Taketake* covers the same areas as *Te Kakano* but the pedagogy way of teaching is different in that *Te Kakano* is an activity-based book while *Te Reo Taketake* is structurally based. Dr Wiri explains that he needed to develop a teaching resource which "reflected his own teaching style". He sees *Te Reo Taketake* complementing *Te Kakano*.

*Te Reo Taketake* comes with an audio CD to help promote aural learning. The narrators are staff and students of the School. In addition, an online, interactive, multimedia programme has been developed for online learners.

This revolutionary online programme features interactive activities, grammatical explanations, audio recordings, video clips, games, songs, audio recorded vocabulary lists and self-marking tests. A free trial is available at [www.maori.ac.nz](http://www.maori.ac.nz).

Another book by Dr Wiri entitled, *Te Ao Māori: The Māori World*, published last year, presents the Māori world in images and text (Māori and English). It comes with a DVD featuring actors performing the haka, poi, hongi and a tour of a marae.

Informative and accessible, it is a great resource for tourists and for New Zealanders who want to know more about the culture, history and language of the Māori.

Dr Wiri is of Ngāti Ruapani, Tāhoe and Te Arawa descent. He graduated from the University of Auckland in 1991 with a BA. In 1994, he obtained a Master of Arts before graduating with his PhD in 2001.

In 2002 he began lecturing Māori language and culture at the University of Hawai'i at Mānoa where he began writing *Te Reo Taketake* and *Te Ao Māori*. He took up a lectureship at Waikato University in 2006 where he teaches a diverse range of topics, including Māori language, Māori Society and Culture, Hawaiian Language and Culture, as well as graduate papers.

## Why research matters to business

*Research isn't just something that's done by pointy-headed boffins in an ivory tower. It can and does have an impact on the real world, and that's particularly important for research in the field of management.*



PROFESSOR HARALD VAN HEERDE

Waikato Management School marketing expert Professor Harald van Heerde has a background in econometrics, but was drawn to marketing because it seemed relevant and important. His research into how consumers respond to sales promotions has had a profound impact on the marketing profession.

His 2003 paper on sales promotions and brand switching, which appeared in one of the top marketing research publications, *The Journal*

of Marketing Research, has been named one of the 20 most influential marketing articles worldwide in the past 25 years.

In the survey commissioned by the INFORMS Society for Marketing Science, a panel of practitioner experts picked the 20 research articles that they thought had most influenced marketing practice.

Professor van Heerde says his research, co-authored with Professor Sachin Gupta of Cornell University and Professor Dick R Wittink of Yale University, has fundamentally changed the way marketers view sales promotions.

"A good example is specials in the supermarket. They're seen as very successful in generating extra sales, but everybody used to believe that three-quarters of the increased sales came at the expense of competing products. So if Coke was on special, sales of Pepsi would suffer.

"But we've proved that's not really what happens. Our research shows that only one-third of the extra sales generated by promotions steal sales from other products, so this particular marketing tool is not as harmful for competing products as we'd thought."

Professor van Heerde says he and his fellow researchers are now working on ways to account for the remaining two-thirds of increased sales.

"We think probably around one-third is as a result of customer stockpiling: consumers buy three bottles of Coke instead of one when it is on special. This implies price promotions are less profitable for supermarkets in the long run."

The final third of extra sales is proving more elusive to pin down, says van Heerde.

"We suspect some of it is to do with increased consumption and some to do with customers chasing specials at different supermarkets, but these consumer responses are harder to measure."

Professor van Heerde says measuring the effectiveness of marketing enables managers to make more informed decisions and therefore market better.

"Marketing effects are not always what they seem and only a careful analysis can reveal that," he says. "And that's where researchers like me come in."

## Enterprising student sees the world

When Dileepa Fonseka started university, he never thought he'd be travelling the world. The fifth year law and management student has been to Germany, Spain and France representing the University of Waikato in World Cups for SIFE – Students in Free Enterprise.

"I've met global corporate leaders and have competed against business students from across the world," says the 22-year-old. "That's the great thing about uni – it throws up a lot of opportunities and the sky's the limit."

SIFE is a world-wide movement that encourages students to work with their local community to build entrepreneurial skills of benefit to that community. The best project from each country is chosen, then those students come together to find the best in the world.

"When I first got involved, I had no idea where it would lead. I didn't even know it was a competition," he says. "I thought it

was all about community service and it sounded interesting so I signed up."

Six months later, SIFE Waikato won the national competition and Dileepa found he was off to Mainz in Germany for the SIFE World Cup.

"Our team made the final five and it's the thing I'm most proud of since I've been at uni," he says.

"When I started with SIFE, I was the only first-year student, so I thought I'd have nothing to add. I kept my head down and listened lots. Then I started having ideas and when that happens, you have to be willing to do something about them, and take responsibility for delivering results."

The learning, says Dileepa, was huge. "I really had to step up," he says. "I had to get organised, become tech-savvy for the formal presentations, and get my head around business management concepts."

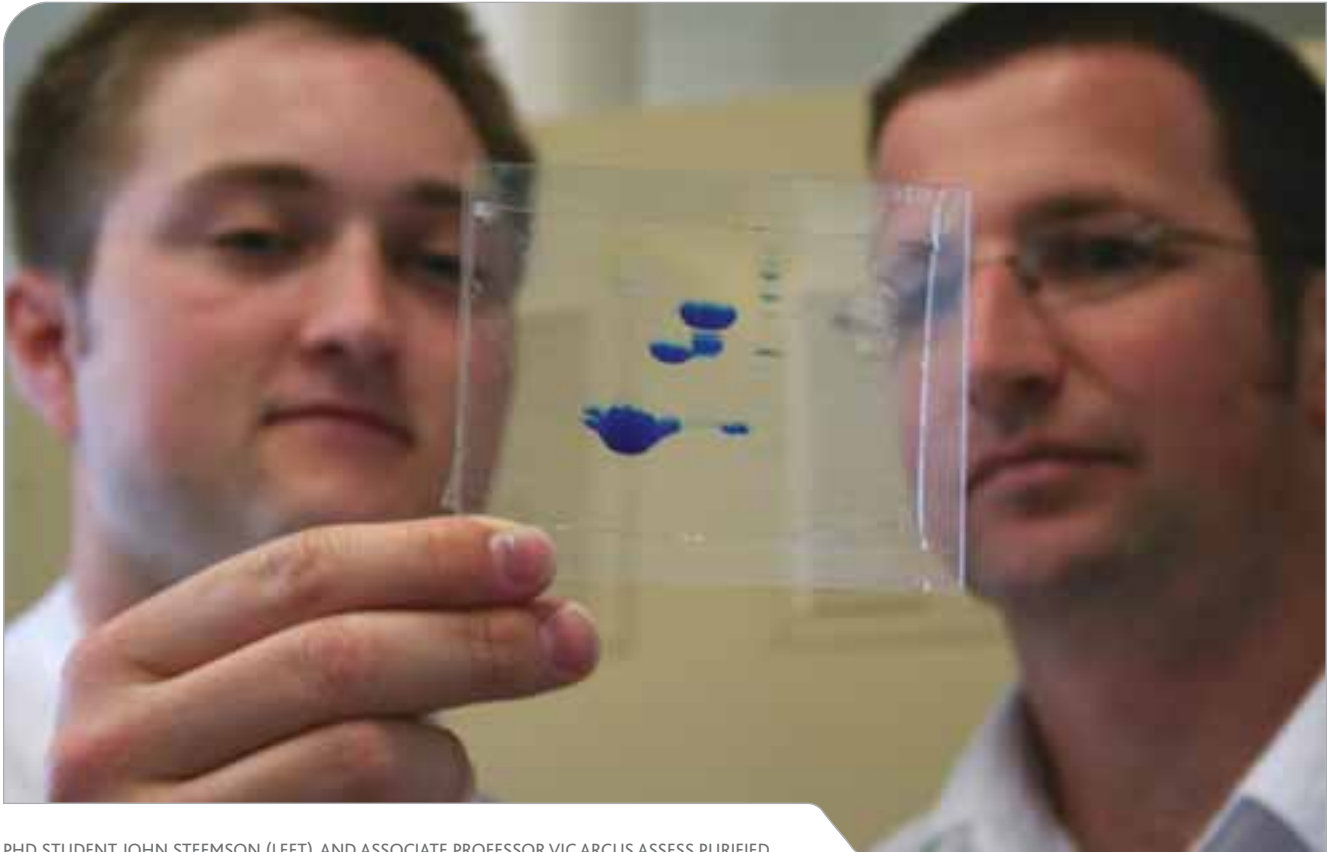
The next year, Dileepa stepped up again – into the CEO role for SIFE where he led the team to two more world finals. But the travel didn't stop there. A keen debater, Dileepa has also represented New Zealand in Sydney and Kuala Lumpur and he's competed in a regional moot (legal debating) contest in Melbourne.

All this and studying for his double degree. "Lots of valuable learning takes place outside the lecture theatres," says Dileepa. "And sometimes you have to take a chance, and commit time and effort even if you don't know the outcome. That's what I did with SIFE and look where it's got me."

Dileepa has two more years of study to go before he graduates. "I'm open to a range of jobs that might combine management and law," he says. "I'm interested in corporate and competition law, but whatever path I choose I want to make an impact on the world."

## Waikato team on detective hunt to crack TB code

*A unique cluster of proteins may hold the secret as to why tuberculosis is elusive to treatment and can lie dormant for many years. Although the TB bug is carried by an estimated one third of the world's population, only 10 per cent of those infected show clinical symptoms.*



PHD STUDENT JOHN STEEMSON (LEFT), AND ASSOCIATE PROFESSOR VIC ARCUS ASSESS PURIFIED PROTEINS ON A GEL AT THE AGRESEARCH-WAIKATO UNIVERSITY PROTEIN ENGINEERING LABORATORY

Associate Professor Vic Arcus at the University's Department of Biological Sciences, head of an international team investigating the TB proteins, received a Health Research Council grant of \$844,000 for research which could pave the way for new treatments for TB in both humans and cattle.

"We are on a bit of a detective hunt. We are working on the biochemistry and genetics of a group of proteins called pin domain proteins. We know they chop up RNA and we think they do this to stall the growth of TB cells," he says.

As antibiotics work in general by seeking out and killing actively growing bacteria, it's believed that by stalling its own growth, the TB bug (*Mycobacterium tuberculosis*) is able to avoid antibiotic activity.

"It's a mystery why the TB bug has so many pin domain proteins. But if we find they are arresting the growth of TB cells, we will be

one step closer to interfering with the process. If we can get dormant TB cells to grow, we will make them more susceptible to current antibiotic treatment," says Associate Professor Arcus, head of AgResearch's Protein Engineering Laboratory at the University of Waikato.

Tuberculosis claims the lives of two to three million people a year - one person every 15 seconds. A total of 400 new cases of TB are reported in New Zealand each year. Bovine tuberculosis and Johne's disease in cattle, caused by related bacteria, are significant agricultural problems.

It is 30 years since the development of any new TB antibiotics and an international race is on to drive a new pipeline of drugs and therapies to reduce treatment times and combat the disease.

The research is a broad collaboration ranging from the molecular biology laboratory to the clinic. The researchers are: Associate Professor

Vic Arcus and Dr Ray Cursons at the University of Waikato; Dr Noel Karalus a consulting respiratory physician and TB expert at Waikato Hospital; Associate Professor Greg Cook at the University of Otago; and Professor Kenn Gerdes at Newcastle University in the UK, one of the scientists who discovered toxin-antitoxin proteins.

The collaboration also spans a number of institutions. Associate Professor Arcus has a joint appointment between the University of Waikato and AgResearch and it is the AgResearch connection which provides links to TB in cattle. He and Associate Professor Cook are members of the Maurice Wilkins Centre for Molecular Biodiscovery, a National Centre for Research Excellence based at the University of Auckland. Other contributing institutions are Waikato Hospital, the Webster Centre for Infectious Diseases based at the University of Otago and Newcastle University.



## Didymo DNA test offers hope of control

Didymo or "rock snot" is an invasive freshwater-borne pest which poses a threat to New Zealand's rivers and lakes. Although confined to the South Island, last year's false alarm that it had spread to the North Island highlighted the urgent need for swift, accurate detection and control measures.

Scientists at the University of Waikato have developed a new, highly sensitive genetic testing tool for early detection and surveillance of the algae. Developed by Professor Craig Cary, Dr Brendan Hicks and colleagues at the School of Science and Engineering's Biological Sciences Department, with support from Biosecurity New Zealand, the DNA test can detect didymo in waterways and lakes before new infestations are visible.

"Developments in molecular technology now allow rapid and specific low-level detection of algal species," says Professor Cary. "The newly developed diagnostic tool relies on gene amplification technologies that allow more rapid throughput of samples, and greater accuracy than traditional microscopy. It can detect didymo at extremely low levels down to 1 cell/ml."

Professor Cary says early detection of didymo in the North Island would give a much better chance of preventing its spread and even possibly eradicating it using a chemical control tool currently being developed.

"The DNA test involves a highly sensitive quantitative protocol designed specifically for detecting and counting didymo cells in

stream water. It's like looking for a needle in a haystack at this level of detection, and we just developed a tool that can quickly find the needle," Dr Cary said.

Field trials in New Zealand and other global sites have demonstrated the efficacy of the didymo DNA test.

Didymo is a single-celled, micro-organism that can spread from one river or lake to another by the movement of water, equipment, clothing, vehicles or other damp items. It forms massive blooms on the bottom of streams and rivers, and sometimes lakes, attaching itself by stalks which can develop into a thick brown layer that smothers rocks, submerged plants and other materials.

## Environment Bay of Plenty extends funding for Lakes Chair

University of Waikato's research programme into the management and restoration of the Rotorua lakes has received additional funding of almost \$1 million under an agreement with Environment Bay of Plenty.

The agreement to extend funding for the University's professorial Environment Bay of Plenty Chair in Lakes Management and Restoration for a further five years was signed following a meeting of the Rotorua Lakes Strategy Group. The group comprises representatives from Environment Bay of Plenty, Rotorua District Council and Te Arawa Lakes Trust.

Established in 2001, the Chair funds the position of Professor David Hamilton, a noted freshwater ecologist in the School of Science and Engineering's biological sciences department, which gained top-ranking in ecology in last year's Tertiary Education Commission's Performance-Based Research Fund (PBRF) assessment.

In the last five years, in addition to providing support for technical assistance, the Chair has also provided support for 15 postgraduate students to undertake lake and freshwater research, based around the Rotorua lakes.

Vice-Chancellor Professor Roy Crawford said establishment of the Chair had enabled Professor Hamilton's research team to grow to the point where it was successful in attracting Outcome-Based Investment (OBI) funding of \$10 million over 10 years from the Foundation for Research,

Science and Technology (FORST) for freshwater restoration.

"The LERNZ (Lake Ecosystem Restoration NZ) programme in turn has attracted further research funding and is now beginning to be seen as a centre of excellence for this body of research," Professor Crawford said.

Research students had contributed substantial information on the sediments of Lake Rotorua and exchanges of nutrients between the sediments and the lake, and about problems such as green-blue algal blooms.

"This information will be an integral part of the knowledge required to manage nutrient levels in the lakes in future. Additionally those students will hopefully become future experts and ecosystem managers as we work together on current freshwater problems in Rotorua and throughout New Zealand," he said.

Professor Crawford thanked Environment Bay of Plenty for its support of coastal and marine research, largely through an association with Professor Terry Healy and the Coastal Marine Group from the University's Earth and Ocean Sciences Department, School of Science and Engineering.

The collaboration between the University and Environment Bay of Plenty had established a platform, not just of mutual benefit, but one that could continue to produce benefits for New Zealand and solve some of the ecosystem problems the country faces, he said.



PROFESSOR DAVID HAMILTON MONITORS TEMPERATURE, OXYGEN AND ALGAL LEVELS IN THE WATER WITH A CTD PROFILER

"The relationship is a model the University seeks to have with other regional councils, industries and community-based organisations throughout the region in which we seek to engage with end users of both our academic and research endeavours."

## Protection orders do not always work

*The murder last year of An An Liu was a high profile incidence of domestic violence, but there are plenty of cases that aren't widely reported. Associate Professor Ruth Busch, of Waikato Law School, hopes the report, "Living at the cutting edge: women's experiences of protection orders," that she co-wrote with Dr Neville Robertson from the University's Psychology Department, will go some way towards reducing domestic violence in New Zealand.*

Associate Professor Busch and Dr Robertson were commissioned to write the report by the Ministry of Women's Affairs 10 years after the implementation of the Domestic Violence Act 1995 to see if the protection orders were doing the job for which they were intended.

The report found areas where good practice was operating but also identified more than 40 improvements that could be made to the system of obtaining and enforcing protection orders.

"I think the Act is basically sound," says Associate Professor Busch, "but it's not always being implemented as it should be and I think it's right that we interrogate the everyday practice of decision makers. The big message is to enforce the law."

Some people, including Principal Family Court Judge Peter Boshier, were critical of the report accusing the authors of bias and saying the stories of the 43 women interviewed were too anecdotal.

"They were real and true stories," says Associate Professor Busch, "and we felt their



ASSOCIATE PROFESSOR RUTH BUSCH (RIGHT) AND DR NEVILLE ROBERTSON (PSYCHOLOGY)

stories were the best way of showing where and how protection orders were not working."

She says the threshold for granting protection orders without notice to the respondents has been raised, and can see no reason for this. It also concerns her that applications for protection orders are routinely "on the papers", that is without the applicant or her lawyer being present.

She and Dr Robertson think Family Court judges should always give reasons for declining

a victim's application for a temporary order and putting it on notice. They also feel there should be harsher penalties for breaches of protection orders.

"There's a need for education in this whole area of domestic violence and that's a major recommendation in our report. Professionals – that's judges, counsel, counsellors, mediators, everybody involved in the Family Court who are dealing with domestic violence – should be able to demonstrate a multidisciplinary understanding of domestic violence, and that includes scientifically rigorous risk assessment."

Associate Professor Busch says training needs to be ongoing so that those working in the field stay on top of their game, learning from research at home and internationally to ensure that everything possible is being done, and being done as well as it can be, to reduce domestic violence.

The full report and its recommendations can be found at <http://research.waikato.ac.nz/CuttingEdge/>

The report was referred to the taskforce for Action on Violence within Families.

## Punching above our weight

*Environmental law is going round in circles. Each government comes to a problem and thinks they can solve it, but according to Professor Al Gillespie, it's all been seen before.*

Professor Gillespie wrote, *Whaling Diplomacy: Defining Issues in International Environmental Law*, to give people a background in the subject; the science, politics and philosophy. And people are taking notice.

His work was recently quoted by a senator in the Australian Parliament and when the American Government agreed to put \$10 billion towards Everglade protection to remove it from the danger list, Professor Gillespie was quoted again.

"It's pleasing to see the research and writing you do used in a practical way, helping to formulate

law and making things happen," he says. "I think my students at Waikato find it interesting too, to be lectured by someone who's been in the thick of it talking about his own experiences in the international environment."

Professor Gillespie says the role New Zealand plays in international environmental protection shouldn't be underestimated. "We may be small but we make a big noise," he says, "and that's a good thing."

New Zealand hosted and chaired last year's World Heritage Convention in Christchurch. »



PROFESSOR AL GILLESPIE

» It was one of the biggest international events of its kind ever held in New Zealand with 700 delegates representing 21 countries.

Professor Gillespie was rapporteur, a prestigious position requiring considerable time and energy. "It went well," he says. "Twenty-two new world heritage sites added to the Commission list, but sadly the Arabian Oryx sanctuary was removed. The Oman Government thinks oil is more important.

"I see it as our job as New Zealanders to be vocal on matters of heritage and conservation and we're good at it. Like Norway, we're seen as neutral, with no big agendas. We're

reasonable and independent and that helps us to punch above our weight when finding solutions to issues that can sometimes get very heated - like whaling for example."

It gladdens Professor Gillespie's heart that Iceland recently decided to suspend whaling, but he says it's now time to educate people about the environmental dangers to whales, like noise and water pollutants, by-catching and ship strikes.

The difficulty for delegates on the Commission is to remain diplomatic and reasoned on matters that get highly emotional. "There are some great people, I know them personally and they are

professionals doing a job, but it can get very nasty. I don't like that at all," says Professor Gillespie.

In total there are 850 World Heritage Sites and the Commission's role is to improve science, increase resources and make sure these sites remain protected and conserved.

"Negotiations are unique, delicate and much nuanced and there's a lot you can't talk about. You wouldn't believe what isn't talked about! And sometimes people don't want a site to be saved; some NGOs don't always like it because it takes away publicity for their cause. But in all this, as New Zealanders, we box above our weight."

## ➤ Gaining insight into Māori customary law

*It has been several years in the making, but a new and extensive compendium that gives insight into Māori customary law is now complete. "Te Matapunenga: A Compendium of References of Māori Customary Law" is the work of a group of lawyers and law academics led by Professor Alex Frame, Paul Meredith and Richard Benton.*

The project, funded by the Foundation for Research, Science and Technology, was started in 1999 with the establishment of Te Matahauariki, a research institute at the University of Waikato. The Institute's objective was to explore ways in which the legal system could better reflect the best of the values and principles of both major component cultures.

Initially the project was led by Judge Mick Brown, Director of the Institute, and involved two stages. First, Pu Wananga, where the Institute sought to approach Māori leaders and experts with a view to discussing and recording knowledge of customary law or tikanga; and the second programme, Te Matapunenga, which was to look at the existing historical material and bring together references to customary concepts from influential or authoritative sources.

Professor Frame took over leading the project in 2005 when Judge Brown stood down.

"We found that there was no systematic written material and there was widespread confusion as to the nature and status of customary law and its place in the legal system," says Professor Frame.

"There were clusters of material, in the Alexander Turnbull library, and National Archives, so our job was to systematically bring it all together. It was interesting to see the

changes in a concept through time, and just as interesting to see where things had stayed the same all the way through. In fact, often the changes, for example, koha, were quite recent, with a government department deciding on a definition that was politically correct."

Each entry in Te Matapunenga is in three parts: Title, Entries, Context, with examples on how a custom is applied and interpreted through situation and time. There are also maps and images that break up the text.

"A custom can either be a habit or a fashion, or it can be an obligation or a right," says Professor Frame. "It's stable in that it's founded on long practice, but on the other hand it's dynamic and changeable. We tried to select entries that represent historical periods while avoiding needless repetition."

Rather than going to early European sources for early Māori histories, the researchers cast their net wide, and searched and traversed a huge range of different primary materials, particularly those in the Māori language. They had to find and assess archival documents, ethnographic observations and Māori narratives.

"It was an exercise in detective work as well as serendipity," says Frame.

Thanks in no small part to digitisation, researchers were able to study early Māori



PROFESSOR ALEX FRAME

newspapers published between 1842 and 1932, which covered the spectrum of Māori political, cultural and social history.

"They were enormously rich and an unprecedented resource for Māori language and cultural information."

He is quick to point out that this is not a definitive work and, as time goes by, others will build on what has already been done. But he is confident that Te Matapunenga will provide a foundation for judges who are referencing customary law, and will guide teachers and students and assist the Māori community on legal matters.



## New Dean for top-ranking business school

*Professor Frank Scrimgeour has been appointed Dean of the University of Waikato Management School, following the retirement of Professor Mike Pratt.*

Professor Scrimgeour is a leading environmental economist, and has contributed to regional, Māori and national policy making on issues ranging from carbon taxes to resource valuation. He is currently president of the New Zealand Association of Economists, and a former president of the New Zealand Agricultural Economics and Resource Society.

He has participated in World Bank panels on agriculture and natural resources, and is currently working with New Zealand's kiwifruit and dairy industries to identify factors for future success. He is also an adviser to Katolyst, the Waikato regional development agency, on the region's economic performance and prospects.

Professor Scrimgeour joined the University of Waikato as a lecturer in 1989. He was Director of the Management Research Centre and chaired the Economics, Finance and Tourism departments. He has been acting Dean of Waikato Management School since 2006.

He holds a BAgSc from Lincoln College, a PhD (Agricultural and Resource Economics) from the University of Hawaii and a BD from Melbourne College of Divinity.

Professor Scrimgeour said he was looking forward to continuing to work with the outstanding academic and support staff at the School.

"Our goal is to ensure that our rigorous academic approach combined with an emphasis on practice relevance, and the impact of our graduates and research publications, will have a positive effect on business and economic outcomes within New Zealand and around the world.



PROFESSOR FRANK SCRIMGEOUR TO HEAD NEW ZEALAND'S LEADING BUSINESS SCHOOL

"There's a growing international awareness that sustainable business policies and practices are crucial for our ongoing success, and teaching and research institutions such as Waikato Management School must be prepared to lead the way."

Vice-Chancellor Roy Crawford said Professor Scrimgeour had been selected after a comprehensive recruitment search both locally and internationally.

"During the past two years, Frank has played an important leadership role at WMS and on the University's senior management team.

"In academic terms, his significant strengths in agriculture and environmental economic research have a particular interest for the Waikato region, while his global economic perspective will help ensure that this School is a real option for international as well as local students."

## One-stop research shop opens

The University of Waikato is taking its research to the people with the opening of a dedicated Research Hub.

Newly-appointed Director of Research, Dominique Noiton, says the hub in the lower level of the University's administration block, B Block, aims to be a one-stop shop for research.

The new hub brings together researchers under one roof alongside UniLink (which provides support services for university research and acts as a liaison for users and sponsors of research both here and overseas), and WaikatoLink (which is the University's commercialisation and technology transfer office, responsible for protecting, managing and commercialising intellectual property generated by the University).

A quarter of New Zealand's professional R&D happens in the Waikato region and the University of Waikato is at the heart of it.

Dr Noiton, who was most recently the director of research management at the University of Auckland, and Dexcel Ltd's general manager of research and technology, took up her role at Waikato recently.

Deputy Vice-Chancellor Professor Doug Sutton says the new role of Director of Research, and the new hub, shows the importance the University places on research. "It underlines our commitment to developing better access to, and relationships with, funding bodies, connecting with research users in the business community of Waikato and further afield."

Already the University's focus on research has seen it rise in the rankings of the Tertiary Education Commission's Performance-Based Research Fund. The results, which independently evaluate the research performance of the country's tertiary education organisations, show the University increased its number of world-class-rated researchers (those rated 'A' under the PBRF system) by 32 percent in 2006.



DOMINIQUE NOITON

The University's research is generally sponsored by an external organisation such as a private company, or a government department.

Dr Noiton says, however, it is important the community feels more connected with the University's research – of which there are hundreds of ongoing projects.

"We want to be seen as a place where anybody who wants access to the research at the University

can come and talk about their issues and problems and what they are looking for," she says.

"There's no research until there's a problem." She says businesses often did not realise what research had to offer them.

"They are busy people and the Research Hub will be an easy and friendly point of contact for them to access the vast pool of knowledge and expertise of the University of Waikato."

## ➤ New Kaumātua appointed

Te Whakatau mō Rewi Rāpana te kaumātua hou o Te Whare Wānanga o Waikato

He waimarie nō mātou o Te Whare Wānanga o Waikato ki te whai tangata ki te whakakii i te whāruarua i whakawātengia e te rangatira e Koro Hare Puke. Nā Koro Hare i tohua ko wai te tangata e tika ana mō te mahi rā ā nā Kīngi Tūheitia i whakaangia kia tū a Rewi Rāpana nō Ngāti Haua Werewere

nō Ngāti Raukawa hoki hei kaumātua hou mō tātou o te whare wānanga nei.

I tae mai a Koro Rewi a Koro Rubal rānei i waenga i a mātou ngā kaimahi Māori me te tūmuaki nūnui a Vice Chancellor Roy Crawford i te Paraire 28th o Poutūterangi 2008.

I reira tonu a Koro Hare hei āhuru mōwai mō tātou katoa hei kaiārahi hei poutokomanawa hoki mō Koro Rubal, ahakoa e wehe atu ana ia e kore e mutu tērā o āna mahi.

Ka nui kē ngā mahi kei mua i te aroaro o tō tātou kaumātua hou ā ko tana mahi okawa tuatahi mō te Whare Wānanga nei ko ngā hui whakapōtaetanga i tū i te Paengawhāwhā.

Ka tika he hui pai tēnei mōnā kia tūtakitaki ai ki ngētehi o ngā taura me ngā kaimahi Māori puta i te whare wānanga whānui.

E rere tonu ana ngā mihi ki a koutou ko tō whānau e Koro Rubal, nau mai, haere mai, whakatau mai.



KO NGĒTEHI O NGĀ KAIMAHI MĀORI NŌ TE WHARE WĀNANGA O WAIKATO RĀTOU KO HARE PUKE KO REWI RAPANA ME TANA TAMĀHINE A MERĒ RANGIHAU

ACADEMIC AND GENERAL MĀORI STAFF AND KORO HARE PUKE (CURRENT UNIVERSITY KAUMĀTUA) WELCOME THE UNIVERSITY'S NEW KAUMĀTUA, REWI RAPANA, ACCOMPANIED BY HIS DAUGHTER MARY RANGIHAU

### *Welcome for new Kaumātua*

The University of Waikato was very honoured and humbled to welcome its new kaumātua Rewi Rapana who hails from Tuwhare Pā Ngāti Haua Werewere and Ngāti Raukawa.

The new kaumātua was identified by our current kaumātua Koro Hare Puke and decided by King Tūheitia.

Koro Rewi known affectionately as Koro Rubal was welcomed by the Vice-Chancellor, Professor Roy Crawford, and a group of academic and general Māori staff in March when Koro Hare Puke formally handed over the role of kaumātua to Koro Rubal. However, Koro Hare Puke still remains to provide guidance and support when needed.

There are many new and exciting activities that await Koro Rubal and his first official duty, the graduation ceremonies, was held in April.

The University is very pleased to welcome Koro Rubal and his family in his new role as University kaumātua.

## ➤ Bridgewater wins Waikato University Blues Award

*Champion rower George Bridgewater was named Sportsman of the Year at the Wallace Corporation University of Waikato Blues Awards. Bridgewater represents New Zealand at this years Olympics in Beijing and has been accepted into Oxford University in the United Kingdom.*



BLUES AWARD WINNERS

Sportswoman of the Year went to sprinter Monique Williams, who also had an outstanding year. Williams, is the current national 100m, 200m and 400m champion who also won the 200m at the Australian Championships and the 200m and 400m double at the Oceania Championships. Williams is a Sir Edmund Hillary Scholar at the University.

Outstanding soprano Julia Hill, winner of an NBR Emerging Artist Operatic Award (see story page 16), was awarded Creative and Performing Arts Person of the Year. Hill sang the lead in the opera, *The White Lady*, performed in Annah Stretton's charity event, Opera in the Quarry, and won the inaugural Aria Competition at the University.

Media Person of the Year, which is awarded for prominence in different types of media throughout the year, went to National Surf Lifesaving representative Nikki Cox. World champion touch rugby player and national javelin champion Keisha Grant won Pou Ahurea, while Fairplay of the Year Award went to Gabrielle Rodgers for her achievements in rowing.

The Cook Waikato University Premier Men's Hockey Team won sports team of the year; Murray Finch won Sports Coach of the year

(Table Tennis) while the University of Waikato Table Tennis Club won Club of the Year.

The University Blues Awards recognise those who excel in the arts or sport, or who assist in their development at the University. The awards related to achievements between July 2006 and July 2007.

A total of 55 Blues and Service Awards were given to athletes, artists, coaches and tutors from a wide range of disciplines, including rowing, hockey, wakeboarding, motocross,

graphic design, piano, oboe, dance and voice.

Twenty-eight of the Blues Award winners were Sir Edmund Hillary Scholars. The Hillary Scholarship programme is a unique leadership and scholarship programme aimed at supporting all-round achievers. Hillary Scholars receive a full fees scholarship for their study, personalised academic support, high performance coaching and personal development opportunities.

### 2007 Wallace Corporation University Blues Award Winners

Creative and Performing Arts Person of the Year	Julia Hill
Sportswoman of the Year	Monique Williams
Sportsman of the Year	George Bridgewater
Pou Ahurea	Keisha Grant
Fair Play of the Year Award	Gabrielle Rodgers
Media Person of the Year	Nikki Cox
Sports Team of the Year Award	The Cook University Premier Men's Hockey Team
University Club of the Year Award	Waikato University Table Tennis Club
Sports Coach of the Year	Murray Finch (Table Tennis)

## ➤ Strengthening links with the Middle East

*The University is strengthening its links with Saudi Arabia and the wider Middle East. Recently there have been reciprocal visits and for the first time, Eid, which marks the end of the Muslim religious month of Ramadan, was celebrated on campus.*

Abdul Kareem, an emissary of the Royal House of Saudi Arabia, recently spent eight weeks in Hamilton where he undertook an intensive English language course as a guest of the University of Waikato.

Saudi Arabia, with a population of 25 million, is headed by King Abdullah ben Abdullaziz Al Saud who is a strong advocate of tertiary education.

The King Abdullah Scholarship Programme fully funds about 25,000 Saudi students at universities and tertiary institutes around the world, with approximately 80 students attending Waikato. There are another 180 Saudi students here under different scholarships and funding programmes.

Waikato Vice-Chancellor, Professor Roy Crawford, says Saudi and the wider Middle East is a growing market for the international tertiary sector.

"Saudi Arabia and its neighbouring states are increasingly important to us - both as markets for our educational expertise and,

for the nation, as a trading and diplomatic partner," he says.

A University delegation recently visited Ha'il, northern Saudi Arabia, as guests of His Royal Highness Prince Saud ben Abdul Mohssan ben Abdullahziz Al Saud, Prince of the Ha'il region and a nephew of the King.

The delegation went with the backing of the New Zealand Government and the University of Waikato Council to discuss opportunities at Waikato and in Saudi Arabia.

Professor Crawford said the University was interested in discussing opportunities to support the Prince in improving educational facilities in Ha'il. Like King Abdullah, the Prince is committed to the development of a robust tertiary structure within his country.

"We are enthusiastic about the opportunity to increase our ties with international markets, both in terms of the information and learning we can share, and to enhance the relationship we have with the region that

is increasingly becoming a source of international students here," says Professor Crawford.

The end of the Muslim religious month of Ramadan was celebrated at the University of Waikato for the first time in October with a special prayer meeting.

Ramadan is a special month in the Muslim calendar marked by fasting during the day and inner reflection. The end of Ramadan coincides with the start of the lunar month and is traditionally marked with a three-day festival known as Eid.

The prayer meeting was hosted by Muslim students at the University with the support of the Waikato Muslim Association. There are between 1500 and 2000 Muslims in the region.

The University is working very closely with the Association and the community to ensure students feel welcome in New Zealand and are integrated into the local community.



UNIVERSITY OF WAIKATO VICE-CHANCELLOR PROFESSOR ROY CRAWFORD, SAUDI EMISSARY ABDUL KAREEM AL-SHAMMARY, UNIVERSITY OF WAIKATO CHANCELLOR RT HON. JIM BOLGER AND FAHAD ALSUNAIDH



## US Book of the Year Award

Sport and Leisure Studies senior lecturer Dr Richard Pringle, won the 2007 Book of the Year Award from the North American Society of Sociology of Sport. The book, *Foucault, sport and exercise: Power, knowledge and transforming the self*, was co-written with

lecturer Dr Pirkko Markula, now based at the University of Alberta, Canada.

It examines the contribution of the ideas of Michel Foucault, a French social theorist and one of the most influential theorists of the

modern age, and illustrates how they can be used to sociologically examine sport and exercise practices. Dr Pringle teaches courses on research methods/paradigms and an introductory paper in social sciences. He has been at the University since 1996.

RAY HARLOW

### *Māori - A Linguistic Introduction*



Māori, the indigenous language of New Zealand, has a number of interesting features in its structure. It is also an endangered minority language with an important role in the culture and identity of the Māori community. This comprehensive overview looks at all aspects of the Māori language: its history, its dialects, its sounds and grammar, its current status, and the efforts being made by the Māori community and the state to ensure its survival.

Central chapters provide an overall sketch of the structure of Māori while highlighting those aspects which have been the subject of detailed linguistic analysis - particularly phonology (sound structure) and morphology (word structure), on which extensive linguistic work has been carried out. Though addressed primarily at those with some knowledge of linguistics, this book will interest anyone wishing to study the structure of a minority language, as well as those interested in endangered languages and their preservation.

TERRY CROWLEY

### *Field Linguistics: A Beginners Guide*



This book is a comprehensive, practical guide to field linguistics. It deals in particular with the problems arising from the documentation of endangered languages. Deploying a mixture of methodology and practical advice, and drawing on his own immense experience, Terry Crowley shows how to record, analyse, and describe language in the field. He covers the challenges and problems the researcher is likely to encounter,

offers guidance on issues ranging from ethics to everyday diplomacy, and provides full discussions of corpus elicitation, how to keep track of data, salvage fieldwork, dealing with unexpected circumstances, and many other central topics.

"We all learn by our mistakes," he writes, "and I have plenty of my own to share with you."

TRACY BOWELL AND GARY KEMP

### *Critical Thinking: A Concise Guide*



Attempts to persuade us - to believe something, to do something, to buy something - are everywhere. How can we learn to think critically about such attempts and to distinguish those that actually provide us with good reasons for being persuaded? *Critical Thinking: A Concise Guide* is a much-needed guide to argument analysis and a clear introduction to thinking clearly and rationally for

oneself. Through precise and accessible discussion this book equips students with the essential skills required to tell a good argument from a bad one.

*Critical Thinking: A Concise Guide* is essential reading for anyone, student or professional, at work or in the classroom, seeking to improve their reasoning and arguing skills.

NORMAN SIMMS

### *Masks in the Mirror: Marranism in Jewish Experience*



Sephardic Jews who voluntarily or forcibly converted to Catholicism in the 15th and 16th centuries to avoid persecution or expulsion were known as conversos or New

Christians. Some tried to live the double life of a Crypto-Jew, outwardly embracing Christianity while secretly maintaining Jewish practices.

Others were in a state that was neither Jewish nor Christian and, as painful and humiliating as it was, these Marranos (a term for conversos that became abusive), actually created a new kind of modern personality. By tracing the usage of this disparaging term, *Masks in the Mirror* also explores the nature of the historical circumstances as it becomes evident that anyone living under these condition - constantly threatened and persecuted by the Inquisition and suspected of being heretics and untrustworthy by their Christian colleagues

and neighbours - could be driven to a state of madness. Focusing on families and childrearing, this book attempts to grasp the structures of feeling that created such madness which, while debilitating, could often be creative and exciting, especially among poets, playwrights, and novelists. It looks at the play of masks, the secrecy and the illusion that Marranos experienced daily, which some attempted to exorcise in their writings, and it explores the possibility of applying the concept of Marranism generically.



IAN POOL, ARUNACHALAM DHARMALINGAM AND JANET SCEATS

### *The New Zealand Family From 1840: A Demographic History*



A definitive demographic history of the New Zealand family since 1840, this book is not merely a collection of statistics, but interprets the changing story of the family and its make-up, its members, and its impact at a time when opinions on this ancient institution ranged from nostalgia to shock to puzzlement. Using detailed and ground breaking research spanning 165 years, the authors chart the move from the large family of the 19th century to the post-war Baby Boom, Bust, Blip and Deficit, the recent increase in family diversity and the modern

trend towards later childbearing and unsustainably small families. In turn, the analysis of the 'building blocks' of society helps trace the changing attitudes and structure of society itself. This account of the transitions of the family in New Zealand provides vivid insights into the past and challenging implications for the future.

The cover is from a painting by New Zealand artist Edward Bullmore, titled *The Family: The beginning of survival*. The Tauranga Art Gallery has many of his works. He exhibited in 1966 with painters such as Dali, Miro and Picasso.

NATHALIE PHILIPPE

### *Vie quotidienne en France occupée: journaux de Maurice Delmotte: 1914-1918*



A few years ago, Dr Nathalie Philippe found a manuscript at the Alexander Turnbull Library in Wellington. It was written by a French civilian between September 1916 and September 1918. Monsieur Maurice Delmotte was able to send his wife and children to safety before going back to his occupied village where he stayed separated from his family for four years.

"It is quite beautiful, written in French script with a quill pen, in different coloured inks - green, black, purple and blues," says Dr Philippe. "I knew it had not been read for a

long time - it was in French - and felt I could and should do something with it."

Dr Philippe was able to trace Maurice Delmotte's descendants. One of them found a second diary among family papers. *Vie quotidienne en France occupée: journaux de Maurice Delmotte: 1914-1918* has just been published by L'Harmattan (Paris). The book includes both diaries and other documents found in New Zealand and France.

"The diary is a very valuable document because it describes everyday life in occupied France, seen through the eyes of a middle-aged civilian."

JAN PILDITCH

### *Catherine Carswell - A Biography*



Scottish novelist, biographer and critic, Catherine Carswell was a major figure in the Scottish Renaissance. Her novels, set in the West End of Glasgow, were strikingly original. Carswell's work was also controversial. Her *Life of Robert Burns* produced a furore in Scottish newspapers for its depiction of the man, rather than the legend; and her biography of D. H. Lawrence, *The Savage Pilgrimage*, was withdrawn amid threats of legal action.

As a working journalist, Carswell knew many of the great literary figures of her day in Scotland, England and America. She worked with the Irishman William Fay to write a history of the Abbey Theatre, and was a lifelong

friend of the novelist D. H. Lawrence, supporting him throughout his battles with British censorship.

Born in Glasgow in the late 19th century, Carswell inherited the godliness, realism, modernity and sentimentality of the era. As a well-travelled 20th century woman who lived in London from 1910, she visited Italy, Germany, France and met most of Stalin's cabinet in pre-war Russia. She was rebellious, determined, intellectual and no stranger to conflict. Jan Pilditch's vivid account of her life tells us much about women and their writing in the early years of the 20th century.

EDITED BY CATHARINE COLEBORNE, MARK HOULAHAN AND HUGH MORRISON

### *Telling Lives: Essays in Biography and History*



This collection of essays is drawn from a one-day symposium held in the Department of History at the University of Waikato in 2005. It is a collaborative venture between staff in History and English and explores questions around the nature of history and biography.

The symposium involved an interdisciplinary group of scholars, including some not represented in this published collection, who work in History, Medical History, Women's and Gender Studies, English Literature, Anthropology,

Psychology, and Nursing Studies. This volume is arranged into four sections: Approaches to Biography; Families and Biography; Psychiatry and Biography; Colonialism and Biography.

From Shakespeare to everyday New Zealand, the essays in this collection move "beyond 'fixed' identities", to use history lecturer Nēpia Mahuika's phrase, as they explore the possibilities and problems of biography. Yet despite these issues, scholars and others can still tell stories about the lives of others, and the biographical mode endures.



## Academic Awards

### *Population expert receives Distinguished NZ Geographer Medal*

Professor Richard Bedford, an internationally recognised specialist on migration and population movements in the Asia-Pacific region, has received the prestigious Distinguished New Zealand Geographer Medal. He is the 13th recipient of the New Zealand Geographical Society award.

Professor of Population Geography, Professor Bedford is Director of the University's Population Studies Centre. He also directs the Tertiary Education Commission-funded Building Research Capability in the Social Sciences (BRCSS) Network on a contract with Massey University.

A Fellow of the Royal Society of New Zealand, he chairs the intergovernmental Social Policy Evaluation and Research Committee (SPEaR), and is a member of the ministerial Advisory Committee on Official Statistics (ACOS).

### *European accolade for environmental work*

A renowned University of Waikato specialist on environmental plant stress resulting from climate change has been awarded the prestigious European Society for Photobiology (ESP) Medal for her outstanding contribution to the field and to the society.

Professor Janet Bornman, Director of the University's International Global Change Institute, has an international reputation in the field of environmental photobiology – the scientific study of the interactions of light and living organisms.

She joined the University of Waikato in 2006 from the Danish Institute of Agricultural Science. She co-chairs the Environmental Effects Assessment Panel of the United Nations Environmental Programme (UNEP), and represents New Zealand on the Asia and Oceania Society of Photobiology. In 2004, she received the Edna Roe Lecturer award by the International Union of Photobiology.

### *Fulbright Award to research bilingual education in the US*

School of Education Professor Stephen May has taken up a prestigious 2008 Fulbright Senior Scholar award to research bilingual school programmes in the US. He is examining four highly successful bilingual education school programmes – two Navajo-English

schools in Arizona's Navajo Reservation and two Spanish-English dual language schools in New York, while based at the University of Arizona in Tucson and then Columbia University in New York.

His research aims to identify the key factors that make a difference for bilingual students in these programmes and improve their educational outcomes, and to see whether these could be applied in New Zealand to improve the literacy achievement of Māori, Pasifika and other bilingual students.

Professor May said he was looking forward to the opportunities the project presented, particularly the potential to address the relatively poor literacy achievement of Māori, Pasifika and other bilingual students in mainstream New Zealand schools.

Professor May is an international authority in bilingual education, and language and literacy education. He has written and researched extensively in these areas, both nationally and internationally. This includes his research on Welsh language education, while working in Britain in the 1990s and, since his return to New Zealand in 2001, a major research report on best practice in Māori-medium education for the Ministry of Education.

For further information about Fulbright New Zealand Senior Scholar Awards, see the Fulbright New Zealand website: <http://www.fulbright.org.nz/awards/nz-sen-scholars.html>

### *Top of the class for fifth time*

Dr Diane Johnson, a senior lecturer in Applied Linguistics in the University's Faculty of Arts and Social Sciences, became the University's fifth recipient of a prestigious national Tertiary Teaching Excellence Award worth \$20,000. Dr Johnson was one of 10 winners of the Award in 2007.

She joined the University of Waikato in 1993. Her interests include language analysis, syllabus design, language policy and planning, and teaching methodology. She is currently working on a collaborative project to develop internet-based, self-access learning resources for Waikato students related to the structure and use of English.

Three main resources are in development: Going dotty: Making punctuation count; Chips or French Fries? Looking at vocabulary in English; and Identity parade: How words function as parts of speech.

Dr Johnson was also one of two recipients of University of Waikato Top Teaching

Awards together with James Tennant in the Department of Music (see story page 17).

### *Kudos for University scientists*

A champion for the conservation of New Zealand native forests, Professor Warwick Silvester, has received an inaugural Kudos Lifetime Achievement Award for his outstanding contribution to science.

The Kudos Hamilton Science Excellence Awards were established in 2007 to recognise scientific excellence in the Waikato region. The Lifetime Achievement Award acknowledges a scientist whose research has made a major contribution to science of relevance to the Waikato region and to the international profile of New Zealand science.

Professor Silvester, Director of the University's Waikato Stable Isotope Laboratory, pioneered the use of stable isotopes to examine the way in which the interactions of soil properties, microbes and plant roots influence the availability of nutrients for plant uptake.

Professor Silvester, was the recipient of one of four individual Kudos awards and one team award to University of Waikato scientists.

Kudos Awards also went to:

- Dr Alison Campbell, Department of Biological Sciences, School of Science and Engineering, received the Science Educator Award for her outstanding leadership in a wide range of science education areas and for her advocacy for science in the public arena.
- Professor Peter Molan, Department of Biological Sciences, School of Science and Engineering, was awarded the Science Entrepreneur Award for his work on the anti-bacterial activity of Manuka honey.
- Associate Professor Louis Schipper, Department of Earth and Ocean Sciences, School of Science and Engineering, received the Environmental Science Award for his work in developing low-cost, denitrification technologies for pollution control.

The Information and Computer Science Technology (ICT) Science Award went to the University's CRCnet Project, which is providing broadband solutions to remote and under-served rural communities, utilising low-cost, high-speed wireless equipment. The members of the CRCnet Project team are: Dr Murray Pearson and Mr Jamie Curtis, Department of Computer Science, School of Computing and Mathematical Sciences, and Mr Mathew Brown, Linux Systems Administrator, Google Ireland.



## Message from the President

You may recall that in the last issue of *Off Campus*, I signalled proposed changes to membership of the Alumni Association which included the introduction of an annual membership fee, and a significant increase in the Life Membership fee.



MALCOLM CARR

After discussion with the University, the Committee has decided not to implement the planned changes.

All graduates and staff, past and present, of the University of Waikato are considered alumni. As such, they will receive "Off Campus", e-news and invitations to special events.

Alumni who choose to become a Life Member of the Alumni Association are entitled to additional benefits, including negotiated access to the University of Waikato Library and the University Recreation Centre. The fee for Life Membership will remain \$150.00.

Many readers will be aware that Professor Paul Day, who was the very first lecturer at what was later to be the University of Waikato, died on 15 July in his ninety-second year.

A commemoration of the life of Professor Paul Day and of his contribution to the University will be held at 2 pm on Wednesday 3 September at the Lady Goodfellow Chapel. All past and present members of the University community and all those who knew Paul in other capacities will be very welcome.

Malcolm Carr

PRESIDENT, ALUMNI ASSOCIATION

### Alumni Association

The University of Waikato Alumni Association Inc

Te Rauika Pukenga

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Ms Donna Hall	Mr Wayne Hewlett	Ms Joanne Clarkson	Mrs Paula Stewart	Ms Emma Wensing	

## ▶ Hard work reaps rewards

*Fiona Martin is fascinated with death. More specifically, she's interested in the words that are uttered just before that final moment.*

It's a PhD topic that some find rather morbid, but the focus is literary and the words themselves are often lively. Although Fiona is also looking at the influence that famous historical figures, such as Sir Thomas More and Sir Walter Raleigh, may have had on stage deaths.

Fiona began her undergraduate degree in Canada nearly 20 years ago, putting it on hold with the arrival of her daughter Hannah. After moving to New Zealand with her Kiwi partner, she eventually found her way to Hamilton in 2002 in order to complete that long-slumbering degree. In 2005 she began a masters with a University of Waikato Masters Scholarship, but was also awarded the Elisabeth Bisley Memorial Prize in English, the Arthur Sewell Prize in English, and a Masters Study Award from Waikato Graduate Women.

Now part-way through her PhD, her efforts have once again paid off with the recent award of a Merit Study Award for Doctoral Study, again from Waikato Graduate Women. The benefits have been more than financial: "The scholarships and prizes are a form of encouragement to keep on going and keep the central goal in sight whenever the work becomes overwhelming." She also holds a University of Waikato Doctoral Scholarship.

Fiona hopes that her current project will fill a gap in the existing scholarship. Whilst other studies deal with related topics such as death, tragedy, violence and dismemberment on the Renaissance stage, there has been a much smaller critical focus on the significance of what characters say when they know that death is only moments away.

Fiona's daughter Hannah seems to have inherited her interest in Renaissance England and plans to embark on a career in Screen and Media Studies. The family likes to think that one day Fiona will write the novel, with

Hannah producing the film version. But first there's the PhD to finish!

### Language learning

Also completing her PhD is Shaoqun Wu, the second person to recently be awarded a Merit Study Award for Doctoral Study by Waikato Graduate Women.

Shaoqun obtained her first degree in Information Management in China 15 years ago, but it was only when she and her husband moved to New Zealand that Shaoqun was able to commence postgraduate studies. Her current area of interest is in computer-assisted language acquisition, the research for her PhD focusing on automating the production and delivery of practice exercises for overseas students who are learning English.

"I was so pleased and grateful to have won the Waikato Graduate Women scholarship, not just because of the extra financial support but, more importantly, it makes me feel that my research and hard work over the past years have been recognised and appreciated," she says. Her project is also funded by a Marsden Scholarship. Like Fiona, she has previously held a University of Waikato Masters Scholarship and a Masters Study Award from Waikato Graduate Women. As well as working towards her PhD, she is chief programmer for the internationally acclaimed Greenstone Digital Library Project and has helped translate into Chinese Ian Witten and Frank Eibe's popular text book 'Data Mining'.

Both Fiona and Shaoqun have been inspired by the successes of other mature women completing postgraduate studies. As Shaoqun puts it, "I am so glad that I have met people from groups like Waikato Graduate Women to get to know other female students so that I can be encouraged by their stories. It definitely makes the tough journey a lot easier."



FIONA MARTIN



SHAOQUN WU

Waikato Graduate Women is a branch of the New Zealand Federation of Graduate Women. It works to empower women by offering a range of scholarships and providing opportunities to engage in advocacy at local, national, and

international levels. Membership includes graduate women of all ages, occupations, and walks of life. For more information, see [www.nzfgw.org.nz](http://www.nzfgw.org.nz) or contact Cathy Bunting ([bunting@waikato.ac.nz](mailto:bunting@waikato.ac.nz)).

## University of Waikato Alumni Representatives

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### On Campus

**SCHOOL OF EDUCATION**  
 07 838 4500  
 teach@waikato.ac.nz

**SCHOOL OF LAW**  
 07 838 4190  
 lawalumni@waikato.ac.nz

**WAIKATO MANAGEMENT SCHOOL**  
 07 838 4676  
 wms-alumni@mngt.waikato.ac.nz

### New Zealand

**AUCKLAND**  
 Jaswin Gandhi  
 jaswin@parshotam.co.nz

**AUCKLAND**  
 Oliver Wu  
 Oliver.Wu@dhl.com

**CHRISTCHURCH**  
 Leith McMurray  
 leith.mcmurray@paradise.net.nz

**NAPIER**  
 Kerry Bartlett  
 kbartlett@xtra.co.nz

**WELLINGTON**  
 Sue Hillda  
 shill56@paradise.net.nz

### Australia

**BRISBANE**  
 Guangliang Pan  
 gpan@apnic.net

**CANBERRA**  
 Meredith Thatcher  
 meredith.thatcher@anu.edu.au

**MELBOURNE**  
 Peter Grayson  
 graysonp@ozemail.com.au

**PERTH**  
 Jimmy Seow  
 jmseow@bigpond.net.au

**SYDNEY**  
 Joyce Ku  
 joycedong.ku@eds.com

**SYDNEY**  
 Katalinsk Hudders  
 katalinskf@hotmail.com

### Other

**BAHRAIN - MANAMA**  
 Mohammad Tayyab  
 tayyabnz@gmail.com

**BERMUDA - WARWICK**  
 Michelle St Jane  
 mstjane@philanthropy.bm

**CANADA - ST JOHN'S, NEW FOUNDLAND**  
 Mark Staveley  
 Mark.Staveley@mun.ca

**CHINA - BEIJING**  
 Helen Liu  
 liuguohong7361@yahoo.com

**CHINA - SHANGHAI**  
 Maria Chen  
 maria\_chen79@yahoo.com

**COOK ISLANDS - AITUTAKI**  
 Retire Puapii  
 retire-tourism@aitutaki.net.ck

**FIJI - SUVA**  
 Imo Sagoa  
 imo.sagoa@tfl.com.fj

**GERMANY - FRANKFURT**  
 Peter Wagner  
 peter.wagner@accenture.com

**HONG KONG**  
 Richard Wu  
 richardywu@hotmail.com

**INDIA - TAMIL NADO**  
 Aladiarun Aladi  
 aladiarun@yahoo.com

**INDONESIA - JAKARTA SELATAN**  
 Azul Rachman  
 zulfikar@bappenas.go.id

**LONDON**  
 Brian Wadman  
 brianwadman@yahoo.com

**MALAYSIA - KOTA SAMARAHAN, SARAWAK**  
 Norazila Abdul Aziz  
 anora@fcs.unimas.my

**MALAYSIA - PENANG**  
 Li Lin Foo  
 chonyoung@yahoo.com

### Other

**MALAYSIA - PETALING JAYA, SELANGOR**  
 Heman Kamalanathan  
 heman.pillai@nzte.govt.nz

**MARSHALL ISLANDS - MAJURO**  
 Keyoka Kabua  
 kkkabua@hotmail.com

**MONGOLIA - ULAANBAATAR-20**  
 Chuluun Munkhbat  
 munkhbat\_grp@magicnet.mn

**PHILIPPINES - BULACAN**  
 Nestor Fajura  
 fajura\_nesnz@yahoo.com

**SINGAPORE**  
 Joanna MacDonald  
 jomacsing@hotmail.com

**SINGAPORE**  
 Michael Warren  
 michael\_warren@asia.com

**THAILAND - BANGKOK**  
 Ai-lada Chote-chuang  
 ailada\_ch@yahoo.com.au

**TONGA - NUKU'ALOFA**  
 Sione Ketu'u  
 sione@kalianet.to

**VANUATU - PORT VILA**  
 Arthur Faerua  
 faerua\_a@vanuatu.usp.ac.fj

**USA - EL GRANADA, CALIFORNIA**  
 Marjorie Tan-Thronson  
 Thronson@us.ibm.com

**USA - GREENLAND, NEW HAMPSHIRE**  
 Ken Olsen  
 olsy73@yahoo.com

**USA - PUEBLO, COLORADO**  
 Gary Kirby  
 pueblogolfer@gmail.com

**USA - THORNDIKE, MAINE**  
 Anne Schmidt  
 anne\_schmidt@umit.maine.edu

**WESTERN SAMOA - APIA**  
 Quandolita Reid-Enari  
 q.enari@mesc.gov.ws



THE UNIVERSITY OF  
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*Te Whare Wānanga o Waikato*