



THE UNIVERSITY
OF AUCKLAND

NEW ZEALAND

Te Whare Wānanga o Tāmaki Makaurau

2009-10

The University of Auckland Profile



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Welcome



I am pleased to introduce to you this *Profile* of The University of Auckland for 2009-10.

In recent years, there has been increasing recognition world-wide of the important roles leading research universities have to play in the social, cultural and economic development of their countries and of the international community.

As New Zealand's leading university, and one of the world's major research universities, The University of Auckland makes a distinctive contribution to national and international development. We are fortunate in being the largest, most comprehensive university in a country that offers many advantages to those wishing to engage in education and research. Our academic staff comprise the largest group of top-rated researchers in New Zealand, and they are notable for their dedication to providing students with a high quality educational experience. We are fortunate in having a very diverse staff and student body, which reflects our commitment to internationalisation and to the advancement of all New Zealanders. The University places strong emphasis on supporting the personal and academic development of our students and the professional development of our staff. The University is currently engaged in major campus development and opened a new Business School Building, the magnificent Owen G Glenn Building, in 2008. A major redevelopment of the Medical and Health Sciences Campus is also underway.

The University is greatly advantaged by its location in Auckland, New Zealand's largest, most international city and the

centre of business activity in this country. Auckland provides a vibrant cultural, outdoor and social life with many opportunities for work experience while students are at the University and after their graduation. The city offers staff great opportunities to engage with professional and cultural activities outside the University, to attract philanthropic support, to develop collaborative research and teaching programmes with the professions and business, and to commercialise research. Our research company, UniServices, is the largest of its kind in Australasia.

The University of Auckland is involved in many national and international partnerships and collaborations. We welcome that kind of engagement and I trust that this *Profile* will help you to understand the many activities and strengths of our University and the opportunities available through working with us.



STUART N. McCUTCHEON
VICE-CHANCELLOR



New Zealand's leading university

The University of Auckland is New Zealand's leading and largest university with 38,500 students, nearly 10,000 of whom graduate annually in a wide range of professions and fields.

The University has eight faculties: Arts, Business and Economics, Creative Arts and Industries, Education, Engineering, Law, Medical and Health Sciences and Science, offering a full range of undergraduate and postgraduate programmes. It supports a number of research centres and institutes including two large-scale institutes: the Liggins Institute, which is involved in biomedical and clinical research, and the Auckland Bioengineering Institute, which has pioneered computer modeling of the human body. A School of Theology teaches in conjunction with external Theological Colleges.

The main campus of the University is in the heart of the city, with four specialist campuses at Grafton, Epsom, Tāmaki, and Whangarei.

The University's mission is to be a research-led, international university, recognised for excellence in teaching, learning, research, creative work and administration. It seeks to make a significant contribution to the advancement of knowledge and is committed to serving its local, national and international communities.

The University is governed by a Council consisting of government appointees, elected and ex officio members. The Vice-Chancellor is the executive head, with academic, staffing and financial responsibilities. The University Senate is composed of all the professors, and representatives of other staff and students. Through its committees Senate manages academic matters and advises the Council and Vice-Chancellor on academic policy.

The University's students and staff come from all over New Zealand and all over the world. In 2008, more than 4,000 international students from some 93 countries studied alongside our domestic students. The teaching and research staff are similarly international.

The University of Auckland is New Zealand's pre-eminent research institution with the largest number of top-ranked researchers. University researchers attract about \$90 million each year from nationally and internationally competitive funding sources. Our research company, UniServices, manages the University's intellectual property and is the largest organisation of its kind in Australasia, generating revenue of \$100 million through the commercialisation of expertise and research. The University's contribution to New Zealand's economy has been estimated at over \$NZ4 billion per annum.¹

The University has a strong international focus. It is a member of Universitas 21 and the Association of Pacific Rim Universities, international consortia of research-led universities.



The University Arms

The University Arms were granted in February 1962, and are recorded in the College of Arms, London.

The open book together with the motto "Ingenio et Labore" (freely translated as "By natural ability and hard work") and the three stars express the idea of learning pursued under the sky of the Southern Hemisphere. The Kiwi signify New Zealand while the wave beneath their feet points to the fact that Auckland is on the sea coast.



¹ The New Zealand Institute of Economic Research. *The University of Auckland Economic Contribution to the Auckland Region 2006*

The University has forged teaching and research linkages with key partner countries. In China a New Zealand Centre has been established at Peking University with the support of the New Zealand Government while a Confucius Institute, run in collaboration with the Chinese Government and Fudan University in Shanghai, was launched at The University of Auckland in early 2007.

The number of international students studying at Auckland has increased dramatically in recent years, almost doubling between 2001 and 2008. The University's student exchange programme 360° Auckland Abroad has more than 90 exchange partners around the world and the number of outbound students on semester exchanges increased four-fold from 2001 to 2008.

The University hosts four of the seven National Centres of Research Excellence established by the Government to drive innovative, international research. These are:

Maurice Wilkins Centre for Molecular Biodiscovery, which brings together over 200 researchers in multi-disciplinary

teams working in drug discovery and development aimed at serious disease.

New Zealand Institute for Mathematics and its Applications, which fosters high level expertise in a range of mathematical fields.

Ngā Pae o te Māramatanga, which carries out research for the development and advancement of New Zealand's indigenous Māori, focusing on their needs and aspirations in education, health and science.

National Research Centre for Growth and Development, which focuses its biomedical research and experimental and clinical physiology programmes on the early periods of life.

The University is involved with the Government and private partners in five Partnerships for Excellence, supporting University initiatives. The Starpath Project aims to understand and provide remedies for underachievement in education. Other partnerships include an Institute for Innovation in Biotechnology; a National Centre for Plastics Excellence and the National Institute for Health Innovation.

University fast facts 2008

Students

Undergraduate	28,026
Postgraduate	10,525
Total	38,551
Domestic	34,268
International	4,283

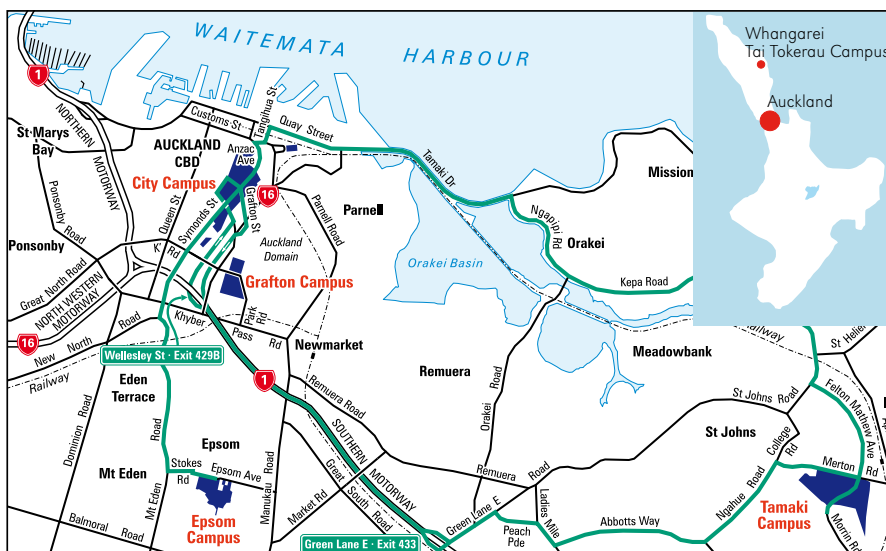
Degrees Awarded

Undergraduate	5,849
Postgraduate	4,082
Total	9,931

Staff

Academic	3,474
General	3,311
Total	6,785

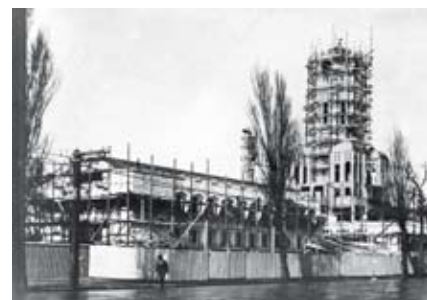
Total research revenue \$190 million



Previous page, bottom right:

The Fale Pasifika and the Owen G Glenn building.

Our history



The University of Auckland was founded in 1883 as a constituent college of the University of New Zealand and in 2008 celebrated its 125th anniversary.

At the opening of the College, the Governor of New Zealand, Sir William Jervois, spoke of the significance of the occasion: "The work on which we are engaged – placing the advantages of a university within the reach of every man and woman of Auckland – is one the importance of which it is almost impossible to over-estimate. It is work, that will, I trust, influence not merely the immediate neighbourhood and the present generation, but also indirectly the whole colony, and that for all time."

The College began with four professors. In the first year, 95 students attended lectures studying for degrees in Arts and Law.

During the first part of the twentieth century, the College began to take over land and buildings that now form part of the City Campus and in 1926 it commissioned prominent Chicago-trained, Australian architect, R.A. Lippincott, to design an Arts complex, today the iconic ClockTower building.

In 1923 a School of Engineering was established and in 1924 the first Professor of Architecture was appointed. The College was structured into faculties of Arts, Science, Architecture, Law, Agriculture, Commerce, Engineering,

Forestry and Education. Agriculture and Forestry were later both disestablished.

In 1950 Elam School of Fine Arts was established as a faculty of fine arts. The School of Medicine enrolled its first students in 1967. The teaching of theology, nursing and pharmacy began in the 1990s. In 2004, the National Institute of Creative Arts and industries was formed, incorporating Music, Fine Arts, Architecture and Planning. A new Faculty of Education was established when the University merged with the Auckland College of Education in the same year.

In 1958 the College changed its name to The University of Auckland, and in 1962, with abolition of the University of New Zealand, it became an autonomous entity.

From the 1950s, student numbers began to grow rapidly and by 1970 they numbered some 9300. Keen to improve student facilities, the University Council built a library complex, the Maidment theatre, and a large gymnasium and recreation centre. Playing fields were created at Tāmaki where the University owned land. New student facilities in the early 2000s included the Kate Edger Information Commons, named after New Zealand's first woman graduate, expanded retail and shopping areas, and new student health premises.

In 1990, the Tāmaki site was further developed as an additional campus and

is now home to the School of Population Health.

In 2008, the Business School came together in the magnificent new Owen G Glenn Building.

The 1970s brought numerous social changes such as an increase in the proportion of Māori and Polynesian students and the numbers of female and mature students.

During the late 1990s and early 2000s, the number of Asian students, both international and domestic, increased to about a third of the over 38,000-strong student body.

Today The University of Auckland is New Zealand's leading tertiary institution and an international centre for excellence in teaching and research.

From top left:

Auckland University College Graduation Parade, 1911.

The University's first home – a disused courthouse.

R. A. Lippincott's new Arts building.

Arts



The expertise of academic staff in the Faculty of Arts is renowned in New Zealand and abroad and our Arts and Humanities programmes are ranked well inside the world's top 50 according to the *Times Higher Education QS World University Rankings*.

The Faculty enjoys academic relationships with international universities and supportive relationships with academic and cultural organisations at home and worldwide. These relationships include New Zealand-based European and Latin American diplomatic and consular bodies, the Europe Centre, Confucius Institute, Goethe Society, the New Zealand Centre in Peking University and various museums and art galleries.

Faculty of Arts academics undertake internationally recognised research across the Humanities and Social Sciences. A major area of research focus is on New Zealand issues, identity and innovation. Associate Professor of Asian Studies Manying Ip has joined with Professor of Māori Studies Margaret Mutu to examine how Māori and Chinese communities in New Zealand are depicted and perceived by each other. Associate Professor of History Caroline Daley analyses New Zealand's social and cultural history, with a special focus on the history of gender relations. Her research spans the fields of sport, fashion, sexuality and body building. In the Department of English Associate

Professor Michele Leggott, New Zealand's inaugural Poet Laureate, has developed the country's first electronic poetry centre (www.nzepec.auckland.ac.nz). Established in 2001, nzepec is the leading electronic gateway to poetry resources in Aotearoa/New Zealand and the Pacific region.

The Faculty's Pacific research is particularly strong, focusing on historical traditions and contemporary culture. With her literary and scholarly explorations of Captain James Cook and blue-water navigation, Distinguished Professor of Māori Studies Dame Anne Salmond is broadening the horizons of how Pacific voyaging is understood. Her recent research output includes a book in press, *Aphrodite's Island: The European Discovery of Tahiti*; and a new book on William Bligh and the mutiny on the *Bounty*. Associate Professor of Anthropology Simon Holdaway regularly leads archaeological expeditions to Australia (where he is co-director of the Western New South Wales Archaeological Programme) and to Egypt, where he collaborates with scholars from UCLA in the US. In the Centre for Pacific Studies Associate Professor Richard Moyle and Dr Melenaita Taumoevalou focus on the preservation and celebration of Pacific Island languages and musics.

Further afield, sociologist Dr David Craig is researching the impact of decentralised governance reforms in Cambodia. Researchers in the Centre for Development Studies postgraduate

programme maintain a strong presence in Asia-Pacific, with fieldwork and research that includes private sector initiatives in Papua New Guinea, governance and development issues in the Southern Philippines, and the role of culture in economic performance in Tonga.

Research filtered through the lens of time is the domain of Professor of History Jonathan Scott, who examines early modern British and European history, especially in terms of culture and ideas, as well as the contribution of geographical discourses to early modern thinking about the British state and empire. Art historian Dr Erin Griffey specialises in Renaissance and Baroque art, and her particular area of research is in early modern portraiture. She recently curated the highly successful *Power of Portraiture* exhibition, the first show in New Zealand dedicated to formal painted portraits. Greek history, language and literature are included in the specialisations of Professor Vivienne Gray in the Department of Classics and Ancient History, who encourages her postgraduate students to explore the Greek historians Xenophon and Herodotus.

The screen arts are well represented within the Faculty of Arts. Work by Associate Professor Annie Goldson and Dr Shuchi Kothari, of the Department of Film, Television and Media Studies, is recognised in feature and documentary film festivals in New Zealand, the Pacific and around the world. Professor of Asian Studies Paul Clark



is respected internationally and at home for his pioneering research into Chinese popular and youth culture, with an emphasis on film.

Other Arts academics whose work receives international recognition include Associate Professor of Philosophy Stephen Davies, who researches the philosophy of the arts, particularly music and political philosophy and is President of the American Society for Aesthetics. In the Department of Applied Language Studies and Linguistics, Professor Yan Huang is regarded as one of the leading thinkers in the field of theoretical linguistics, in particular, pragmatics. Distinguished Professor of English Brian Boyd is renowned for his seminal publications on the writings of Vladimir Nabokov, as well

as his ongoing research into narrative, evolution and cognition. Emeritus Professor of English Michael Neill is a leading figure in international Shakespeare scholarship; and Professor Witi Ihimaera, who received international acclaim when his book, *The Whale Rider*, was turned into a feature film, enjoys ongoing recognition as Distinguished Creative Fellow in Māori Literature.

Fast facts 2008

Students

Undergraduate	6,351
Postgraduate	1,283
Total	7,634

Domestic	7,013
International	621

Staff

Academic	630
General	138
Total	768

Academic units

- Anthropology
- Applied Language Studies and Linguistics
- Art History
- Asian Studies
- Classics and Ancient History
- Development Studies
- English
- European Languages and Literatures
- Film, Television and Media Studies
- History
- Māori Studies
- Pacific Studies
- Philosophy
- Political Studies
- Sociology
- Women's Studies

Clockwise from top left:

Associate Professor Simon Holdaway in the field with students.

Professor Paul Clark.

Associate Professor Michele Leggott.
Distinguished Professor Dame Anne Salmond.

Business and Economics



The Faculty of Business and Economics is recognised internationally as one of Asia-Pacific's foremost business schools and is focused on advancing the global competitiveness of New Zealand.

Established in 1905, the School is among the one percent of leading business schools worldwide awarded the Triple Crown –accreditations from the premier international accrediting bodies: the Association to Advance Collegiate Schools of Business (AACSB), the European Quality Improvement System (EQUIS), and the Association of MBAs (AMBA).

The School is housed in the Owen G Glenn building – a 34,000 square metre state-of-the-art learning environment – and its academic staff are world-class scholars boasting tertiary qualifications from more than 38 countries. For example health economist and senior lecturer Rhema Vaithianathan is originally from Sri Lanka and has served as an expert consultant to the OECD, the Australian Medical Council and the New Zealand Ministry of Health. Rhema's research spans a wide range of areas within health economics including the statistical analysis of healthcare cost growth, design of healthcare funding systems and optimal contracting for healthcare delivery.

The Business School impacts on more than 12,000 individuals each year through its degree and diploma programmes, executive development courses and initiatives it operates with partner organisations. It confers more than 2,000 degrees and diplomas annually, and 75 percent of its students have offers of employment before graduation. There are more than 28,000 Business School alumni residing in 67 countries worldwide, and more than 80 countries are represented in the School's student body.

Professor Greg Whittred, who assumed the role of Dean in June 2008, heads the School. He has held senior positions at the University of Sydney and the Australian Graduate School of Management and visiting professorial appointments in the United States, England, Hong Kong and China.

There are eight departments in the Business School and its programmes are increasingly focused on advancing the global competitiveness of New Zealand. In addition to an emphasis on disciplinary strength the School enables and supports interdisciplinary initiatives in the following areas:

- Leadership
- Entrepreneurship, innovation and business growth
- International business and global business development
- Digital and service enterprise
- Māori business
- Economic policy.

Initiatives in these areas are supported by a combination of partnerships with business enterprise, networks and industry advisory groups. Because both relevance and rigour are important in the School's work, it actively encourages business





leaders to engage with researchers and research centres to help drive the direction of their work.

As a result the School boasts several research centres including the New Zealand Leadership Institute, ICEHOUSE – a business incubator established in partnership with local companies, the APEC Study Centre, the New Zealand Governance Centre, the New Zealand Retirement Policy and Research Centre, the Mira Szászy Centre for Māori and Pacific Development, the Centre of Digital Enterprise, the Energy Centre and the Centre for Supply Chain Management.

The School has received generous financial support from the business community to appoint a number of sponsored chairs. These include The Fletcher Building Education Trust Professor in Leadership, a Professor of Entrepreneurship (anonymous trust), the Ports of Auckland Professor of Logistics and Supply Chain Management, a Professor of Energy Economics (New Zealand Energy Education Trust), the Ernst & Young Professor of Financial Accounting, the Bank of New Zealand Professor of Finance, and the Douglas Myers Distinguished Visiting Professorship.

New innovative programmes have been created and developed to enhance New Zealand’s competitiveness and capacity to create wealth and prosperity. These



include the Graduate School of Enterprise (GSE) whose overarching theme is growth through innovation and leadership and the New Zealand Leadership Institute – a national leadership research and development centre.

Dedicated to fostering a spirit of enterprise, innovation and entrepreneurship amongst New Zealand start-ups, SMEs, students and university staff, the School has developed an entrepreneurial eco-system to encourage New Zealand’s economic transformation.

There are two student-led initiatives at the heart of this system. SPARK: The University of Auckland Entrepreneurship Challenge provides the skills and knowledge needed to turn first-class ideas into world-class businesses; and Chiasma links biotech enterprise and creates business-literate scientists.

The Business School is located prominently in downtown Auckland right at the heart of New Zealand’s financial and corporate powerhouse, enabling strong engagement with business. This means it can, and does, play an important role in the country’s business development.

Fast facts 2008

Students

Undergraduate	5,403
Postgraduate	1,328
Total	6,731

Domestic	5,812
International	919

Staff

Academic	322
General	147
Total	469

Academic units

- Accounting and Finance
- Commercial Law
- Economics
- The Graduate School of Enterprise
- Management and International Business
- Information Systems and Operations Management
- Marketing
- Property

From left: Dr Rhema Vaitianathan and Professor Greg Whittred.

Creative Arts and Industries



The National Institute of Creative Arts and Industries (NICAL) is a centre of creative research, practice and teaching that is recognised for its disciplinary excellence and interdisciplinary leadership and innovation.

NICAL, which comprises the School of Architecture and Planning, Elam School of Fine Arts, the School of Music and the Dance Studies Programme, and the Centre for New Zealand Art Research and Discovery, is a forward-looking institute continuously seeking and identifying new pathways for inter- and trans-disciplinary imagining.

The School of Architecture and Planning boasts a range of programmes and partnerships that reflect its status as a leader in its fields. The Master of Architecture (Professional) is an internationally recognised qualification established in response to the worldwide demand for research-led practitioners. The School also enjoys a growing exhibition programme which is supported by a number of local and European-trained architects. Architecture students are annual participants in Auckland Architecture Week and many of them compete with great success in prestigious national and international design contests. Recently, more than 40 students from the School spent five weeks in Palermo, Italy, as part of their Architecture studio programme.

The School's planning programme is active in New Zealand and abroad. Professor Dory Reeves is involved with scoping several potential partner tertiary institutions in China; she also attended the Habitat Partner University Round Table, which explored opportunities for collaboration between Habitat University partners and the United Nations Habitat Project. Professor of Planning Jenny Dixon has carried out significant research into urban development and intensification and currently heads the University's Centre for Urban Ecosystem Sustainability. This is a joint venture between the University and Landcare Research – a Government-funded research institute – to promote research in sustainable urban design and development. Several members of the School are on Auckland City's Urban Design Panel and regularly provide expert contributions to debates on urban development and sustainability.

Elam School of Fine Arts has a long tradition of training some of New Zealand's most respected artists. With its interdisciplinary studio approach, students are exposed to a wide range of fine arts media and are taught by some of the country's leading practitioners, including Associate Professor Peter Robinson, who was recently awarded the prestigious Walters Prize, New Zealand's main award for contemporary art. Other Elam artists include Judy Millar, who will represent the country in the 2009 Venice Biennale; et al. (a collective of Elam staff), which exhibited at the prestigious international art fair, Art Basel; and Michael Parekowhai, who has exhibited installations and multi-media artworks around the world.

Elam students have the chance to shine at various events throughout the year. The biennial Auckland Festival features Elam Art UpFront, a showcase of artwork by current students and recent graduates. Elam Open Days are an annual art extravaganza comprising the artwork of more than 120 graduating students. The School hosts an International Artists in Residency programme, which brings overseas practitioners to Elam.

The Gus Fisher Gallery, part of NICAL's Centre for New Zealand Art Research and Discovery (CNZARD), further supports the fine arts through an active programme of exhibitions, seminars and gallery talks. The gallery was recently named Best Arts Institution in Auckland. CNZARD also manages the University's extensive and valuable art collection and supports and guides the student team that leads the activities of the online and onsite student-curated gallery, Window.

Offering cutting-edge jazz and popular music programmes and respected classical music courses, the School of Music is increasingly hailed for its commitment to contemporary as well as traditional music. Headed by Professor Robert Constable, himself an acclaimed pianist and composer, the School collaborates regularly with professional musicians, composers and conductors in New Zealand and abroad. The School's impressive stable of musicians and music educators include Austrian cellist Martin Rummel, pianist and tutor Rae de Lisle, and flautist Uwe Grodde. Wolfram Christ, one of the world's most respected musicians and conductors, pays regular visits to the School to work with its string orchestra.



School of Music students perform alongside members of the Auckland Philharmonia Orchestra at the annual Graduation Gala: Concerto Competition. They participate in the Auckland Festival and the annual Auckland Jazz Festival, a three-day event hosted by the School of Music.

Head of Dance Studies, Associate Professor Ralph Buck, oversees a programme that allows students to develop their dance research and theory, and performance techniques under the guidance of leading dance professionals and dance educators from New Zealand and around the world. NICA's dance students and staff participate in a variety of festivals and symposiums in New Zealand and abroad. Students also explore dance and disabilities, working with special needs high school students, children who are hospitalised, and residents of a retirement village.



A member of the European League of Institutes of the Arts (ELIA), NICA is a respected and active player on the international stage. Cross-cultural initiatives are also supported by the Faculty, as reflected in an international collaboration exploring cultural responses to communities at risk. In partnership with the Victorian College of the Arts (Melbourne) and the Emily Carr University of Art and Design in Vancouver, the project focuses on the island nation of Tuvalu, aiming to support indigenous students develop artistic and community leadership skills.

Fast facts 2008

Students

Undergraduate	1,581
Postgraduate	445
Total	2,026

Domestic	1,856
International	170

Staff

Academic	296
General	70
Total	366

Academic units

- Architecture and Planning
- Dance Studies
- Fine Arts
- Music

Clockwise from top left:

"Autonomous Space" (2008) an innovative design project by postgraduate architecture students.

"Untitled" (2008) by David Copisarow from exhibition *The Conch Is Calling*.

Dance students performing at the end of year show.

Education



The Faculty of Education is New Zealand's largest specialist provider of teacher education. It also offers programmes in social work and human services.

The Faculty is a leader in innovative research and is world-renowned for its pioneering work in enhancing children's literacy and numeracy.

Established in 2004 as a result of amalgamation of the 123-year-old Auckland College of Education and the School of Education from within the Faculty of Arts, this is the University's youngest faculty. It is based primarily at the Epsom Campus but programmes are available at the University's City and Tāmaki campuses while Tai Tokerau Campus in Whangarei, north of Auckland, offers early childhood, primary and secondary teacher education. The Manukau Institute of Technology campus offers Bachelor of Education (Teaching) for primary teachers and some graduate diploma courses.

The Faculty's teacher education, social work and human services programmes include specialist qualifications in social work, physical education, Te Reo Māori (the native language of New Zealand's

indigenous population), Pacific Island education and education for teachers of the visually impaired; the Faculty also provides New Zealand's only hearing impairment specialisation for students training as teachers of the deaf and it offers programmes especially designed for international teachers, principals and education administrators.

Many initiatives today focus on raising performance of those who are not reaching their potential at school. Significant to New Zealand, this group comprises a high proportion of Māori and Pacific students attending schools and living in the greater Auckland region.

The Faculty is ideally placed to offer hands-on programmes and world-class research to address this unrealised potential while at the same time giving undergraduate and postgraduate students opportunities to participate in research that will make a real difference.

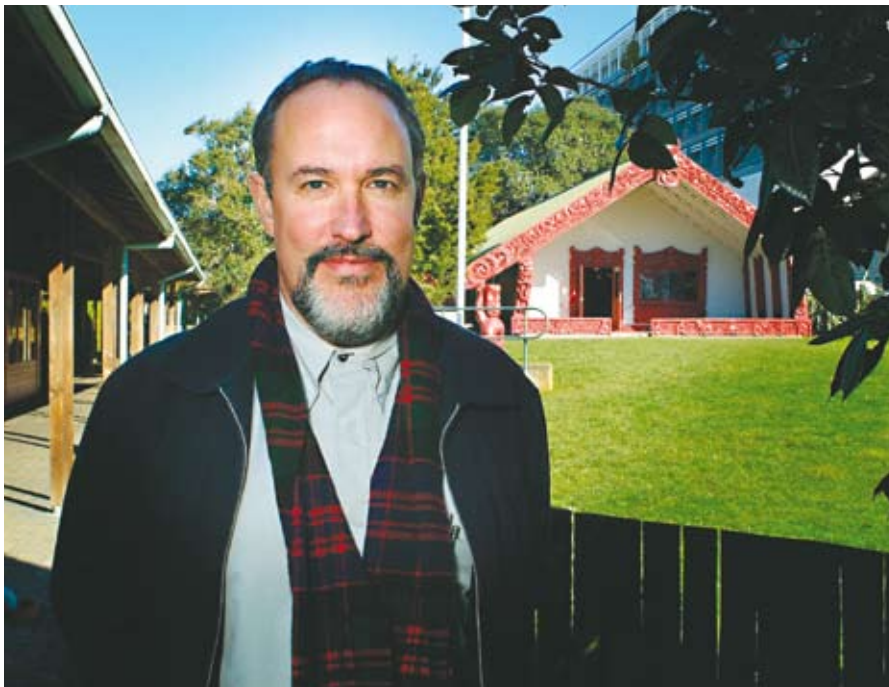
One key initiative is Starpath, a unique project funded by business, philanthropic and government sectors, which aims to develop a strategic, evidence-based approach to educational achievement that focuses on educational outcomes for

secondary school and tertiary students.

Starpath works collaboratively with schools and tertiary institutions to identify critical barriers to educational progress for students from low- to mid-decile schools. It aims to develop a toolkit of initiatives and strategies to help transform patterns of educational underachievement in New Zealand.

Another initiative addressing this "tail of underachievement" is the Woolf Fisher Research Centre, established in 1998 to promote and develop innovative programmes to increase educational success in clusters of low-achieving primary schools. Led by Stuart McNaughton, Professor of Education, researchers have developed programmes in schools, which are successfully raising achievement levels, particularly in the areas of literacy and language development. The programmes are helping to inform the development of what constitutes effective teaching and instruction.

Another project focuses on literacy: Professor Helen Timperley from the Department of Teaching, Learning and Development and Associate Professor Judy Parr from the Department of Teacher



Fast facts 2008

Students

Undergraduate	2,954
Postgraduate	1,453
Total	4,407

Domestic	4,199
International	208

Staff

Academic	251
General	377
Total	628

Academic units

Arts, Languages and Literacies

Counselling, Human Services and Social Work

Critical Studies in Education

Science, Mathematics and Technology Education

Te Puna Wanānga

Teaching, Learning and Development

Teacher Education Practice

Education Practice are major contributors to the success of a national Literacy Professional Development Project. Working with teachers in 200 primary schools around the country, they show that professional development interventions can have a significant impact on students' reading and writing, in particular those in the "tail".

Research is also underway in the Faculty's Te Puna Wanānga (School of Māori Education). For example Professor Alison Jones focuses her work on understanding Māori-European educational relationships and is currently working on a book which foregrounds the earliest Māori views of schooling and the role of Māori in initiating schooling in New Zealand in the early 1800s.

A key innovation to come out of the Faculty of Education is world-leading software called asTTle (Assessment Tools for Teaching and Learning). In 2001 the New Zealand Ministry of Education commissioned Professor of Education John Hattie and a team of researchers to develop a tool enabling teachers to assess their own teaching and their students' learning, compared to peers across the country. The result was asTTle, launched in 2003 and now being used in schools around New Zealand and attracting considerable interest from overseas education providers.

With the release of e-asTTle in 2007 the tool has become more flexible in order to meet the needs of schools, student and teachers. e-asTTle is used to create online tests designed to test students' learning needs in reading, writing and mathematics. Once the tests are scored, the asTTle tool generates interactive graphic reports to analyse student achievement against curriculum levels, curriculum objectives, and population norms.

The Faculty of Education is also internationally known for its Reading Recovery Early Literacy Intervention programme. Now firmly entrenched in the New Zealand education system, Reading Recovery has been implemented in Australia, Canada, England, Wales, Northern Ireland, Denmark and the US – where one in five elementary schools use its methods.

Today the Faculty hosts the National Reading Recovery Centre, which oversees New Zealand's Reading Recovery programme and is a training ground for international reading recovery specialists who enrol for the specially designed postgraduate diploma for reading recovery trainers.

From top left:

Dr Georgina Stewart, an honorary research fellow with the Starpath team.

Professor Stuart McNaughton.

Engineering



Founded in 1906 as Auckland's School of Mines, the Faculty of Engineering has evolved from modest beginnings to stamp its mark on New Zealand and the world.

It annually offers 620 places to undergraduates who can choose a course of study ranging from traditional engineering disciplines to new specialities in biomedical engineering, computer systems, software engineering and mechatronics. It has a large postgraduate and doctoral programme, including a significant cohort of international students.

The Faculty has been at the forefront of international technology research. The Power Electronics Research Group, led by Professor John Boys, is known for pioneering Wireless or Inductive Power Transfer (IPT) technology, which involves transmitting electrical energy across air. The technology has been licensed for various commercial uses all over the world.

More recently, prototype IPT systems capable of efficiently charging plug-in hybrid and pure electric cars at home have been developed by the research group. Professor Boys and colleague Associate Professor Grant Covic are now mid-way through a four-year project to develop IPT systems powerful and efficient enough to power road and rail.

In 2008 the University launched a new Centre for Healthcare Robotics, housed in the Department of Electrical and Computer Engineering. The centre operates in collaboration with Korea's largest government-funded research facility to develop inexpensive mobile robotic care devices for use in health and care facilities for older people.

The Faculty is known in international yachting circles for its Yacht Research Unit, which pioneered the development of a twisted flow wind tunnel, designed to simulate the flow of wind over yacht sails. This has been an important tool in New Zealand's success in America's Cup campaigns and two Emirates Team New Zealand scholarships have recently been established enabling masters students to work on specific projects in the unit.

A Transport Research Centre (TRC) has also recently been established in the Faculty with the aim of improving transport practice in New Zealand and finding innovative solutions to traffic and logistics issues.

During 2007 Professor Pierre Quenneville was appointed to the first Chair in Timber Design in the Faculty. The aim of the chair, supported by the Ministry of Agriculture and Forestry, is to develop innovative ways of using timber in large commercial and multi-unit residential structures. In 2008 the Faculty also became part of a trans-Tasman, multi-million dollar research consortium STIC (The Structural Timber Innovation Company) to advance the use of timber in construction.

Chemical and Materials engineers working with scientists from the University's Science Faculty have revolutionised aluminium smelting technology by dramatically improving efficiency of the process and purity of the end product. The Light Metals Research Centre, established in 2002, is now involved in aluminium projects





on every continent and runs training programmes in Dubai, Bahrain, the United States and South America.

In the Department of Chemical and Materials Engineering, Professor Wei Gao is leading ground-breaking research into nano-structured materials. His research team has patented a new approach to growing nano-materials on a solid substrate based on the oxidation of solid-state materials. This allows the control of the microstructure and properties of nano-materials and addresses inherent instability problems.

The Faculty is home to state-of-the-art research equipment. Notably it has an Environmental Scanning Electron Microscope and an X-ray Photoelectron Spectroscopy to support research into advanced materials characterisation.

In late 2008 a National Plastics Centre of Excellence was launched in the Faculty to develop leading-edge environmentally sustainable technologies, conduct plastics industry specific research, and carry out graduate and industry training

A core focus in the Faculty of Engineering is sustainability. Students are taught how to work in an environmentally sensitive and sustainable way, and sustainability is a key goal in many research projects. For example, the Centre for Advanced Composite Materials, directed by Professor Debes Bhattacharyya has pioneered the development of polymer

and composite materials – notably a world-leading polymer-polymer composite, made by blending and processing two recycled plastics. This new product has a wide range of applications in manufacturing, biomedical areas and packaging, particularly for products that have limited shelf-life.

Another project is investigating sustainable ways to treat stormwater run-off in Auckland City. Dr Elizabeth Fassman, a lecturer in Civil Engineering, in collaboration with local government organisations, has turned the top of the 12-storey Engineering building into a 200 square metre “green roof”. The garden, which comprises six plots of more than 3,600 plants, is providing evidence to support design standards for “green roofs”.

A scheme imported from Indiana’s Purdue University called Engineering Projects in Community Service (EPICS) has enabled students to work with local communities on sustainability projects such as recycling plastic on Waiheke Island into new products like roof tiles; building a platform to help children with Cerebral Palsy learn to operate an electronic wheelchair; and applying laser-scanning technology to archival documentation of Māori and Pacific Island heritage artefacts at the Auckland War Memorial Museum.

Fast facts 2008

Students

Undergraduate	1,640
Postgraduate	1,348
Total	2,988

Domestic	2,540
International	448

Staff

Academic	196
General	126
Total	322

Academic units

- Chemical and Materials Engineering
- Civil and Environmental Engineering
- Electrical and Computer Engineering
- Engineering Science
- Mechanical Engineering



Bottom left: Emeritus Professor of Anthropology, Geoff Irwin, Wind Tunnel Manager David Le Pelley and Professor of Mechanical Engineering, Richard Flay.

Top right: Dr Elizabeth Fassman.

Bottom right: Professor Pierre Quenneville.

Law



The Faculty of Law offers a broad-based legal education focused on core principles of the foundational subjects, allied with New Zealand's largest range of elective courses.

It boasts leaders in many fields of public and private law, with a wide range of specialities including international law and the impact of globalisation, commercial, corporate and commercial law, environmental, criminal, family and youth law, the rights of indigenous people, intellectual property law, healthcare law, and animal law.

The Faculty provides an excellent platform for postgraduate study and legal research, with a thriving LLM programme. In recent years there has been an emphasis on growing postgraduate numbers, and seeking to offer an even larger range of LLM courses for its own graduates, international students and the local profession.

Auckland aims to be a truly "global" law school. The Faculty recognises the need for an international orientation, reflecting the fact that law is increasingly influenced by transnational developments

and that the best law schools in the world are training lawyers for a global employment market. As well as employment in domestic legal practice, Auckland graduates are to be found in an increasing variety of jurisdictions and contexts: some in law firms in the world's major cities, others working for international institutions and tribunals, still others for NGOs.

The Faculty has international linkages to the world's best law schools through student and staff exchanges, visiting fellowships, and international programmes. Every year as part of the student exchange programme, 360° Auckland Abroad, around ten percent of Auckland's final-year students spend one or two semesters at law schools abroad.

Law students have earned international respect for their winning performances in skills-based international competitions. In 2007 and 2008, the Faculty won the national moot competition, thus gaining the right to represent New Zealand in Washington at the Philip C. Jessup International Law Moot, the world's largest moot court competition with 500 law schools from more than 80 countries.

Located close to New Zealand's busiest high court and in the heart of its largest commercial centre, the Faculty is appropriately strong in commercial law. Professor Peter Watts, who teaches in the law of obligations, agency law, restitution, company and company finance law, is the editor and author of leading publications in the field. Christopher Hare joined the Faculty in 2005, having completed his undergraduate Law degree at Cambridge and post-graduate studies at Harvard Law School and Oxford before practising in chambers. His research focuses primarily on the commercial and banking law areas. Professor Rick Bigwood, a lecturer in contract law beloved by his students (as indicated by the receipt of several teaching excellence awards), researches widely in the field. He has authored and edited numerous books, notably the seminal *Exploitative Contracts*.

Public and international law is another major strength. As the lead author of New Zealand's foremost text, *The New Zealand Bill of Rights* (Oxford University Press, Melbourne, 2003), Professor Paul Rishworth is the country's leading legal academic expert on the New Zealand Bill of Rights. The Faculty's Dean since



Fast facts 2008

Students

Undergraduate	1,564
Postgraduate	345
Total	1,909

Domestic	1,788
International	121

Staff

Academic	114
General	29
Total	143



December 2005, he continues to write extensively on human rights issues and remains involved in the litigation of civil rights issues. This strength is augmented by Kris Gledhill, who joined the Faculty in 2007 after an appellate criminal and public law practice in England which included numerous appearances in precedent-setting cases. His research interests are mental health law, prison law, human rights law, and comparative criminal law.

Professor Jane Kelsey is well-known throughout the world to those with an interest in globalisation. She specialises in socio-legal scholarship, bringing the law into contact with politics, economics, social justice, colonialism and international relations. She is a frequent and highly-respected commentator on colonialism, globalisation and structural adjustment and is an elected member of the steering committee of the International Network for Cultural Diversity where she advises on the interface between international trade agreements and cultural policy.

Professor Klaus Bosselmann, who has consulted on public and environmental law for the European Community, the United Nations Environmental Programme, and German and New Zealand authorities, contributes to the Faculty's high profile in Environmental Law.

The Faculty comprises several formal and informal research "clusters" or centres that reflect its expertise. The oldest, established in 1993, is the Research Centre for Business Law, which draws on the combined expertise of the Faculty of Law and the Department of Commercial Law in the Business School. Directed by Professor Rick Bigwood, the Centre promotes research and writing in commercial law, organises lectures and seminars by resident and visiting experts, and sponsors publication of the *New Zealand Business Law Quarterly*.

The New Zealand Centre for Environmental Law provides a focal point for research, publication, and community service in environmental law in New Zealand and the Asia-Pacific region. It draws on resources throughout the University to develop and advance environmental policy locally, nationally and globally.

Another growing strength is in the study of the Māori dimension of New Zealand law. Of the Faculty's 40 academic staff, five are Māori, and a strong Māori component is built into the curriculum.

From top right: Law student Rachel Nootai; Professor Klaus Bosselmann.

Medical and Health Sciences



The Faculty of Medical and Health Sciences aims to improve the health and well being of our local, national and global communities through excellence in teaching, research and service.

Opened in 1968, originally as a School of Medicine, the Faculty is located at Grafton and Tāmaki Campuses. It now comprises Schools of Medicine, Medical Sciences, Nursing, Pharmacy, and Population Health. In addition there are clinical teaching and research schools at Auckland City Hospital, Middlemore Hospital in South Auckland and Waikato Hospital in Hamilton. A new clinical teaching programme for Year 5 students has been developed in conjunction with Northland District Health Board. This enables students to gain work experience in a range of rural settings from Kaitia to Whangarei.

The Faculty has undergraduate degrees in Health Sciences, Nursing, Pharmacy, Medicine and Biomedical Science. It offers a special foundation year for Māori and Pacific students and has an extensive range of postgraduate subjects. These include traditional fields such as mental health and paediatrics and emerging subjects such as forensic psychiatry and health informatics.

The Faculty has a number of new, modern teaching facilities. The Advanced Clinical Skills Centre at nearby MercyAscot Hospital provides a state-of-the art environment for simulated surgical and anaesthesiology training, while the Centre for Advanced MRI at Grafton Campus is the first of its kind in New Zealand and is equipped with one of the world's most advanced laser MRI scanners. A unique Medical Sciences Learning Centre, which provides teaching resources in anatomy, radiology, pathology and clinical skills, has been established at Grafton. Using a circular display arrangement around a central core depicting da Vinci's classic symmetrical Vitruvian man, the Centre houses a comprehensive tissue, specimen and anatomical collection.

The Faculty's AnQual Laboratory is a Good Laboratory Practice facility in its School of Pharmacy for specialised activities such as the development and testing of new drugs.

The University has recently refurbished a number of its medical laboratories and is embarking on a major building programme on its Grafton campus to provide for further research facilities and an expanded student intake into its medical programme.

Developing and testing new drugs is the focus of one of the Faculty's flagship research programmes. For some twenty-five years cancer specialists, Professors Bill Denny, Bruce Baguley and Bill Wilson, have been investigating how to reduce cancer growth and development through the disruption of oxygen and nutrient levels to tumour cells.

The professors' research has led to the development of a number of anti-cancer treatments, including DMXAA, which is currently in the final stages of clinical trials (as AS-404) for treatment of non-small cell lung cancer. It is also being investigated for its potential as a treatment for ovarian and prostate cancer. DMXAA disrupts the blood vessels supplying solid tumours with





Fast facts 2009

Students

Undergraduate	1,943
Postgraduate	2,483
Total	4,426

Domestic	4,233
International	193

Staff

Academic	581
General	438
Total	1019

Academic Units

Medical Sciences
(Anatomy with Radiology, Molecular Medicine and Pathology, Nutrition, Physiology, Pharmacology)

Medicine
(Anaesthesiology, Medicine, Obstetrics and Gynaecology, Ophthalmology, Paediatrics, Psychological Medicine, Surgery)

Nursing

Pharmacy

Population Health (Audiology, Epidemiology and Biostatistics, General Practice and Primary Health Care, Health Systems, Māori Health, Pacific Health, Social and Community Health)

Clockwise from bottom left: Medical Sciences Learning Centre; Professors Bill Denny (left) and Bill Wilson.

Associate Professor of Epidemiology, Robert Scragg working with school students on the Obesity project.

nutrients, effectively killing the tumour cells. DMXAA was licensed to UK biotechnology company Antisoma in 2001, with worldwide rights to the drug granted to Novartis in 2007.

The Faculty is equally renowned for its research in neuroscience. Anatomy Professor Richard Faull and his research team were the first to show that the diseased adult human brain has the ability to repair itself, and to identify the pathway stem cells take through the brain to replace damaged or dying brain cells. Professor Faull, who was awarded New Zealand's highest science honour, the Rutherford Medal in 2007, is now applying this knowledge to research into debilitating neurodegenerative diseases such as Alzheimer's, Parkinson's, Huntington's and epilepsy.

At the Tāmaki Campus, the Faculty's School of Population Health represents disciplines such as indigenous health, epidemiology, primary care, health promotion, health economics, ethics and audiology. Current research topics include an initiative to maximise health for older people and the New Zealand arm of an international study on Obesity Prevention in Communities being run in four South Auckland schools and led by Associate Professor Robert Scragg.

The School is home to a major new study called Growing Up in New Zealand, which

will track nearly 8,000 children from across the North Island over the next twenty years. The aim of this study is to collect information about the population over a long period of time, whilst building an understanding of influences and decisions made throughout a child's life, from pre-birth to adulthood.

The National Institute for Health Innovation at Tāmaki operates at the forefront of the New Zealand, and global, health informatics field. Supported by international companies such as IBM, Oracle, Phonak and Microsoft, the Institute's primary aim is to make information technology innovations work for such things as keeping primary healthcare records, measuring national food consumption and improving prescription management.

Science



The Faculty of Science is New Zealand's largest university science facility and hosts a wealth of teaching and research programmes.

It carries out world-leading research into topics ranging from diabetes and medicinal chemistry, to quantum optics, neuropsychology and software innovation. It is active in the greater Auckland community running specialised clinics in speech language therapy, optometry and exercise and cardiac rehabilitation. In sport and exercise science, for example, the Gait Laboratory works with children with mobility problems, and develops techniques to diagnose movements for elite international athletes.

The Faculty offers a wide range of undergraduate courses from genetics and biometry to the practice of "artificial intelligence" and food preservation. Postgraduate specialisations include bioinformatics, forensic science, speech language therapy, bioscience enterprise, biosecurity and wine science.

The Faculty of Science has a growing world-class marine science programme and is redeveloping its Leigh Marine Laboratory on the coast northeast of Auckland to reflect new developments in marine research.

The South Pacific Centre for Marine Science will incorporate all marine research at the University, including

underwater acoustics, coastal morphology, and the study of natural marine compounds with pharmaceutical potential. The Centre will also house the Edith Winstone Blackwell Interpretive Centre, to allow visitors to the reserve to learn more about the marine environment.

The Faculty has a strong capacity in drug discovery and development, with particular experience in structural biology, proteomics and bioinformatics.

The Faculty hosts the Maurice Wilkins Centre for Molecular Biodiscovery, one of seven government-funded Centres of Research Excellence. The Centre brings together a cross-disciplinary group of leading researchers from Science, Engineering, and Medical and Health Sciences to work on integrated programmes in drug discovery.

The Institute for Innovation in Biotechnology is a partnership with the biotechnology industry and the Government, and provides access for commercial companies to research facilities and services available in the School of Biological Sciences. The Institute has founded the Bioscience Enterprise programme, a postgraduate course for biology students to gain knowledge and experience in the business of biotechnology, including finance, intellectual property, marketing and commercial development.

There is a consensus internationally that research into climate change, energy, water and urban issues needs to be bolstered. The Faculty has a number of researchers working in these areas across several departments. New appointments have been made in the key fields of energy and hydrology.

Building a stronger presence in biophotonics and laser physics (nano technology) is another key initiative. The Faculty has re-branded the current Centre for Applied Optics as the Dan Walls Centre for Advanced Optics and Biophotonics and purchase of a photon factory will enable the project to generate momentum. The Faculty has also recently installed an "ultra clean" room – a controlled particle-free environment – to support this initiative

Among the Faculty's leading scientists is statistician Associate Professor Ross Ihaka, who was awarded the New Zealand Royal Society's 2008 Pickering Medal for technology innovation. This reflected his key role in developing the statistical computing software R, an open source statistical computing package utilised worldwide by both universities and businesses.

Professor Peter Malin is Director of the Institute for Earth Science and Engineering (IESE). Professor Malin is an expert in imaging activity below the Earth's surface, and was one of the leading scientists on the San Andreas Fault Observatory at Depth project,



Fast facts 2008

Students

Undergraduate	5,968
Postgraduate	1,692
Total	7,660
Domestic	6,739
International	921

Staff

Academic	843
General	341
Total	1,184

Academic Units

- Biological Sciences
- Chemistry
- Computer Science
- Geography, Geology and Environmental Science
- Leigh Marine Laboratory
- Mathematics
- Optometry and Vision Science
- Physics
- Psychology
- Sport and Exercise Science
- Statistics

which monitors activity in the fault line at a depth of three kilometres below the surface. The Institute aims to study volcanic and seismic activity in New Zealand and is closely involved with the Borehole Instrument Centre for Eden Park (BICEP) project. This comprises installing an array of seismographs to provide a three-dimensional view of the movements directly below Eden Park – New Zealand’s famous rugby ground. It will be a permanent installation incorporated into the stadium infrastructure providing continuous data.

Associate Professor of Geology, Kathy Campbell, has just received the annual Hochstetter Lecturer Award from the Geological Society of New Zealand. This commemorates the pioneering and wide-ranging contributions to New Zealand geology of Ferdinand Ritter von Hochstetter (1829-84).

Associate Professor Campbell’s research interests include the geologic record of life in extreme environments, including terrestrial hot springs and undersea hydrocarbon seeps, and using fossils for high-resolution paleoenvironmental analysis. She collaborates with geologists and biologists nationally and internationally, and conducts field studies in California, Oregon, Washington, Alaska, Portugal, Chile, Argentina, and New Zealand.

Many other science researchers are working on the international stage.



Psychologist Professor Russell Gray and biologist Associate Professor Mark Hauber are conducting leading research in bird behaviour. Professor of Biological Sciences, Michael Walker, is one of the world’s foremost experts in the magnetic sense of animals. Professor James Sneyd of the Department of Mathematics conducts research on mathematical physiology in association with laboratories at the University of Massachusetts Medical Centre and the University of Rochester.

Clockwise from top left:

Children study marine biology at the Leigh Marine Laboratory; The Leigh Marine Laboratory; The Gait Laboratory; Associate Professor Ross Ihaka.

Liggins Institute



Fast facts 2008

Students

Undergraduate	-
Postgraduate	41
Total	41
Domestic	30
International	11

Staff

Academic	48
General	51
Total	99

The Liggins Institute is one of the world's leading centres for research on fetal and child health and development.

It is a multi-disciplinary biomedical and clinical research and postgraduate teaching facility. Its research is focused on understanding how a baby's environment between conception and birth determines its childhood development and life-long health – and the impact that this knowledge has for individuals and whole populations. The Institute hosts the National Research Centre for Growth and Development, one of New Zealand's prestigious government-funded Centres of Research Excellence.

Named after New Zealand paediatric researcher, Professor Sir Graham Liggins, the Institute is extensively involved in international collaborations and has formal partnerships with the University of Southampton, the University of Cambridge and the Singapore Institute for Clinical Sciences.

The Institute is organised into a number of key research and teaching groups including: the Centre for Human Evolution, Adaptation and Disease; reproductive biology, pregnancy and birth; fetal and neonatal physiology and medicine; paediatric endocrinology, child development and puberty; developmental neuroendocrinology; neural development, degeneration and repair; breast cancer; and international child health. The Pastoral Foods for Health Research Centre is a major new collaboration with New Zealand's largest Crown Research

Institute, AgResearch. Together they are conducting research in growth and development at the scientific interface between human and animal biology to improve human health through diet.

Some of New Zealand's leading medical academics carry out their work in the Institute. The founding director, Peter Gluckman, Distinguished University Professor of Paediatric and Perinatal Biology, is a fellow of London's Royal Society and the only New Zealander to be elected a Fellow of the United Kingdom's Academy of Medical Science. Among many international roles, he advises the World Health Organisation on public measures to improve the outcomes of pregnancy.

Internationally recognised as a leading researcher on the impact of events in early life and in human evolutionary biology, Professor Gluckman is co-author of *Mismatch – why our world no longer fits our bodies*. Aimed at the general and specialist reader, *Mismatch* argues that the biology of a 21st century human reflects evolutionary and developmental factors in conflict with the contemporary world. He is also lead author of the first textbook of evolutionary medicine, which will be published in 2009.

Deputy-director and Professor of Paediatric Endocrinology, Professor Wayne Cutfield, has an international reputation for his research assessing how the hormone insulin is secreted and acts in children, and for population-based studies of childhood growth and the

efficacy of growth hormone therapy. As director of the Institute's purpose-designed children's research unit, he leads clinical research showing how environmental influences early in life can affect childhood growth and development in ways that could lead to chronic conditions such as diabetes and obesity.

Professor Peter Lobie who leads molecular and oncology research at the Liggins, is an international authority on molecular mechanisms of hormone action and has carried out pioneering work on the role of growth hormone in the development of breast cancer. His team's findings, that when the amount of growth hormone produced by a breast cancer cell is increased the previously non-invasive cancer cells around it become invasive and more lethal, may lead to new ways to stop the disease spreading. In 2007 he was appointed to New Zealand's first academic Chair in Breast Cancer Research funded by the Breast Cancer Research Trust.

Above left: Professor Peter Lobie

Auckland Bioengineering Institute



The world-leading Auckland Bioengineering Institute brings together biologists and engineers to create sophisticated computer models of parts of the human body.

It was founded in 2001 by Peter Hunter, Distinguished Professor of Engineering Science and a Fellow of the Royal Society of London, and has close links with the Faculty of Engineering and the Faculty of Medical and Health Sciences.

Professor Hunter pioneered the world's first anatomically correct computer simulation of the human heart, a product of more than 40 years research drawing on millions of mathematical equations. Today the Institute is a world leader in computational physiology and biomedical engineering. Its teams of researchers have developed computer models of the heart, lung, digestive, and musculo-skeletal systems to further understanding of human health and disease. The Institute has also developed novel imaging applications and instrumentation systems to support these initiatives.

Institute researchers work closely with medical professionals to create patient-specific models to improve disease prognosis and therapy, construct systems for surgical planning and develop

products and services customised to individual anatomy. The institute is also a leading player in the Human Physiome Project. This comprises an international network of researchers who are developing mathematical models that link gene, protein, cell, tissue, organ and the whole body into one cohesive framework that will eventually be a web resource for patient diagnosis and medical treatment.

The Institute comprises 140 researchers, 70 of whom are postgraduate students. Among those is Hayley Reynolds, whose PhD project successfully mapped melanoma data from the Sydney Melanoma Unit onto a 3D computer model of the human body, helping doctors to predict how this cancer may spread. Hayley is now on the Institute's staff as a research scientist.

Dr Iain Anderson leads the Institute's Biomimetics Laboratory, a group which investigates artificial muscle technology. The group's current projects include the development of a new membrane rotary motor and finding ways for the human body to intuitively control artificial muscles.

Associate Professor Martyn Nash is developing a computer model of the human heart to better understand

Fast facts 2008

Students

Undergraduate	-
Postgraduate	54
Total	54
Domestic	43
International	11

Staff

Academic	29
General	22
Total	51

ventricular fibrillation – often associated with heart attacks. He is also developing a realistic 3D computer model of the breast based on medical imaging to help clinicians better detect and diagnose breast cancer.

The Auckland Bioengineering Institute collaborates with numerous international universities, including the University of Oxford and Massachusetts Institute of Technology.

Above: Dr Iain Anderson (centre) with PhD students

Theology



The School of Theology, established in 2003, works in partnership with local Anglican, Methodist and Catholic theological colleges.

One of the distinctive features of the School is its emphasis on the study of theology within a variety of cultural contexts. For example, a Tongan doctoral student has developed “a lens of Oceania” through which to read the bible; a Samoan PhD student is developing an understanding of the male body and the construction of masculinity within the Samoan cultural world view; and an Indian student is developing a critical understanding of leadership for Indian social service Christian missions in an interfaith environment.

Another strength of the School is in public theology, which is always the focus of its annual public lecture. A course on “Issues in Public Theology” is offered.

The School offers undergraduate and postgraduate degrees. Undergraduate courses range from an introduction to Biblical Hebrew and Johannine literature, to religious themes in the arts, the gendered church, ecotheology and Māori theology. Honours and postgraduate courses include topics such as biblical methodologies, church and society in New Zealand, body theology and society, and theology of children.



Theology places particular value on its relationships with departments and faculties across the University. Students have the opportunity to complete conjoint degrees in Theology and Arts or Theology and Science. General education courses are offered, including “The Bible in Popular Culture”, which looks at how biblical figures, ideas and images are portrayed in popular music, films and literature.

Doctoral students are encouraged to undertake interdisciplinary studies with joint supervision, and students who have graduated in other disciplines are encouraged to continue their postgraduate study in the School of Theology. The Postgraduate Diploma in Theology currently enrolls students who have graduated from Philosophy and Political Studies while a number of students completing a Masters in Counselling in the Faculty of Education have incorporated a theology paper on “Spirituality and wellbeing” into their study programme.

The School of Theology is engaged in a large contract research project examining spirit possession from multiple perspectives within a Christian context. The first phase of this study is complete and a book on its findings is in preparation.

Fast facts 2008

Students

Undergraduate	106
Postgraduate	54
Total	160
Domestic	145
International	15

Staff

Academic	8
General	5
Total	13

From top left: Dr Mary Caygill, Acting Head of School; Lecturer Stephen Garner.

The University Library



The University of Auckland Library, with 13 subject-specific libraries, four information commons facilities, a bindery and an off-campus storage facility, is the most extensive tertiary library system in New Zealand and ranks alongside the top five university libraries in Australia.

The Library provides high quality, conveniently-located, study environments for staff and students to access collections, seek support for learning, teaching and research, work individually and in groups, and attend information skills training courses.

The primary focus of the largest library, the General Library on the City Campus, is to serve the needs of staff and students of the Faculties of Arts, Science, and Business and Economics. This library provides over 1,500 study spaces and access to a million print volumes, including the notable collections of Asian Languages and New Zealand and Pacific material. There are 12 other libraries – the Architecture Library, Audio Visual Library, Business Information Centre, Engineering Library, Fine Arts Library, Davis Law Library and the Music and Dance Library on the City Campus, Philson Medical and Health Sciences Library on the Grafton Campus, Sylvia Ashton-Warner Education Library on the Epsom Campus with a branch at the Tai Tokerau Campus, the Tāmaki Campus Library and the Leigh Marine Laboratory Library. The majority of these libraries

hold the foremost collections in their subject areas in New Zealand. They provide access to over 1,700 study spaces. Over 400 of the library-based study spaces are equipped with computers for accessing the electronic collections and services of the University Library.

In addition the University Library provides world-class information commons facilities: the Kate Edger Information Commons and Te Huka-ā-tai facility on the City Campus, while the Grafton and Epsom Information Commons support respectively the Faculties of Medical and Health Sciences and Education. These facilities provide academic and IT support, group and individual study spaces and a variety of teaching facilities.

The University's commitment to investing in library resources has enabled the Library to provide a research collection of international standing, with over 60 percent of the annual budget allocated to electronic publications. The Library's website, www.library.auckland.ac.nz, provides round the clock access, from anywhere in the world, to electronic resources and services.

Over 700 databases, 80,000 full text electronic journals and 300,000 electronic books are accessible electronically. The Library has a well-developed digital publishing programme

which includes providing access to many unique New Zealand and Pacific resources, for example Early New Zealand Books online - www.enzb.auckland.ac.nz, the first hundred volumes of *The Journal of the Polynesian Society* and the New Zealand Electronic Poetry Centre – www.nzepc.auckland.ac.nz, a major gateway to New Zealand poetry.

Student life



The University offers first-class student facilities and services to enrich student life beyond the classroom.

The purpose-built, five-floor Kate Edger Information Commons and the linked Student Commons and Student Union is the student heart on the City Campus.

Designed as learning and information hubs, the Information Commons provides computer access and learning support as well as group and individual study areas. Information Commons computers or laptops allow students to access coursework through the University's e-learning system, send email and browse the Internet, and to complete coursework using MS Office, Adobe Master Collection and other software. They can retrieve information from the Library databases, e-journals, e-books and electronic course materials. Printers, scanners, photocopiers and wireless technology are available. There are over 1300 study and casual seats and 500 multi-purpose computers.

The Student Learning Centre, which provides academic skills for both undergraduate and postgraduate students, and the English Language Self-Access Centre, offering assistance to students wanting to develop their academic English skills, are co-located in the Commons. There is also a disabilities resource room.

The Student Commons is linked to the Information Commons via walkways and a glass atrium. The Information Commons houses the University Bookshop, a travel agency, a campus pharmacy, foodmarket and hairdresser, a postgraduate lounge and iSpace – an international student lounge. A large, international food hall offers a range of ethnic foods.

The Auckland University Students' Association (AUSA), a student-led organisation, represents and advocates for students. It operates many businesses on campus and provides a range of free services from Student Job Search to legal advice. A full-time events manager organises events throughout the year.

AUSA funds and supports more than 100 clubs including sports clubs, a Hispanic club, political and religious clubs, a club for leaders, a book club, underwater, frisbee and tramping clubs.

Students can volunteer to work on the student newspaper *Craccum*, or at 95bFM – New Zealand's largest student radio station.

Sporting opportunities abound and two campuses have comprehensive sport and recreation facilities. At Epsom there are dance studios, a fitness centre and gymnasium, tennis courts and a swimming pool while at the City Campus there is a large Recreation Centre. This offers everything from a cardio theatre and climbing wall to a boxing studio, dance studio and squash facilities.

The University provides counselling, medical and dental services for students. There are three childcare centres on the City Campus and two at each of the Epsom and Grafton Campuses.

A mentoring system is offered to new undergraduates at the start of each semester. Groups of up to eight students are assigned to a student Uniguide from their faculty who introduces





them to the University and its facilities and services, and offers ongoing advice and support for up to six weeks.

University of Auckland Careers Services is another important service for students. The largest university careers service in New Zealand, the Centre has 12 professionally trained career consultants with post-degree qualifications in vocational guidance.

Careers Services offers one-on-one consulting, helps students find jobs, and runs workshops on preparing CVs, interview technique and job search strategies. It has national and international links with prospective employers and hosts NZUniCareerHub, the national graduate job vacancy system, in collaboration with six other tertiary institutions in New Zealand (see www.careerhub.auckland.ac.nz).

Facilities for Postgraduate students

The University of Auckland provides a comprehensive range of services and facilities specifically for postgraduate students.

The School of Graduate Studies, based in the East Wing of the ClockTower, has overall responsibility for the development and oversight of policies and procedures for graduate programmes, for the promotion of graduate study and for advocacy for graduate students.

A specialised Doctoral Skills Programme is coordinated by the School of Graduate Studies. This offers a variety of courses on topics such as thesis writing, copyright, research methodologies, literature searches and career planning. Individual consultations assist doctoral students in gaining the study, organisational and

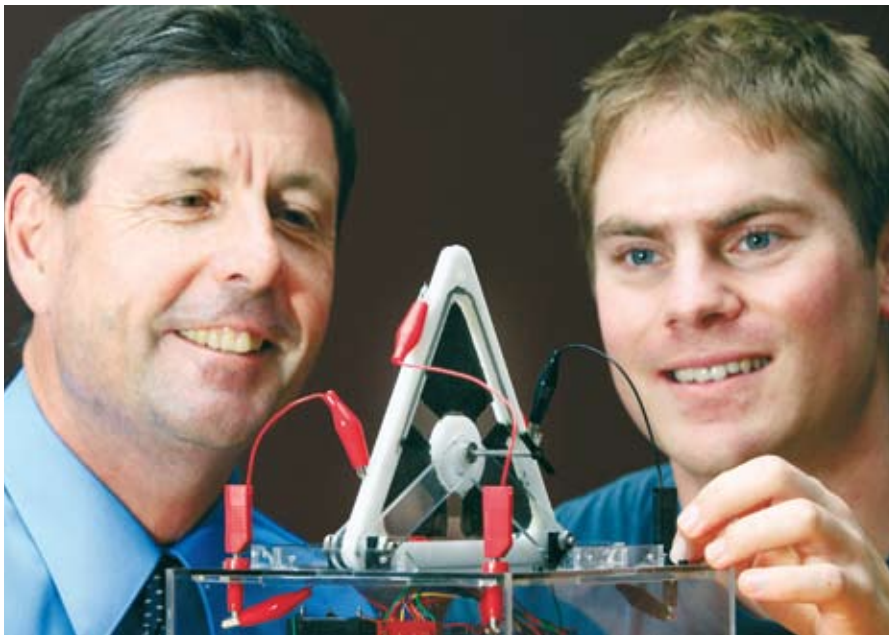
self-management skills necessary to complete a major research project.

Departments and faculties provide orientation sessions for postgraduate students and run seminar programmes and social functions to support their coursework and research activities.

Postgraduate students can join the Postgraduate Students' Association which advocates for postgraduate students, provides discounts to Strata café and the postgraduate student commons and organises special postgraduate events.

Every year there is an annual Exposure week for presenting postgraduate research in poster exhibitions and oral presentations.

Commercialisation of research



Auckland UniServices Limited is the commercial research and knowledge transfer company of The University of Auckland.

Its mission is to create mutual social and economic benefits for the University and our global partners by forging new opportunities based on advanced University research, technology and educational capabilities.

UniServices manages all of the University's commercial research and consultancy contracts in New Zealand and internationally. It develops partnerships and enters into research and consultancy contracts, drawing on the expertise of the University. It works alongside academic staff to identify and protect discoveries with commercial potential, find business partners and negotiate suitable licence agreements. It protects all University intellectual property and has an extensive portfolio of new technologies available for commercial licensing.

The company's track record is both impressive and global. It has created more than 25 medical and high technology spinouts, including Pathway Therapeutics, EBONZ and Symansis. The University's education research expertise has seen the development of world-class programmes to improve student learning outcomes and school leadership. Its research programmes have led to breakthrough

cancer therapies. The company works with governments around the world to help upskill their educational leaders.

UniServices works across more than 2,500 projects at any one time in fields as diverse as clean energy, educational leadership, food and nutrition, medical research and electronics across 27 countries with some of the most well-known names in the world – Siemens, Daifuku, Samsung, Toyota, Roche and the United States Cancer Institute.

UniServices is a wholly owned subsidiary of the University and was established in 1988. Today it is the largest company of its kind in Australasia, employing more than 600 staff ranging from managers to researchers and PhD students. UniServices also delivers a broad funding support programme from the seed/proof of concept level through to global marketing. The company generates over \$100 million in revenue with a consistent track record of 15 percent year on year growth. All surpluses are returned to The University of Auckland to continue supporting, expanding and enhancing its capabilities in commercial and basic research. As a result of UniServices' success, it contributes half of all the University's external research revenue.

Clockwise from top left:

Tom McKay (right) shows UniServices CEO, Dr Peter Lee, the thin membrane artificial muscle motor he and three fellow students invented.

IESE Dr Stephen Onacha installing a borehole seismometer in the Krafla Geothermal Field, Iceland.

Dr Bruce Macdonald demonstrates prototype blood pressure robot to Dr Mun-Kee Choi, president of Korea's Electronics and Telecommunications Research Institute (ETRI) and senior ETRI officials.

International engagement



The University engages actively in international partnerships to support its position as a leading research university, to participate in innovative and collaborative projects, to provide international opportunities for students and staff, and to benchmark against international standards.

The University is the only New Zealand member of Universitas 21 and the Association of Pacific Rim Universities, two international consortia which enable leading research universities from around the world to collaborate in addressing educational and other issues of global significance. The combined power of such networks is considerable, and The University of Auckland brings to them an important New Zealand/South Pacific perspective.

The University's international mission is central to its teaching and research. International initiatives include teaching and research linkages with key partner countries. For example, The Three Brothers Project is a trilateral partnership with Tsinghua University in Beijing and Qinghai University in the north eastern part of the Tibetan Plateau which supports the economic development of Eastern China. It includes the development of joint research work in highland ecology most notably water management and

environmental protection in the "Three Source Zone" – the headwaters of the Yellow, Yangtze and Mekong rivers. Spin-offs from this partnership include opportunities for teaching and professional development, commercial projects and knowledge transfer, and the acceptance of Chinese students from Qinghai into postgraduate programmes at The University of Auckland.

The University hosts a Confucius Institute, operated in collaboration with the Chinese Government and Fudan University in Shanghai, while a New Zealand Centre has been established at Peking University with the support of the New Zealand government to encourage greater collaboration and mutual understanding between New Zealand and China.

The University's international office, Auckland International, and each of our faculties, have developed regional strategies for the Middle East, India, Northeast Asia, Europe, and North America.

Several academic units such as the New Zealand Asia Institute, the Europe Institute and the Centre for Latin American Studies focus their research and teaching on particular regions. They provide links between the University and business,

research institutions, foreign and local governments and are becoming centres of excellence on policy relating to New Zealand's engagement with their regions.

The University attracts high-quality undergraduate and postgraduate international students and in 2008, there were 4,283 students from 93 countries, contributing much to the richness of cultural diversity on its campuses.

The University's student exchange programme, 360° Auckland Abroad, promotes internationalisation by encouraging local and international students to undertake a semester of their Auckland degree at one of more than 90 exchange partner universities. In 2008, 935 Auckland undergraduate and postgraduate students undertook part of their studies overseas.

As New Zealand's leading export education institution, the University has developed high-quality support services and resources for international students. An International Student Information Centre on the City Campus supports students in everything from choosing a course of study to assisting with electronic renewal of their visas. Student advisers offer specialised pastoral care, and iSPACE offers activities, workshops and information for international students.

Advancement



With a long history of teaching and research excellence, The University of Auckland has increasingly turned to philanthropic support to fund new developments and to provide endowments for staffing and student scholarships.

In November 2008 it broke new ground for a New Zealand university when it launched its “Leading the Way” Fundraising Campaign aiming to raise a minimum of \$100 million to build on the University’s areas of strength and address some of the key issues facing New Zealand and humanity at large.

History

Endowments for student scholarships were established soon after the University was founded as a college in 1883, but the first major benefactor was Sir William Goodfellow. Sir William, managing director of Amalgamated Dairies Ltd, began a tradition of giving after the Second World War that has continued through to new generations of his family today.

The Goodfellow family’s contributions to the University include the Maclaurin

Chapel and support for the chaplaincy in perpetuity, the establishment and maintenance of the Goodfellow Unit and Chair in General Practice at the School of Population Health, numerous prizes, scholarships and other financial support. In 2008 the family’s generosity extended to providing support to attract back to New Zealand some of our most talented young medical researchers and technicians. The Goodfellow Repatriation Fellowships will be awarded for the first time in 2009. A second gift from the family in the same year went to the Richard Maclaurin Goodfellow Foundation to establish the “Student Soul” student leadership movement, designed to nurture faith and leadership alongside academic studies.

The University of Auckland Foundation was established in 2002 as a legally separate entity under the Charitable Trusts Act 1957. The Foundation was set up to secure funding for the advancement of knowledge and learning with the University being its main beneficiary.

In recent years, some well-known Auckland families and individuals have made

significant gifts to the Foundation that, in accordance with the wishes of the donors, have benefited the University. Charles Bidwill’s 2008 gift to establish the Charles Bidwill/University of Auckland Business School Entrepreneurial Challenge will assist promising New Zealand businesses that have reached a critical stage in their growth and development.

The Edith Winstone Blackwell Foundation Trust enabled the University to take a significant step forward in developing a South Pacific Centre for Marine Science at Leigh, north of Auckland, in June 2008. Its generous gift will support the development of a public interpretive centre and the future education of New Zealand’s young people in the study of Marine Science.

Douglas Myers, former chairman of Lion Nathan, played a leading role in securing an arts centre, the Kenneth Myers Centre, and in raising funds for the Business School. Expatriate businessman, Owen G Glenn, US benefactor Paul Kelly, and alumnus Tony Falkenstein have made significant donations which have assisted the Business School to build a world-class staff and facilities.



The University's art gallery, the Gus Fisher Gallery, is named after its chief benefactor who has also contributed to research seeking a cure for Parkinson's disease. Funds from the Woolf Fisher Trust enabled the establishment of an important educational research facility. Medical research receives significant support, with the Maurice and Phyllis Paykel Medical Trust, among others, making major donations.

The University receives philanthropic support from alumni, businesses, trusts and foundations, including The University of Auckland Foundation, in the form of current use gifts, endowed donations and bequests. The gifts may be unrestricted or restricted by the donor for student scholarships, faculty position endowments, facility renovation and construction, and academic programmes.



The University of Auckland Foundation currently oversees the investment of approximately \$60 million in current use and endowed gifts, including those donated to a special initiative, the Hood Fellowship Fund. This is an endowment fund enabling leading Auckland academics to travel to prestigious institutions abroad and bringing leading academics from abroad to Auckland.

Leading the way

As with other leading universities, The University of Auckland is adopting an increasingly proactive and coordinated approach to fund-raising.

The vision behind the "Leading the Way" Campaign is based on five areas in which the University has particular strengths that fit with New Zealand and world needs. These are:

The health of our nation

This builds on our world-leading biomedical research expertise in such areas as cancer, neurodegenerative diseases and diabetes.

The development of our children

New Zealand has one of the longest tails of educational underachievement in the developed world. It is an issue that must be addressed, and no institution is better placed to do that than the University, with its combined expertise in fetal and neonatal physiology and its leading research in education.

The growth of our economy

As New Zealand's most international university in New Zealand's main business centre, we have a significant contribution to make in research into enterprise and entrepreneurship.

The future of our cities

The real need that cities have for improved transport and energy infrastructure, urban planning and design, and cultural life is evident throughout the world, including New Zealand, where, by 2030, it is estimated that 90 percent of our population will be urban dwellers.

The expression of who we are

This theme explores what it means to be an increasingly diverse nation, founded on a unique treaty with its indigenous people, and with one in five of its population living overseas. By supporting scholarships and research in the arts, humanities and social sciences, we can help New Zealand understand and express itself in the world.

Above: Vice-Chancellor Professor Stuart McCutcheon; Campaign Patron Jenny Gibbs; Campaign Chair Geoff Ricketts; Chancellor Hugh Fletcher; Campaign Patrons John Graham and Chris Liddell.

Left: Douglas Myers.

Alumni



The University of Auckland has more than 127,000 alumni, many of whom occupy leading positions in New Zealand and overseas.

New Zealand's Governor General, his Excellency the Honourable Anand Satyanand, completed an LLB in 1970, and was awarded an honorary Doctor of Laws in 2006 while the country's Chief Justice, the Rt. Honourable Dame Sian Elias, gained an LLB (Hons) in 1971 and was awarded an honorary Doctor of Laws in 1999.

Auckland alumni are at the helm of New Zealand's top financial institutions. Mark Weldon (BA/BCom 1991, MCom, 1993) is CEO of the New Zealand Stock Exchange. Dr Alan Bollard (BA 1972, MA 1974, PhD in Economics 1977) is Governor of the Reserve Bank. Internationally, our alumni hold leading positions in major institutions and corporations such the World Bank Group where Graeme Wheeler (MCom 1973) is Managing Director Operations and Microsoft Corporation where Chris Liddell (BE 1979) is Chief Financial Officer.

In the arts and literature too Auckland alumni are prominent. CK Stead (BA 1954, MA 1955, DLitt 1982), novelist, literary critic, poet, essayist and Emeritus Professor of the University, has been one of New Zealand's leading literary figures



for almost half a century. Niki Caro, director of the internationally acclaimed film *Whale Rider*, completed a BFA in 1988.

Our alumni feature across the global academic spectrum. Distinguished University Professors Peter Hunter (BE 1971, ME 1972) and Peter Gluckman (MMSc 1976, DSc 1988) are both Fellows of the Royal Society of London; Dr Ngaire Woods (BCom/LLB 1987) is the founding director of Oxford University's Global Economic Governance programme.

Two graduates of the Engineering School are vice-chancellors in the United Kingdom. Dr John Hood (BE 1973, PhD 1977, Honorary Doctor of Laws 2004), a former Vice-Chancellor of this University, took up his role as Vice-Chancellor of Oxford University in 2004 and Sir Graeme Davies (BE 1960, PhD 1962, Honorary Doctor of Engineering 2002) is Vice-Chancellor of the University of London.

The Alumni Relations Office, located within the External Relations division, aims to build strong relations and pride among all alumni. The annual Distinguished Alumni Awards honour alumni who have made outstanding contributions to society. Six awards, including one to a young alumnus, are presented at an annual awards dinner. The Honourable Prime Minister Tuilaepa



Malielegaoi, who has had a distinguished career in Samoan politics, and Lynley Dodd, one of New Zealand's much-loved children's authors, were among the 2009 awardees.

The Alumni Relations team has established a network of alumni coordinators in the US, UK, Australia, Canada, China, Israel, Japan, Indonesia, Malaysia, Scandinavia, Singapore, Taiwan and throughout New Zealand. Each year Alumni and Friends' events, attended by senior members of the University, are held in many centres.

The Alumni Relations Office keeps in touch with alumni via its website www.alumni.auckland.ac.nz, through its biennial magazine *Ingenio* and by a monthly email newsletter, @auckland.

From top left: Lynley Dodd, Mark Weldon and Ngaire Woods.

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