THE UNIVERSITY OF AUCKLAND

news

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Congratulations to researchers



Research teams from across the University put their work on show at the function to celebrate research excellence. Tom McKay (left), a PhD student at the Auckland Bioengineering Institute, demonstrates a flat rotary motor driven by artificial muscles the thickness of a human hair to Dr Rachael Niederer and Fraser Harding. His Biomimetics Group develops new technologies inspired by natural systems. Artificial muscle, made of rubber, is 40 times more powerful by weight than real muscle. The smaller device closer to Tom is a generator which converts mechanical energy into electrical energy. (Rachael Niederer was presented with a best doctoral thesis award at the same function.)

Three hundred staff and friends of the University met in the marquee at Old Government House on 5 May to celebrate the University's research excellence.

Vice-Chancellor, Professor Stuart McCutcheon, announced several major research initiatives designed to strengthen the University's position as New Zealand's premier research university, and to support achievement of its strategic objectives to 2012.

These include programmes to support future research leaders, to promote international research team development, to assist researchers applying for funding, to identify areas for improvement of the research environment, and to develop research within selected themes. They are designed to support achievement of the University's strategic objectives.

The function was held to celebrate the success of researchers who have received awards and to

honour the many achievements of researchers across the University.

Speakers at the event reflected on research successes to date and the future of research at the University. Professor Jane Harding, Deputy Vice-Chancellor (Research), spoke about the many achievements of researchers from across the University in 2008. Dr Peter Lee, Chief Executive of UniServices Ltd, reflected on the many successes of UniServices in its 21 years of operation, and on the pleasure of celebrating those 21 years of support for research at an event held to recognise the University's outstanding researchers.

Guests also received a taste of some of the outstanding research underway at the University, with research teams on site to display their work in robotics, physiology, brain research, business, history, fine arts, and education.

Jane Harding introduced the winners of the

story continued on page 2

In this issue

Further honours for Raewyn Dalziel Autumn Graduation

4 Ardmore spirit rekindled

Key events

Sparking ideas

Guest speaker at the Spark Ideas Challenge Prizegiving for 2009 will be Murray Thom, who started personalised plates in New Zealand and now does major deals in the world of international music.

This is an event that recognises successful entrepreneurship ideas. Over \$20,000 worth of prizes will be awarded during the evening function, which takes place on 21 May from 7pm at the Fisher & Paykel Appliances Auditorium in the Owen G. Glenn Building, 12 Grafton Road. Those who attend will also learn about competitions taking place later in the year.

What works in history

"Teaching and learning history: What works and why?" is the theme of a professional development day for history teachers, to take place on 22 May in the Music Auditorium at Epsom Campus. Among the speakers will be staff from the Department of History and from the Faculty of Education, including Associate Professor Graeme Aitken, Dean of Education, who will speak on "History teaching and student outcomes: The findings of a best evidence synthesis". Contact person is Dr Jennifer Frost, Department of History.

Speaking of art

On 16 May at 1pm at the Gus Fisher Gallery, artist Anne Shelton will talk about her project room room, which explores the idea of reflection. On 23 May, also at 1pm, Dr Don Bassett (Art History) will speak in response to Sandra Bushby's Absent Jewels exhibition. His subject will be Louis Comfort Tiffany and Art Nouveau. Both are on now at the Gus Fisher Gallery and will continue until 20 June, along with a further exhibition entitled Antarctica, which brings together work by Joyce Campbell, Ann Noble and Connie Samaras. Artist residencies enabled each of them to photograph and experience first hand the severe and almost inhuman conditions. Each artist's work approaches the subject with differing yet overlapping frameworks.



From the Vice-Chancellor

The recent incident in which a group of North Shore college students and teachers were quarantined because of the risk that they had contracted Influenza A (H1N1) while on a trip to Mexico reminds us all of how vulnerable we are to pandemics. An institution such as ours with 44,000 staff and students engaged in a great deal of academic and social interaction, and domestic and international travel, is particularly at risk.

During the avian flu threat of 2006, the University prepared a framework to assist in the management of a pandemic. The key objective of this framework is to ensure that appropriate issues are addressed, and decisions made, at all levels in the University. Clearly we wish to continue the delivery of our academic and research programmes if at all possible, but we also have to be aware that in a severe pandemic situation the University would likely close, or be forced to close by Government, in order to help reduce the spread of the influenza virus. At that point, the issues to be addressed by the framework would become not "business as usual" issues but rather questions of how to care for affected members of our community, when to re-open the University, and how to help recover the situation for those students whose academic programmes had been disrupted.

At this point, of course, such questions are hypothetical. The Ministry of Health is monitoring the situation closely and its website (www.moh.govt.nz/moh.nsf/indexmh/mexican-swine-influenza-update-270409) records the current alert status. It may well be that some of the early concerns about the pandemic will not be realised, particularly as Influenza A (H1N1) symptoms appear to be generally mild, but the University community does need to be alert to the possibility that the situation will become more severe. To that end I have formed a group of senior managers to monitor progress of the Influenza A (H1N1) issue and help coordinate our response to it.

In the meantime, all members of the University community are encouraged to adopt appropriate personal hygiene procedures, to think carefully about proposed travel, and to see their health professional should they develop flu-like symptoms. Because we are members of a large, highly engaged community, we all have a responsibility to ensure that our activities do not impact on the health of others.





Major contribution recognised



Raewyn receives her Distinguished Alumni Award from Victoria's Chancellor, Tim Beaglehole.

One of our most highly-respected members of staff, Professor Raewyn Dalziel, Deputy Vice-Chancellor (Academic), has received high accolades from her alma mater

On April 23, at a gala dinner held at the Wellington Town Hall, Raewyn received a Distinguished Alumni Award from Victoria University of Wellington, where she graduated with a BA in 1965, a BA (Hons) in 1966, and a PhD in 1970

She was one of six to receive the awards. Victoria's Vice-Chancellor, Professor Pat Walsh, said the University was proud to recognise the distinguished alumni and their achievements.

"I am delighted to have the opportunity to recognise the valuable contributions they've made, not only to their community and country but also on the global stage," he said.

The citation for Raewyn described her as a "notable New Zealand historian" who has "made a major contribution to the teaching of history and historical research, has published extensively on New Zealand politics and social history, and has worked across the spectrum of New Zealand history.

"Raewyn has also made a major contribution to national policy development and its implementation, serving on a number of government working parties on tertiary education, and on the Humanities Panel of the Marsden Fund."

Raewyn's role as Deputy Vice-Chancellor at The University of Auckland was recognised as one that has "seen her serve the national scholarly community with great distinction. She was made an Officer of the New Zealand Order of Merit in 2004."

After completing her PhD, Raewyn studied at the Institute of Historical Research in London on a postdoctoral fellowship before returning to take up a lectureship in History at The University of Auckland in 1972.

Publishing on New Zealand politics and social history, she wrote and taught widely on New Zealand history and also took an active role outside of the University, on curriculum development, as Chair of the Advisory Committee of the Historical Branch of the Department of Internal Affairs and the New Zealand History Research Trust, as a member of the National Archives Advisory Committee, and on government working parties on tertiary education. She served a term as president of the New Zealand Historical Association and on the Humanities Panel of the Marsden Fund.

Raewyn has been Deputy Vice-Chancellor (Academic) since 1999, and, from July to December 2004, was Acting Vice-Chancellor. At the awards, she paid tribute to some great teachers at Victoria in her two main disciplines, history and English.

The other five distinguished alumni were Gareth Morgan, Melissa Moon, Bill Day, Peter Boshier, and Anne Meade.

story continues from page 1

Early Career Research Excellence Awards, who then received their certificates from the Vice-Chanceller.

The recipients of these awards were Dr Anthony Hickey (School of Biological Sciences), Dr Darrell Patterson (Chemical and Materials Engineering), Dr Nicola Dalbeth (School of Medicine), Dr Cathy Stinear (School of Medicine) and Dr Deborah Sloboda (Liggins Institute).

Professor Gregor Coster introduced the winners of the Vice-Chancellor's Best Doctoral Thesis Prizes for 2008 (named in the last issue of *University News*). Four of the five recipients were presented with their certificates by Stuart McCutcheon (the fifth having already received his prize while passing through Auckland last month).

Flags and smiles for graduation



Thousands of graduates and their families brought colour, pageantry and celebration to central Auckland last week.

Some 5747 students graduated from The University of Auckland during Autumn Graduation, receiving a total of 6313 qualifications including 121 doctorates.

Some 16,623 tickets were issued to guests to attend 11 ceremonies at the Aotea Centre spread over three days (4, 6, 8 May).

Graduands, staff and Council members in academic regalia processed from the University through the city from 9.45am (down Bowen Avenue and Victoria Street East, and up Queen Street) on the first two days (rain cancelling the Friday procession)

The Faculty of Business and Economics had the most graduates with 1264 followed by Science (1090), Arts (1079), and Education (947).

There were 572 in Medical and Health Sciences, 560 in Engineering, 525 in Creative Arts and Industries, 249 in Law and 27 in Theology. Chancellor Roger France personally conferred 4910 degrees and diplomas. The rest were bestowed "in absentia" on those not attending.

Teaching excellence awards were presented to five staff.

Guest speakers at the ceremonies included Auckland Central MP Nikki Kaye, Air New Zealand CEO Rob Fyfe, Warehouse founder Stephen Tindall, Chief Executive of the Auckland District Health Board Garry Smith, and CEO of Industrial Research Ltd Shaun Coffey.

A highlight of the week was the free Gala Concerto Competition in the Auckland Town Hall on Thursday 7 May at 7.30pm. Three School of Music soloists competed for a \$3000 first prize, accompanied by the University's Symphony Orchestra conducted by Uwe Grodd.

A special graduation celebration for Māori graduates and their whanau took place at the University Marae on the Saturday.

Reports on Autumn Graduation and stories of some of the graduating students will be published in the next issue of *University News*.



... in brief

Difficult territory

An illustrated lecture to take place on 5 June at Epsom Campus will survey one historian's 40-year journey through changing and contested intellectual and political landscapes.

Professor Kerry Howe from Massey University will speak on "Difficult territory: The politics of writing New Zealand and Pacific history".

Professor Howe has literally and figuratively inhabited Pacific places all his life and has been a longstanding contributor to understanding the region's fascinating past.

Among his ten books are Where the Waves Fall (1984); (co-editor) Tides of History (1994) and Nature, Culture, and History: The 'Knowing' of Oceania (2000).

One of the School of Critical Studies in Education seminar series, this event will take place in N356 at Epsom Campus from 4-5.30pm on 5 June. Please RSVP to Shelley Catlin (s.catlin@auckland.ac.nz) by 2 June.

Health challenges

An international report focusing on the health problems faced by indigenous children – including young Māori in New Zealand – has concluded that they are the result of social rather than biological causes.

"Māori children are more likely to experience adverse social determinants of health such as inadequate or crowded housing, poverty, poorer educational outcomes and lower living standards. Māori children also experience worse health outcomes and the data suggest that the provision of health services to Māori children could be improved," says Dr Sue Crengle (Te Kupenga Hauora Māori, Māori Health Research) who contributed the New Zealand section of the report.

The study, "Indigenous children's health report: Health assessment in action" looks at the health of indigenous children in Canada, New Zealand, Australia, and the United States, drawing parallels between the countries. It is one of the first reports of its kind looking at common issues affecting the health of indigenous children around the world.

Living and giving

The School of Theology invites you to a free public lecture by Dr Tat-Siong Benny Liew, entitled: "Jesus as flesh: Living and giving life in the shadow of death. Dr Tat-Siong Benny Liew is a Professor of New Testament in the Pacific School of Religion/Graduate Theological Union in Berkeley, California. He is guest lecturer at the School of Theology while on sabbatical in semester one. The lecture will take place at Room 018 in the ClockTower on 3 June at 6pm.

In brief

Sustainability forum

At the end of May, students from nine Asia-Pacific countries will arrive at the University to take part in a unique forum where they will work with an international team to develop solutions for real-world problems in sustainability.

The University is hosting Eco-Minds 2009, an annual forum supported by Bayer and the United Nations Environment Programme (UNEP) aimed at encouraging young people to use science and technology to drive sustainability behaviour.

"Addressing the world's environmental issues will require a concerted effort across all sectors of society," says Vice-Chancellor, Professor Stuart McCutcheon, who will open the forum. This year's topic is "sustainable energy supplies" and participants will have the opportunity to learn more about sustainable energy systems, including New Zealand's hydro, wind and geothermal power plants. The academic programme is being led by Dr Robert Kirkpatrick of the Energy Centre, Faculty of Business and Economics.

The opening will be attended by senior representatives from the United Nations Environment Programme, the New Zealand Commission for UNESCO and Bayer, as well as New Zealand's Governor-General, Sir Anand Satyanand.

For more information, email Environmental Coordinator, Dr Lesley Stone (lj.stone@auckland.ac.nz)

AgResearch and Liggins

AgResearch has put the official seal on a collaboration with the Liggins Institute which aims to carry out quality research in human nutrition, including what determines body composition, development and metabolism.

It will place priority on research excellence and will focus on the needs of the pastoral sector as well as on human health and nutrition, including novel ranges of food ingredients, animal feeds, animal welfare products, ethical animal handling methods, and smart ways of handling and processing food products.

The two organisations together will offer an unparalleled combination of capability in pastoral agriculture and human nutrition, growth and health.

Reporting back

On 27 May at the Tamaki Campus Dr Rhema Vaithianathan (Economics) will report on her experience at Harvard Medical School in Boston, where she was based during her Harkness Fellowship in Health Care in 2007 and 2008.

Rhema is a health economist and senior lecturer. Her research topic was "Insurance coverage and cost growth". She will deliver her report in Function Room 220, School of Population Health. This session is open to the public and no registrations are required.

Rekindling the Ardmore spirit



More than 40 engineering graduates from the Ardmore class of 1958 travelled from all over the world to reconnect with old classmates at special reunion held in April.

The Ardmore class of 1958 have reunited more than 50 years after they studied engineering together.

The former students of the then Auckland University College travelled from all over the world to attend a three-day reunion, organised by class member Bob Wakelin, who organised a host of activities across Auckland including a visit to the Faculty of Engineering.

He said even after five decades and with the spread of graduates across continents, friendships were still strong: "We have a bond that is unique."

Ardmore, an isolated aerodrome east of Papakura, was the location of the University's School of Engineering from 1948 to 1969. It produced some of New Zealand's most noteworthy, eclectic and influential engineers and business leaders. Its students were also known for their academic excellence, a fondness for practical jokes, and a special collegiality.

The class of 1958, like all classes at Ardmore at the time, was an all-male intake of students who nostalgically remember living in cramped and primitive buildings on campus, and of learning from great professors.

"The interesting thing is that we still instantly recognise each other as if 50 years had vanished," said Jim Lord, who travelled from California for the reunion.

More than 41 engineers (and 30 wives) attended the reunion from the original class of 62 people, with members travelling from Australia, the United States, Malaysia, France and throughout New Zealand to attend. Of the original group, 12 have sadly passed away. All of the former classmates are now aged between 69 and 73. The class of 1958 were high achievers academically, with nine going on to complete PhDs, more than any other year at Ardmore. Three members of the class have been honoured by the Queen.

The current Dean of the Faculty of Engineering, Professor Michael Davies, hosted a lunch and tour of the school as part of the reunion activities. He

International accolades

Distinguished Professor of Anthropology and Māori Studies Dame Anne Salmond has been elected a foreign associate in the National Academy of Sciences (NAS) for her excellence in scientific research.

Membership in the NAS is the highest honour given to a scientist or engineer in the United States, with even fewer scientists around the world being elected as foreign associates. Professor Salmond will be inducted into the Academy next April during its 147th annual meeting in Washington, DC.

There are currently just over 350 foreign associate NAS members. Among the NAS's renowned members are Albert Einstein, Robert Oppenheimer, Thomas Edison, Orville Wright, and Alexander Graham Bell. Over 180 living Academy members have won Nobel Prizes.

Professor Dame Anne Salmond was also elected as a Corresponding Fellow of the British Academy last year, one of just 307 such fellows. She is the only New Zealander known to have achieved this double distinction.

With her explorations of Captain James Cook and blue-water navigation, she is internationally recognised for 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.

For Anne Salmond, election to the Academy is a tremendous privilege, signalling international recognition for research that draws its inspiration from Māori and Polynesian philosophies as well as Western knowledge.

"I owe so much to my teachers and mentors, both in academia and in the Māori and Pacific communities. It is wonderful to realise that in New Zealand, questions and challenges arising from local conditions can inspire scientific work that is seen to be of global interest and importance," she says.

The National Academy of Sciences is a private, nonprofit honorific society of distinguished scholars engaged in scientific and engineering research, dedicated to furthering science and technology and to their use for the general welfare.

Established in 1863, the academy has served to "investigate, examine, experiment, and report upon any subject of science or art" whenever called upon to do so by any department of the government. For more information, or for the full list of newly elected members, visit www.nasonline.org/site/PageServer

told the group they were influential in setting the tone for the future success of the Faculty.

Arved Raudkivi, a retired Professor in fluid mechanics who taught the 1958 Ardmore class, attended the reunion and said the students were not only outstanding, but fun to teach: "The classes were relatively small and because they lived together for three years they developed lifelong friendships," he said.

A number of alumni are now based in the United States, with several class members pursuing postgraduate studies at American universities in the 1960s before making it their permanent home.

Jim Lord co-founded US engineering firm Lord, Flicks and Zayed in California. He and his wife recently established a fellowship to enable young emerging members of The University of Auckland to complete placements in the University of Southern California, where he completed his Masters in Civil Engineering.

The class also has a significant Malaysian connection: eight of the original class members were Malaysians who studied engineering in New Zealand under Colombo Plan Scholarships, an initiative which continues today.

Hooi Jee Sum, a Malaysian scholarship student, was back in New Zealand for the reunion for the first time since 1962: "I'm amazed at the success of this group, across so many fields," he said. "I've been wanting to come back for so long so when the idea of a reunion came up I jumped at it."

A souvenir reunion book has been printed which includes the life stories of 61 classmates and four lecturers. A copy has been placed in the School of Engineering Library.



Viewpoint

Optimism the key

During this ongoing economic crisis, a number of commentators have urged consumers to keep spending.

Except, it's not that simple. An individual consumer increasing spending makes no difference to the recession. What is required is for all consumers to increase consumption simultaneously. As a consumer, I might clearly understand that we can make a difference if we increase consumption, but how do I know if others will actually increase their consumption if I do so?

A wide variety of economic situations require coordinated action on the part of individuals or groups in order to achieve a successful outcome. Economists refer to these as "co-ordination problems" and they arise, for instance, in any industry engaged in team production along an assembly line such as in steel mills and automobile factories.

Even if everyone works at speed, just one individual or group lagging behind is needed to slow down production significantly to the detriment of everyone else. This may not seem like a large problem, but in reality getting a large group of individuals to successfully coordinate their actions often poses a difficult challenge for many organisations.

While coordination failures at individual organisations may only be of passing interest, when they apply to the economy as a whole all of us are affected. Economic recessions are to a large extent an outcome of widespread pessimism among businesses and individuals, rather than the result of inherent systemic problems. Creating appropriately optimistic beliefs is a key to addressing such crises.

One fundamental problem in deep recessions is that the economy gets caught in an underemployment trap...a situation where no firm wishes to expand production unless it can be assured that others will do the same – yet not doing so leads to an outcome that is worse for everyone concerned. The crux of the issue here is that taking a risky action makes sense if – and only if – everyone matches that action. If they don't, then the individual or firm taking that risk is worse off and makes no difference.

Such a lack of coordination can also lead to a run on banks if depositors lose faith and rush to withdraw their money, even though everyone is better off if they keep their money where it is.

Along with Andrew Schotter of New York University and Barry Sopher of Rutgers University, I recently used economic decision-making experiments to understand whether it was possible for groups to "talk" themselves out of such an under-employment trap. To do so we developed an innovative "intergenerational" paradigm in which one group of players – after playing the game – could leave advice for their successors. This continued for a number of generations.

We found that allowing one group to pass advice to the next could indeed create the optimistic beliefs that led to coordination on the risky action, but with a twist. When the advice was private and given from one participant to his immediate successor, this advice tended to be pessimistic, suggesting following the least risky course of action.

In order for the advice to make a difference it needed to be public and common knowledge, in the sense that everyone in the group must get the same advice and must also know that everyone else has got the same advice. So if a political leader makes a public announcement heard by everyone, and everyone knows that everyone else has heard it, then a necessary condition has been met for successful coordination.

We conclude that getting a message to coordinate was not enough; each person must be convinced that others have received the same message and interpreted it in similar ways. A shared comprehension of the message is absolutely crucial to solving such coordination problems. Thus, in combating our financial crises, we really need to think of innovative actions or social processes that generate optimistic beliefs. This, in turn, suggests that economic stimuli packages might need to be accompanied by exhortative messages that clearly highlight the aims of these packages and are designed to reduce consumer pessimism.

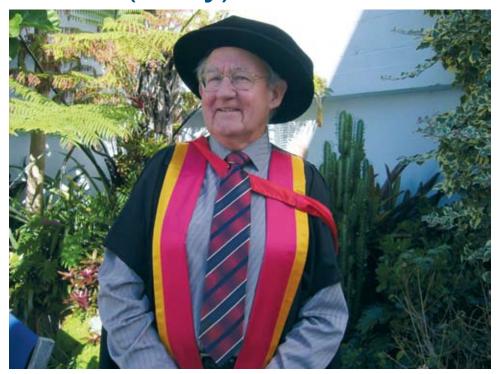
These results appear in the January 2009 issue of the *Economic Journal*, a leading international journal published by the Royal Economic Society.

In the context of the current crisis, an example of such a commonly perceived public announcement might be the one made by the British government early on of a plan for major equity injections into British banks, backed up by guarantees on bank debt that should get lending among banks going again. This may have gone a long way towards calming jittery financial markets.

The recent "jaw-boning" by Alan Bollard about banks passing on rate cuts to consumers and companies keeping prices down should also help. Another example of this is the recent announcement by the US Federal Reserve that not only was it cutting interest rates, but aiming to keep them at that level for the foreseeable future. In this regard, New Zealand may be well situated, given the population's generally high trust in the government and other social institutions which makes public pronouncements more credible.

Associate Professor Ananish Chaudhuri (Economics)

Garrick (Garry) Tonks 1943-2009



Garry Tonks, a senior lecturer in the School of Architecture and Planning, died suddenly at home on 21 April. He had taught here for 18 years and was held in very affectionate regard by both staff and students at the School.

Garry had a long association with the School before he joined, being one of the few architect practitioners with a PhD, gained at the University in 1974. His area of research was timber technology, something that continued to hold his interest all through life, and at one stage he was president of the New Zealand Timber Design Society.

Garry practised on his own account in the 1970s and then in partnership as Jarvis Tonks before joining the School in 1991. He continued to

practise while at the School and this lifelong combination of the academic and practice, along with his considerable experience, gave him significant "street cred" with the students, as one recently expressed it.

He was always a champion of integrating the technology and professional subjects with the core activity of design in the studios. Likewise Garry was equally at home in the workshops and ran a popular elective in which students got hands-on with tools, and created furniture that resulted in an always stimulating annual exhibition and award.

After hours Garry was devoted to his family life, with wife Jill and children Anna and Adrian who both completed Engineering degrees at the University. He was a keen yachtie and slightly less

keen alpinist who spent many weekends teaching his children to sail and ski.

When I first started in the School I taught alongside Garry in a studio project focused on group work and a real life design project. It was one of the great teaching experiences of our careers, fondly remembered by staff and students alike for the friendly rivalry and camaraderie of the teams. Unsurprisingly Garry's group of students won and their design was further developed by a few of the students in an internship over summer at one of the city's leading architectural practices.

More recently I had the enjoyable experience of prodding Garry to produce a paper on the Second World War air raid tunnels under Albert Park for an architectural history conference. Garry had been involved in a collaboration over several years with a local businessman to explore these tunnels and options for developing them as an underground transport link from the city to Parnell. Garry enjoyed the process of writing the paper and reflecting on the decades of part-time research and design devoted to the tunnels and on the various plans ranging from the sensible to the fabulous – particularly his design for a transport terminal that reflected the excesses of the eighties but with a sense of irony and humour.

Garry was starting to look forward to life after academia and his sudden death has deprived him of that. But luckily he very much enjoyed his time here and his daily interaction with students. In a memorial event at the School students recalled him as always having his door open, always finding time for them and always being helpful, positive and constructive in his teaching. The studios are emptier without Garry here but we are all lucky to have known him as teacher, colleague, mentor and friend. He will be remembered by us and through an award in design and technology in the professional Master of Architecture degree.

Bill McKay (Architecture and Planning)

Books

Microbial Toxins

A volume that highlights very recent achievements in toxin research is *Microbial Toxins: Current Research and Future Trends*, edited by Dr Thomas Proft from the Maurice Wilkins Centre for Molecular Biology and the School of Medical Sciences, and published by Caister Academic Press.

Since Pierre Roux's and Alexandre Yersin's discovery of the first bacterial protein toxin, diphtheria toxin, in 1888, more than 350 toxins have been identified to date.

In particular over the last few decades, our understanding of microbial toxins has been greatly increased. This is mainly due to the extraordinary technical advances in various disciplines involved in toxin research, such as molecular microbiology, complete genome sequencing, protein crystallography and experimental animal models.

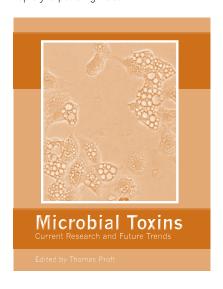
Understanding toxin molecular and cellular biology is critical for the development of new anti-toxin strategies, particularly for those with bioterrorism capability.

Indeed potential applications of toxin research extend beyond simply combating microbial virulence and include the development of novel anti-cancer drugs and other front-line medicines, and the use of toxins as tools in neurobiology and cellular biology.

This timely volume serves as an update on the most important recent advances. Topics reviewed include toxins carried by mobile genetic elements, botulinum neurotoxins, anthrax, subtilase cytotoxin, Pasteurella multocida toxin, RTX toxins of vibrios, Helicobacter pylori vacA toxin, staphylococcal immune evasion toxins and fungal ribotoxins.

The nine chapters are written by a panel of 25 international experts from Australia, Germany, New Zealand, Spain, Britain and the United

States, who describe the latest insights from this rapidly expanding field.



Art

From the collection



Christine Hellyar (born 1947), Armlet 1993, bronze.

Armlets are decorative bands usually worn above the bicep and made from a precious material such as gold or silver. Why then have these three bronze sculptures been given that title?

Based on native plants, fern, palm and flowering flax, they are sited in Grafton Road in a small plot which is formally planted to resemble an eighteenth century European garden. *Armlet* comes from a series of the artist's works which are titled to make reference to the adornments of classical antiquity – amulet, necklet, coronet, diadem. Two of the sets of three stems – Spray and Corsage – were also titled for the European

tradition of women wearing flowers for special occasions. The three stems that make up *Armlet* are meant to stand as sentinels in attendance upon Mother Nature, and to draw attention to her beauty through their own.

As a group of works, the series that Armlet comes from was first exhibited collectively in the winter of 1993, and the work was purchased for The University of Auckland Art Collection the following year.

Christine Hellyar has had a long association with this University. She graduated with a Diploma of Fine Arts (Hons) from Elam School of Fine Arts in 1969, focusing on landscapes and land forms in her sculpture. Endlessly experimental in her practice, she was the first artist to mould her work in latex directly from native flora. By the mid-1980s she had established herself as one of the leading sculptors of her generation. She returned to Elam to teach in the Sculpture Department where she stayed for over a decade. Maintaining an invigorating sculptural installation which now occupies her full-time, she now has commissions in every major New Zealand sculpture park and also installed in many public and private buildings.

In writing to the University in 1994 while still teaching at Elam, the artist drew a plan of where she would like her sculpture sited, commenting that she found the proportions of the small garden at the back of the German Department to be most suitable. She felt that the Grafton Road garden had a contemplative nature, with seating that made it appropriate for the addition of an art work. She also observed that the garden was relatively private.

Writing more recently about her concerns at that time, the artist has identified her principal interest as being in the ways in which humans domesticate the sublime in nature, subjecting the

wilderness to the mowing, pruning and clipping which makes a garden.

Bronze as a material carries historical associations and the artist has used it here knowingly. The great civilisations of antiquity worked in bronze for art, from the time of the introduction of this alloy of copper and tin for edged weapons. Having worked for a long period in rubber, plaster and found materials, Christine Hellyar relished deploying the loaded properties of this metal to contribute to a long tradition of civic sculpture.

"I like the tool and weapon quality of the bronze," she writes. Ironically, bronze can be both solid and ephemeral. While it seems like a permanent material (in contrast to the biodegradable media the artist has often used) relatively few large ancient bronzes have survived. Many more works in ceramic and stone have come through the centuries, even if only in fragments, as many bronzes were melted down to make weapons in times of war, or to create new sculptures commemorating the victors.

Commemoration is part of the content of this work. Native vegetation has been lost through the process of colonisation, and this is a city where even the Māori names which were based on plants have been replaced. For example, Maungakiekie – mountain of kiekie (Freycinetia banksii) – is now One Tree Hill, and like the rest of Tamaki makau rau which has been cleared of its coastal broadleaf forest, few remnants of flora persist to remind us of what has gone.

The artist writes that she likes to think of the three different kinds of plants in *Armlet* dancing together in this European garden – fern, palm and flowering flax united once again as they were in pre-colonial times.

Linda Tyler

Integrated design and manufacturing

For many years computers have been playing a prominent role in designing and manufacturing products.

There is now a critical need to address the role of computer technologies in an integrated fashion, emphasising product data exchange as well as product data management.

This book, Integrating Advanced Computer-Aided Design, Manufacturing and Numerical Control: Principles and Implementations, written by Associate Professor Xun Xu (Mechanical Engineering) and published by IGI Global, presents basic principles of product modelling and management while featuring contemporary industrial case studies as well.

The book is a one-stop reference source for the latest international standards and industry

practices. This is the only book on integrating design and manufacturing based on the concepts of STEP and STEP-NC. The book also expands beyond the traditional scope of the product development process to give a brief account of product data management (PDM) and product lifestyle management (PLM).

This book is appropriate for all academic and research libraries, as well as for anyone involved in the use of computer technology to aid in the design, drafting, manufacturing or prototyping of a part or product. This includes researchers, educators, students, practitioners, engineers, machinists and IT systems developers.

Xun Xu is an associate professor of manufacturing systems and leads the University's Intelligent and Interoperable Manufacturing Research Group. He consults extensively with industry and has close ties with industries in New Zealand and overseas.

Integrating Advanced Computer-Aided Design, Manufacturing, and Numerical Control Principles and Implementations

What's on

FRIDAY 15 MAY

Dept of Philosophy research seminar Holly Lawford-Smith, ANU: *On a notion of political feasibility.* 3-5pm Rm 207.303, Arts II.

Auckland University Buddhist Society seminar

Venerable Gyalten Wangmo: Developing our compassion. 6-7.30pm Graham Hill Lecture Theatre, Auckland Clinical School of Medicine, Level 12, Auckland Hospital. Queries to aklubs@gmail.com

SATURDAY 16 MAY

Exhibition talk

Artist Ann Shelton talks about her project *room room*. 1pm Gus Fisher Gallery, Shortland Street.

MONDAY 18 MAY

Postgraduate Information Week

Until 22 May. Explore your options for postgraduate study at UoA. Visit your faculty of interest for information sessions, display presentations and the opportunity to discuss your research or study interests with postgraduate advisers and current students. Network with other like-minded students and postgraduate advisers at events held all over the University throughout the week. View www.auckland.ac.nz/postgradweek

General Science and Careers Fair

10am-4pm, Recreation Centre An opportunity for students to meet future employers and hear about graduate recruitment programmes, internships and holiday work-experience. View www.auckland.ac.nz/uoa/cs-careerfairs/

Fulbright NZ outreach tour 2009

Information seminar and careers fair, 10am-4pm Recreation Centre and Conference Centre. Fulbright NZ's educational advising team are visiting to inform about options for studying, researching and teaching in the US. Information seminar, 2-3.30pm, 423-342, Conference Centre. View visit www.fulbright.org.nz

TUESDAY 19 MAY

Communiqué '09 lunchtime seminar Dr Alex Monteith, artist and lecturer,

Elam School of Fine Arts: Recent large-scale multi-channel video installations. 12-1pm Exhibition Studio, School of Architecture and Planning, 26 Symonds St. Queries to Kathy Waghorn, ext 89150 or k.waghorn@auckland.ac.nz View www.alexmonteith.com

School of Music seminar

Allan Badley: Double vision: Pleyel's revision of the violin concerto in D (Benton 103/103a). 1.05-2pm Music Theatre, School of Music.

School of Asian Studies seminar and book launch

Dr Edward McDonald: Chomsky's syntactic structures or Tesnière's syntaxe structurale?: On two roads more or less taken in syntactic studies after half a century. 4pm Rm 501, Arts 2. 4.45pm - Professor Yan Huang (DALSL) will launch Dr McDonald's book Meaningful Arrangement: exploring the syntactic description of texts. Wine and cheese provided.

Bioengineering research seminar Dr Stephen Marsland, Senior Lecturer in Computer Science, SEAT, Massey University: Does my brain look big in this? Image registration and the Diffeomorphism Group. 4-5pm Fifth Floor Seminar Rm, 70 Symonds St.

School of Counselling, Human Services and Social Work public lecture

Prof Irwin Epstein, University of New York: Multi-disciplinary data-mining in the age of evidence-based practice. 4-5pm J3 lecture theatre, Epsom Campus.

Queries to M. Barnett, 623 8899 ext 48565 or ma.barnett@auckland.ac.nz International Law Association/

Faculty of Law public lecture
Prof Lauren Robel: Lawyers and torture:
Ethics in extremis. 6pm Lecture Theatre,
OGH. RSVP to raewyn@wwandd.co.nz

WEDNESDAY 20 MAY

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Secrets of effective teaching
11am-12.30pm, CAD Seminar Rm,
5th Floor, 76 Symonds St. Three UoA
Teaching Excellence Award Winners
share the philosophies 'secrets' and
strategies that have made them
excellent teachers. Please enrol through
Peoplesoft HR or call CAD reception at
ext 88140 for assistance (code SEFTEA).
Department of Sociology seminar
Dr Peter Davis, UoA: Five rules for the
public practice of professional social
science. 4pm HSB 604. Queries to Niki
Harre, email n.harre@auckland.ac.nz
Peter Gibbons Memorial Lecture

series 2009 Myra B. Cohen, University of Nebraska:

Myra B. Cohen, University of Nebraska: Computing: From theory to practice - Making software testing easier. 5.30pm Conference Centre, 22 Symonds St. The second lecture in a series of four. View www.cs.auckland.ac.nz/research/ GibbonsLectures/

Auckland Museum Institute lecture
Dr Fulvio Melia, Professor of Physics and
Astronomy, University of Arizona: Black
hole horizons. 7pm, Auckland Museum
Auditorium. RSVP to 306 7923 or
friends.events@aucklandmuseum.com

THURSDAY 21 MAY

Department of History seminar

Lindsay Thomson, University of Glasgow: Medicine to religion: Gendered blood from Galen to Isidore. 1pm Common Room, History Dept, 5 Wynyard St. Queries to Linda Bryder, email l.bryder@auckland.ac.nz

Spark Ideas Challenge Prizegiving

6pm Fisher & Paykel Appliances Auditorium, Owen G Glenn Bldg, 12 Grafton Rd. Celebrate NZ's future entrepreneurs and innovators. Come along to this exciting and entertaining event, where over \$20,000 of cash prizes are being awarded.

FRIDAY 22 MAY

Developing an understanding of the Treaty of Waitangi

9am–1pm, Waipapa Marae, Wynyard St. To help staff gain an understanding of the history and implications of the Treaty of Waitangi. Enrol via PeopleSoft HR Employee Self Service (HRITW). For queries phone ext 89630.

First Aid certificate course

9am–4.30pm, Rm 336, Level 3, Bldg 810, 1-11 Short St. For staff to gain a certificate that is valid for two years and meets workplace First Aid requirements. Enrol via PeopleSoft HR Employee Self Service (HRFAC). For queries phone ext 85070.

Teaching and learning history symposium

What works and why? 9am - 5pm, Music Auditorium, Epsom Campus.
Sponsored by The University of Auckland Department of History, and Faculty of Education with support from Auckland History Teachers' Association.

SATURDAY 23 MAY

Exhibition talk

1pm, Gus Fisher Gallery, Shortland St.In response to Sandra Bushby's Absent Jewels exhibition, The University of Auckland Art History Senior Lecturer Dr Don Bassett gives a talk on Louis Comfort Tiffany and Art Nouveau.

TUESDAY 26 MAY

School of Population Health seminar

Len Cook, Chair, Medical Training Board: The future of the NZ health workforce: Lessons learnt from the Medical Training Board. 12.30-1.30pm Function Rm 220, School of Population Health, Tamaki Campus. Queries to e.kinane@auckland.ac.nz

School of Music seminar

Heath Lees: The Prometheus Hypothesis: A different view of Beethoven's deafness. 1.05-2pm Music Theatre, School of Music.

WEDNESDAY 27 MAY

School of Asian Studies seminar

Dr Wayne Lawrence: *On reconstructing Proto-Northern Ryukyuan accentuation*. 9.30am Rm 501, 18 Symonds St.

Linguistic research seminars

- 12.30pm, Rm 210, Level 2, Fisher Bldg. Three students from LINGUIST 709 will each give a short presentation of their research project.
- 1. Marie-France DuHamel: Dialectal variation on Lombok: Pronominal clitics in four varieties of Sasak.
- 2. Rosalind King: Internet comment boards: A new genre in CMC?
- 3. Frederike Hūlsmann: Loss of the ear-air distinction in NZ English: Twenty years on.

Oticon Foundation Hearing Education Centre Research seminar

Srdjan Vlajkovic: Antioxidants and hearing loss. 5-6.30pm, School of Population Health, Tamaki Campus. Queries to

pamina.prasad@auckland.ac.nz

Peter Gibbons Memorial Lecture series 2009

Alexei Drummond: Computing: From theory to practice - Developing Darwin's computer 5.30pm, Conference Centre, 22 Symonds St. The third lecture in a series of four.

THURSDAY 28 MAY

Department of History seminar

Peter Field, University of Canterbury: A study in leadership: Abraham Lincoln and the first person plural. 4pm Rm 59, History Dept, 7 Wynyard St. Queries to l.bryder@auckland.ac.nz

Classifieds

ACCOMMODATION AVAILABLE

Apartment to rent, in Connaught from the end of May. Fully-furnished, one bdrm and a study with bed settee. Sunny outlook, with harbour view. Available for up to six months.

Phone (021) 211 0535.

Bungalow to let a stone's throw from Ponsonby Rd. Stylish and comfortable, fully-furnished with two bdrms, two living areas, sunny courtyard and underfloor heating. Available to rent for four months from July to November, dates negotiable. \$470 pw. Contact Trudi on (021) 135 5092.

Devonport. Fully renovated half a house, five minutes walk to village and ferry to CBD. Available fully-furnished from approx 1 July for four months while owner in Australia. Renovated 2009. Two bdrms, second set up as study or could be converted to single; large ensuite to main bdrm; large modern wardrobe; second wc off study; large combined lounge/diner; sep kitchen but with opening to dining area; gas heating/cooking; fully insulated; lock up garage with auto door; modern laundry; Sky TV, large deck at back; large sunny verandah at front; no lawn; flower beds. Cat OK, no dog. Minimum rental two months, prefer complete four months. \$700 pw includes gas/power/SkyTV. Phone 445 6155.

Furnished house St Heliers/Glendowie.

Attractive location in quiet leafy street. Three bdrms, or two with a study. Recently redecorated with polished rimu floors and carpeted bdrms. Near excellent schools and public transport. Just 15-20 minutes from the city and University. A 10-minute walk to St Heliers beach and village. Suit couple or small family. Available from 28 May- 31 December 2009 negotiable. No pets or smokers. \$575 pw includes lawn-mowing. Contact (021) 072 8701 or email nautikos07@yahoo.com.au

House to rent on Waineke Island. Modern three bdrm house for long-term rental, either furnished or unfurnished. Includes office, two bthrms and garage, with large decks overlooking the sea. Close to ferry and Oneroa village. Very quiet and private. For further information, please contact Ruth. Email ruths@ihug.co.nz or or (021) 372 294.

Ponsonby housemate. Ponsonby villa close to shops. House has three bthrms. On the Link bus route to University. Fully furnished, quiet. Suit visiting researcher. N/s. \$180 pw + expenses (ca \$70 per month). Phone 360 2202 or (027) 436 8836.

Three Kings furnished home for rent, 27 June-1 Aug. Lovely home (photos available) x two lounges, x two bthrms, x three dble bdrms, x two single bdrms + nursery, playroom, separate dining, kitchen + kitchenette, large garden, outdoor seating, and children's play equipment. One-minute walk to beautiful park. Close buses, airport, schools. \$1000 pw all inclusive Contact info@straighttalking.co.nz

ACCOMMODATION REQUIRED

House-sitter available. Long and short-term. Single female, 40. Academic working at UoA for several years, at the moment completing doctoral thesis. Phone (021) 254 4250.

MISCELLANEOUS

For a limited time: \$20 hearing tests available for children aged from six months to five years. Please call the Hearing and Tinnitus Clinic, Tamaki Campus for an appointment: 373 8791 (ample free parking).

Travel. I have 12 years experience in booking all aspects of personal travel for university staff and lecturers. I pride myself in ensuring that your travel plans are sourced at the lowest possible costs and are tailor-made to your requirements. For more information contact Karen on Karen.embleton@ mondotravel.co.nz or phone 940 0064 (wk) or (021) 188 7781.

Travel opportunity. Thirty days in Bhutan, India and Sri Lanka. Departing 18 December 2009. Reasonable level of fitness required. I have twenty-plus years experience organising and leading adventure-travel trips. For more information please contact Chris Smaill, c.smaill@auckland.ac.nz.

Please email classified ads to m.playfair@auckland.ac.nz nine days before publication. Cost \$20 (incl GST).

For a full list of The University of Auckland events see: www.auckland.ac.nz/uoa/home/events