



CoREVISIONS

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INSIDE

WHAT'S IN A NAME?

Louise Cotterall is a technical advisor with the School of Environment. She is a trained cartographer and draws maps and diagrams for scientific publications and for teaching; she is also the school's photographer. In our "My Story" section Louise talks about growing up in Herne Bay, about her fascination with photography and technical drawing, about the satisfactions of her work and the privilege of having a newly discovered species named after her.

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BIOGRAPHICAL CHALLENGE

Karl Popper provokes wild disagreements, says Distinguished Professor Brian Boyd, who, with the help of Marsden Funding, is writing a biography of this Austrian-English philosopher. For many, he says, Popper was one of the most important philosophers of the twentieth century. Yet he often meets neglect, indifference or hostility. In "What I Am Discovering", Brian tells of Popper's achievements and of the deep need to explain the disagreements he provokes.

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DEATH BY DRONE

In April the media reported that a New Zealand citizen had been killed in a US drone attack in Yemen. There was no evidence that this person had committed a crime, writes Scott Poynting, Professor of Criminology (School of Social Sciences) in the Maramatanga for this issue, in which he examines some of the moral and legal issues that arise in connection with the strike. Scott's book on *Counter-Terrorism and State Political Violence* is also reviewed on page 11 in "What's Coming Out?"

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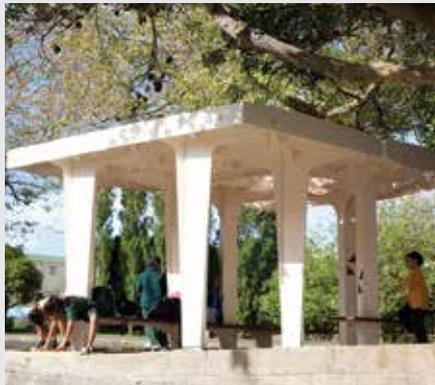
ICONIC TREE

Vice-Chancellor, Professor Stuart McCutcheon, planted a ten-year-old kauri tree in the University's gardens on 22 May, International Biodiversity Day. This was the offspring of Tāne Mahuta, a giant kauri tree in Northland's Waipoua Forest that forms part of our New Zealand heritage. Nick Stott, a heritage arborist from the Auckland Council who arranged for the tree to be supplied, said he admires the work of Grounds and Precincts Manager Stanley Jones and his team, and is happy the tree has been given to the University.



AWARD-WINNING SHELTER

As part of their Master of Architecture (Professional) study, students Sam Wood and Yusef Patel created seating shelters for Onehunga Primary School. Responding to Auckland's traffic problems, particularly the congestion that occurs around school drop-off and pick-up times, the pair designed a safe, sheltered area for children and their parents to meet at the entrance of the school. This won them the top prize in the Innovation in Structural Engineering Design category of a prestigious global award: the 2014 Bentley Student Design Awards.



PORTRAIT PLACED IN RESEARCH HUB

A small group of staff, guests and graduate students gathered to welcome Emeritus Professor of English Albert Wendt and his partner Reina Whaitiri to a double celebration at the Centre of Pacific Studies. One big reason to celebrate was the opening of the department's new "research hub", a large, light and well-equipped working space for graduate students and other researchers. The other reason was the arrival of a portrait of Albert by well-known artist, Annette Isbey (pictured), also a guest at the morning tea.



COCA COLA CHRISTMAS

Godfrey De Grut, who lectures in Popular Music Studies in the School of Music, is to be artistic director with his wife Cherie Mathiesson for the 21st anniversary of Coca Cola Christmas in the Park 2014. With 40 years of combined musical experience as performers, producers and songwriters, they are looking forward to this new challenge. "It's an event we've all grown up with," says Godfrey. "We can't wait to play a part in its musical coming-of-age."



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COVER PHOTO: Left to right are Professor Rod Dunbar, Distinguished Professor Richard Faull, Professor Shaun Hendy, Distinguished Professor Peter Hunter and Professor Cliff Abraham. Photo Lydia Arnold

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NEW BOOK STORE AND BINDERY

The Library's off-campus store and Bindery have moved into new premises at Highbrook.

Both operations had been in a warehouse opposite the Tāmaki Campus since the late 1990s but the owners wanted the site for a supermarket. Property Services surveyed the market and a lease was secured on the Highbrook property. This is a new and considerably larger warehouse; most of its space is allocated to the Library store while the Bindery occupies the spacious office area at the front.

"The old store had reached capacity some years ago and the Library's print collections continue to grow, with many of the libraries now full," says University Librarian, Janet Copsey. The new store is fitted with compact moveable shelves and there are more than 23 kilometres of shelving in stacks three metres high; a warehouse picking ladder is needed to reach the higher levels.



Janet says planning the Bindery layout was complex as it had operated over two floors at Tāmaki and was to be re-established in a single area at the new site. "Equipment and furniture were numbered and shifted to their new positions at Easter. The opportunity was taken to replace some old furniture and install contemporary fittings."

As well as binding for the University, including theses for students, the Bindery does commercial work for other institutions and individuals. Most is specialised one-off, hand-bound work including restoration of valuable or rare books, preservation and preparation of unique commercial covers or other material. Enquiries are welcome and jobs can be delivered in person or left at the Lending Desk in the General Library. For more information see:

www.library.auckland.ac.nz/bindery

Library items from the store can be requested through the Inter Campus Delivery Service (see www.library.auckland.ac.nz/services/borrowing-and-requesting/requesting/intercampus)

The new address is 4 Neil Park Drive, Highbrook; for both store and Bindery phone (09) 278 2456. Hours are 8am-4pm weekdays.

BEATING BLOOD CANCERS

William Tan, 2014 Distinguished Alumni Award Winner, medical doctor, Paralympian and inspirational speaker is adding a new accomplishment to an exceptionally long list.



He is handcycling from London to Paris to raise funds for leukaemia and lymphoma research at centres around the world, including the University of Auckland.

As *Uninews* went to print, William was preparing for the 500 kilometre fundraiser ride called London/Paris: Be Unstoppable.

The event is a four-day endurance ride taking in the English Channel Tunnel, which is all the more daunting for a participant who is paralysed from the waist down due to childhood polio.

William was diagnosed with Stage 4 leukaemia in April 2009 and told that he had only nine to 12 months to live. He braved through six months of chemotherapy and a bone marrow transplant. Grateful that he has reached five years of survivorship, he is using this event as a platform to raise funds for cancer research in those countries where he has studied or worked. A special fund has been set up at the University to accept donations to support leukaemia and lymphoma research.

To donate to the Dr William Tan Leukaemia Appeal at the University of Auckland, please visit: www.auckland.ac.nz/william-tan-appeal or contact: Emma Dent, Development Manager (FMHS) on (09) 373 7599, ext 87275 or on email (emma.dent@auckland.ac.nz).

SEEING SCIENCE

The School of Chemical Sciences is gearing up for its annual Chemical Sciences Research Showcase in July.

Paul Hume who is in his final year of a PhD in Chemistry, is looking forward to the event because "when you're busy with your own research and study," he says, "it's easy to get tunnel vision and not realize all the different and interesting things around you."

Paul is one of six PhD students who have been picked to give a 20 minute presentation about their PhD topic at the showcase. He wants to pass on his knowledge and enjoyment of the total synthesis of natural products.

"I'm hoping to convey what I did as a logic puzzle," he says "I'm trying to paint the field of total synthesis as a puzzle you get to work on and solve by thinking creatively."

Paul's topic is about a molecule discovered by a Chinese research group. He describes it as "a bit of Russian Doll situation", because "my molecule" comes from a fungus that lives inside the leaves of a tree. The molecule could provide the starting point to develop a drug as it has "interesting bioactivity".

Alongside the selected PhD presentations, students beginning their PhD give a two-minute talk on their work and there is a poster competition followed by a social event organised by the Wine Science programme.

As Paul says, "it is the one day a year that we come together to get a taste of all the different Science that is going on in our School."

www.chemistry.auckland.ac.nz

LEADING GLOBAL STRATEGY

World Health Organization Director General Dr Margaret Chan has named the Liggins Institute's founding director Professor Sir Peter Gluckman as co-chair of a commission with the task of ending childhood obesity.

The Commission will report early next year on which approaches and interventions are likely to be most effective in different global contexts.

Co-chairing the Commission is internationally recognised cardiologist, public health specialist and former Pakistan Minister of Science and Education, Dr Sania Nishtar.

Sir Peter will receive advice from a working group of experts representing disciplines including epidemiology, paediatrics, nutrition, developmental origins, health literacy, marketing to children, health economics, physical activity and gestational diabetes.

CELEBRATING ACHIEVEMENT

When guests gathered on 8 June at Old Government House for the 2014 Kate Edger Educational Charitable Trust (KEECT) Awards Ceremony, they were not only celebrating the achievements of the successful award-winners but also paying tribute to the late Dame Dorothy Winstone with the announcement of a new final-year doctoral award.

The Dame Dorothy Winstone Award has been established to assist a woman who will have completed three years' full-time study towards a PhD or named doctorate to remain a full-time student for a further semester. The value is \$16,000 and this year's closing dates for applications are 7 July and 1 December.

The photo at the right, taken at the ceremony, shows Jill Smith, grand-daughter of Kate Edger (whose hood the mannequin in the background is wearing), with Fiona Thompson, daughter of Tressa Tompkins. Tressa's children donated \$4,000 to the Auckland Branch of the New Zealand Federation of University Women to

establish an award for women wishing to re-train for employment.

Since then many women have been assisted through these awards, now administered by the Kate Edger Educational Charitable Trust.

For information on the KEECT awards, see www.academicdresshire.co.nz



ARCHITECTURAL INFLUENCE

The following is a tribute by Professor Andrew Barrie from Architecture and Planning to Ivan Mercep, whose death was reported in the May issue of *Uninews*.

Ivan's work had a profound influence on the way we live our lives around the University.

In the mid-sixties, he was one of the founding members of Jelichich, Austin, Smith, Mercep and Davies – JASMaD – an adventurous multi-disciplinary design practice. This young firm secured the commission for International House on Whittaker Place, which became the first in a series of projects JASMaD produced for the University.

JASMaD's rapid growth through the 1970s and 1980s coincided with the renaissance of Māori culture and the rise of Auckland as a Polynesian city. Ivan was a key contributor to this development, with JASMaD becoming one of the first architectural practices to engage in institutional-scale architecture for Māori and Polynesian clients. This work gave Māori and Pacific Islanders a public and enduring presence within the built and urban fabric of Auckland, South Auckland, and later around the Pacific. It included some of New Zealand's first urban marae – a marae project in Otara led to Hoani Waititi Marae in Glen Eden and then to the design of the University's Waipapa marae complex (1988) and the Fale Pasifika (2004).

In 1989 JASMaD transformed into Jasmax, and soon afterwards won the competition for the design of Te Papa – one of the biggest architectural projects ever carried out in this country. Powered by Te Papa and other major buildings, Jasmax developed into New Zealand's largest architectural practice, and Ivan Mercep became one of the nations most respected architects. In 2008 he was awarded the Gold Medal of the New Zealand Institute of Architects for outstanding contributions to the profession across more than 50 years.

He leaves a legacy not only in the buildings he designed, but in the work produced by the generations of architects that developed under his gracious mentorship and will continue to serve both the University and the city.



INDIGENOUS PEOPLE'S CONFERENCE

Two staff from the Equity Office – Te Ara Tautika - presented papers at the World Indigenous People's Conference on Education, held this year at Kapi'olani Community College in O'ahu, Hawaii. Around 3000 people attended, with particularly strong representation from the Americas, Asia and the Pacific, including more than 300 Māori educationists. Kaiarahi Jeremy Hema's attendance was supported by the Office of the Pro Vice-Chancellor (Māori); Jason Tutara, Kaitakawaenga Māori - Māori Liaison Officer, received a Professional Staff Development Award to attend. For more information, see the Staff Intranet.

\$28 MILLION FOR HEALTH

University researchers have been awarded \$28.8 million in the annual contestable Health Research Council of New Zealand funding round. The funded research ranges from growing better placentas for healthy babies to augmenting neuroplasticity in the Huntington's diseased brain. The principal investigators are based in the Faculty of Medical and Health Sciences, the Liggins Institute, the Auckland Bioengineering Institute, the Faculty of Science and the Faculty of Arts. The University won three out of the 14 Emerging Research Grants, one out of the four Programme Grants and most importantly 20 out of the 50 Project Grants. Professor Bill Wilson from the Auckland Cancer Society Research Centre is leading the successful Programme entitled "Biomarker-guided drug targeting of the tumour microenvironment in radiotherapy". His research has been funded for five years. Congratulations to all our researchers.

INNOVATION AWARDS

A team of researchers creating innovative new technologies for manufacturing won a top award at New Zealand's premier Kiwinet innovation awards last night. The group was Titanium Technologies NZ (TiTeNZ). Associate Professor Peng Cao (Chemical and Materials Engineering) plays a key role in TiTeNZ, which is a team of researchers from universities, Crown-owned research institutes and industry partners who won the Kiwinet AJ Park Commercialisation Collaboration Award. The new company creates products for global markets in titanium alloys, which have applications in yachting and defence.

CoREs OF SUCCESS



Professor Jane Harding, Deputy Vice-Chancellor (Research) speaks at the celebration.

Senior staff and key scientists gathered at the Fale Pasifika on 27 May to celebrate the new Centres of Research Excellence announced by the Tertiary Education Commission.

Later the directors of the four (of a total of six) CoREs to be hosted or co-hosted by the University of Auckland spoke with *Uninews* about their visions for the Centres and some of the exciting outcomes they plan.

Distinguished Professor Peter Hunter, Director of the Medical Technologies CoRE, is very excited that the CoRE makes it possible to draw on complementary skills from throughout the country to fulfil his vision of creating a critical mass in the bioengineering areas in New Zealand. "It's a major partnership with Canterbury, Otago, AUT, Victoria and Callaghan Innovation, and from a broad range of disciplines."

The CoRE funding "is dedicated to making sure we translate our research into clinical and commercial outcomes, and will lead to many more opportunities for translational research."

Just one among many exciting current investigations is the work of the musculoskeletal group led by Associate Professor Thor Besier, which combines medical imaging with computational modelling to understand mechanisms of musculoskeletal injury and disease. This team recently received a grant from the US Food and Drug Administration (FDA) to develop a computational framework to perform "virtual" clinical trials for orthopaedic devices.

The FDA sees it as a very high-profile project, says Peter. "The idea is to build models of the musculoskeletal system, where you gather a lot of data about the variability of anatomy across a very large data base." These could be used, for

example, to test the design of a hip prosthesis and the team are working closely with a Christchurch orthopaedic company, Ossis, to make this a reality. This is a powerful tool for doing preclinical testing and places New Zealand firmly in the world scene in terms of ability to speed the trialling of medical devices."

Professor Shaun Hendy is Director of Te Pūnaha Matatini – The Centre for Complex Systems and Networks. This CoRE will develop methods and tools for transforming complex data into a greater understanding of the environment, the economy and the marketplace.

"New Zealand faces pressing economic, environmental, and social challenges," says Shaun. "We need socially and environmentally sustainable sources of growth, and tools for managing the complex, interconnected economic, environmental, and social phenomena of the 21st-century world."

He adds that the rapid pace of technological change has created a society that is data-rich but knowledge-poor. "By bringing together researchers in physics, economics, mathematics, ecology, computer science, and the social sciences, we can transform this data into knowledge, and this knowledge into better decisions," says Shaun.

Te Pūnaha Matatini will be hosted by the University of Auckland, in partnership with the University of Canterbury, Motu Economic and Public Policy Research, Victoria University of Wellington and Massey University.

Professor Rod Dunbar, Director of the Maurice Wilkins Centre for Molecular Biodiscovery, was delighted to see the Centre's funding renewed for a further six years. The Centre had already established a vibrant network of eminent biomedical researchers across the

country, from biologists and clinicians to medicinal chemists.

"The next phase for us is to focus all that talent onto major diseases affecting New Zealanders, and ultimately deliver new therapy," says Rod. However this won't be at the expense of support for fundamental science. "Discovering new treatments for human disease always depends on scientific excellence across a broad range of disciplines, and we will continue to back the most exciting new ideas as they arise, even if they seem quite a long way from the clinic." The Maurice Wilkins Centre will also expand its technology access programme, where researchers can use cutting edge technology at other sites in New Zealand or overseas, and build on its successful engagement with leading international research institutes. "It's all about opening up opportunities for New Zealand science that wouldn't otherwise be available. We have really exciting prospects over the next six years - including the ability to work with the five other CoREs, which will synergise incredibly well with our programme."

Distinguished Professor Richard Faull and **Professor Cliff Abraham** (University of Otago) are co-directors of Brain Research New Zealand – Rangahou Roro Aotearoa, which is jointly hosted by the two universities. The work of the CoRE will focus on life-long brain health.

"We're bringing together the major neuroscience research groups with expertise on the aging brain, from Auckland and Otago and also from AUT and Canterbury," says Richard.

"Today the number of people living with dementia and/or stroke number 95,000 (2.1 percent of the population). By 2050, it will be 240,000 (4.3 percent). However, if the onset of Alzheimers and dementia could be pushed out by two years or by five years, that would decrease the prevalence by 20 or 50 percent, respectively.

"Though there is not now a cure for any single brain disease, the aim is to develop treatments to delay and slow the progress of these diseases. This will be accomplished through the combined strength of research in neurodiscovery (concerned with genes and cells), on biomarkers (indicators of disease progression) and on neuroplasticity (how much we can change the brain)."

A further essential part of the vision is to develop a Dementia Research Clinic [alongside the Stroke Research Clinic, already established] to investigate people in the very early stages of dementia and Alzheimer's disease, and conduct research on how to delay its progression. These clinics will eventually form part of a national network of research clinics.

For Richard, this is the dream of a lifetime.

MY STORY

STAFF QUESTIONS & ANSWERS



LOUISE COTTERALL

Louise is a technical officer with the School of Environment. She is a trained cartographer and draws maps and diagrams for scientific publications and for teaching; she is also the School's photographer.

Louise trained as a draughting cadet at the Auckland Ministry of Works and studied for a New Zealand certificate in survey draughting at the then-called Auckland Technical Institute (ATI) — she was the only female in her class.

While at the Ministry of Works Louise was seconded to the Auckland Rail Rapid Transit Project Office in Parnell to draw up road and motorway plans. "So 42 years later I would love to see rapid rail in Auckland actually become a reality," she laughs. After 14 years working in survey draughting, Louise was offered a job as a technician in the University's Geology Department in 1988. She has been employed at the University ever since.

WHERE DID YOU GROW UP AND WHAT DID YOU LOVE DOING WHEN YOU WERE A CHILD?

I grew up in Herne Bay with two older brothers. Dad was an engineer and Mum was homemaker. We spent our time swimming (at Home Bay), floundering and fishing off Herne Bay wharf and riding our bicycles round the neighbourhood and down to Westhaven. My brothers made a surfboard and went out to Watchman's Island. I always wanted to go too. Finally a few years ago I kayaked out there for the first time.

WHAT DID YOU ENJOY LEARNING ABOUT IN YOUR EARLY LIFE?

My grandfather, who lived with us, gave us an Agfa Clack camera. It started my fascination with photography and led on to learning how to develop film, and process black and white prints in the darkroom. I recorded things that were disappearing like the old steam ferries that were sunk into reclaimed land at Westhaven. I loved the *National Geographic* Magazine and the

quality of its images. I loved drawing. Art became a favourite subject at school. I went to Herne Bay Primary and then St Mary's College in Ponsonby.

TELL US ABOUT YOUR FIRST JOB EVER.

My first job was a holiday job in the Auckland Council Civic Administration building — it was Auckland's tallest building then — in the cafeteria on the 16th (top) floor, making lunches: rolls, hot corn beef and potatoes.

CAN YOU TELL US ABOUT YOUR BEST TEACHER?

I remember my history teacher at secondary school, who impressed on me the importance of reading and research from all angles before thinking of writing any treatise on historical events. She was tiny in stature but her personality was powerful.

HOW AND WHEN DID YOU DECIDE WHAT YOUR FUTURE CAREER WOULD BE?

I looked for jobs in the newspaper. I saw the advertisement in the *New Zealand Herald* jobs section for draughting cadets with MoW and it appealed to me as an interesting job with continuing training. I applied for it, got an interview, and was successful. I guess my father's ability to draw technically and invent and make things, rubbed off on me.

IN JUST ONE SENTENCE DESCRIBE THE PURPOSE OF YOUR PRESENT POSITION.

To produce scientific-standard maps, illustrations and photographs for academic publications and for teaching purposes and displays; and to support and promote staff research and train students to use macro camera equipment and drawing programmes.

WHAT DO YOU LOVE MOST ABOUT THE JOB?

Turning rough sketches or concepts into clear-to-understand maps; illustrating stories with photos that illuminate them; contributing to research projects and applying my skills to them.

DO YOU BELIEVE THAT WHAT YOU DO CHANGES PEOPLE'S LIVES?

I believe that what I do is useful and worthwhile and contributes to the pursuit of knowledge. Geology research in particular has always struck me as being so crucial to life. Everything we need to sustain life comes from the earth, the soil, the land, its elements, minerals and processes.

WHAT HAVE YOU ACHIEVED THAT YOU ARE VERY PLEASED ABOUT?

Most recently I was privileged to have University palaeontologist Jack Grant-Mackie name a new species after me. *Makoiomya cotterallae*, a new genus and species of bivalve (Ceratomyidae) from the latest Triassic of New Zealand and New Caledonia. The Etymology reads: "Named for Louise M. Cotterall, draughtsperson and photographer to the Geology section, who has been of enormous assistance in illustrating my publications over many years and has always maintained the highest of standards."

WHAT DO YOU ENJOY DOING WHEN YOU'RE NOT WORKING?

I like reading, photographing, being able to catch the clematis in Spring for example, sketching, bush walking, botany, gardening, art galleries, travel, completing all of New Zealand's Great Walks (I do one every year), enjoying our National Parks, and doing volunteer work on our conservation islands (Motuihe, Little Barrier, Tiritiri Matangi, Kawau). I'm in the Geoscience Society of NZ GeoClub and recently we went to Fletcher's Bay at the top of the Coromandel to look at local geology. I have studied towards a BSc in Geology and also done papers in computer programming, computer graphics, New Zealand Art History, Museums and GIS (Geographic Information Systems).



Makoiomya cotterallae

Note, this year Louise has won a University Professional Staff Development Award and in July heads off with two other University staff to The Guild of Natural Science Illustrators Annual Conference in Boulder, Colorado.

DID YOU KNOW

... Epsom's top secret

"We didn't have a toilet so had to climb three flights of stairs and in the blackout walk up to College. We had to carry gas masks wherever we went..."

These are the words of Mrs Dorothy Allen (nee Ashton) who was a captain in the New Zealand Women's Auxiliary Air Force (WAAF) during World War II. Believe it or not from 1 October 1944 to 10 August 1945 Dorothy and many members of the WAAF were stationed in a huge underground bunker beneath the University's Epsom Campus.

Drive through Gate 3 at Epsom today and on your right you will pass a large stone stairwell with a graffiti-scrawled metal plate covering its entry. Although it looks more like a huge jaded garden sculpture, it is in fact a reminder of the "combined operations centre" — designed to withstand 113kg bombs dropped from 3700 metres — that was once existed below. Pause and poke your head over the concrete wall beyond towards the car park and there are two tall shimmering silver ventilation shafts — more visible reminders of Epsom's "former life".



Early on in World War II, the then Auckland College of Education (ACE) campus became New Zealand's Northern Districts Combined Headquarters for army, airforce and navy, occupying over 45,000 square feet of space. When the Japanese bombed Pearl Harbour and Darwin, the perceived threat to New Zealand became so great Cabinet approved construction of a £52,000 underground headquarters beneath where the Epsom carpark stands today.

The bunker was to provide a 40-room refuge for key headquarters' functions in the event of air-raid. It included a number of full height control rooms including one for the fighter sector, one for combined operations and one for gun operations. There were three cipher and teleprinter rooms adjacent to a communications centre, wireless and telegraph rooms, a direction finding triangulation room, various viewing galleries and offices (including one for the Commander in Chief), emergency generators, air filtration, locker rooms and toilet facilities. There were even wall-mounted maps, blackboards and canted plotting tables complete with model ships and planes just like in the movies.

But the bunker never served its urgent purpose. As the course of the war shifted, construction was halted in October 1943 and from then until 1945 it was used by women from the WAAF. It remained under military control for a further 20 years after the campus was handed back to the Education Board at the end of 1944. In the early 1960s the Auckland Regional Authority took over the facility as a civil defence disaster control headquarters for the northern region. One of those lucky enough to visit was current Dean of the Faculty of Education, Professor Graeme Aitken: "I visited the bunker

in 1968 with my Form 6 class (Year 12) as part of a reward for us achieving UE accrediting," he remembers.

By July 1976 the bunker was handed back to the ACE. Used for storage, it became a target for vagrants who gained entry on a number of occasions. In November 1982 a major blaze, likely lit by intruders, broke out in the bunker. A second, smaller fire occurred in 1988. While the upper level was largely destroyed some parts of the ground floor remain identifiable despite serious charring.

Since then the bunker has remained sealed and inaccessible. "It is sad that what I recall as something of an historic treasure is now shut away and abandoned and that an important part of our 'home front' history has been lost," says Professor Aitken.

"Inside, sealed from view, are the charred remnants of remarkable investments made, but never called upon, to protect New Zealanders in both war and peace," writes a former ACE student, librarian and historian Jeanette Grant. Her article, which informed this one, appears in the March 2003 *Prospect*, published by Epsom, Eden District Historical Society.



WHAT'S ON CAMPUS

PIANO FESTIVAL

10-13 JULY, 7.30-9PM

Music Theatre, 6 Symonds Street, Auckland

The Wallace National Piano Festival is an exciting four-day event hosted by the School of Music and featuring evening recitals by Chenyin Li (10 July), Read Gainsford (11 July) and Jason Bae (13 July); and master classes and workshops led by Christopher Elton (London), Chenyin Li (China/London) and Read Gainsford (New Zealand). The Wallace Junior Piano Competition, finals on 12 July, gives pianists under 18 a chance to compete for prizes totalling \$4000. Prices \$10-\$50. Book at iTicket. Contact concerts@auckland.ac.nz.

BOLLYWOOD LOVE

31 JULY, 7PM

Maidment Theatre

East Meets West: Love in Bollywood Style, hosted by the University of Auckland Indian Society, features Sameer, who is travelling to India on an exchange program at the Film and Television Institute of India) to find out more about Bollywood. It shows Sameer's journey as he adjusts to a new life in a college hostel, getting in touch with his hidden side as he falls for a typical Bollywood-loving Indian girl. The cost is \$15-\$30. For bookings and enquiries, phone 09 308 2383. For more information see www.maidment.ac.nz

WINTER LECTURES

TUESDAYS, 22 JULY-26 AUGUST, 1-2PM

Maidment Theatre

The Winter Lecture Series commemorates the arrival of Pākehā settlers 200 years ago. Speakers: Professor Kuni Kaa Jenkins (Education), Associate Professor Mānuka Hēnare (Business School), Distinguished Professor Dame Anne Salmond (Māori Studies), Associate Professor Alex Calder (English, Drama and Writing Studies), Judge Craig Coxhead (Waitangi Tribunal), Emeritus Professor Andrew Sharp (Politics and International Relations). Convenor: Professor Alison Jones (Education); a.jones@auckland.ac.nz

BEE NAVIGATION AND PATIENT CARE



James Cheeseman releases a bee in the radar field while at the same time communicating with the radar technicians by radio.

How do bees find their way home?

For many years it was thought they used only the sun.

However, a University of Auckland study has now shown that bees, like mammals, can also use cognitive maps: mental maps of familiar terrain that are created through experience and are continually referenced and updated.

The study by Dr James Cheeseman and Dr Guy Warman (both from Anaesthesiology) and Dr Craig Millar (Biological Sciences) has thrown new light on a long-standing biological question that is of strong interest internationally and also has implications for post-operative care of patients.

The research, led by James and carried out in collaboration with neurobiologist Professor Randolph Menzel from the Free University of Berlin, tested the theory that displaced bees rely only on remembered direction home from familiar landmarks, referenced to the sun's position.

"We reasoned that if bees relied only on the sun to navigate, then a circadian shift should disrupt the bees' ability to locate their hive after release," says James.

They caught the honey bees and anaesthetised them for six hours, to shift their circadian clocks. Miniature transponders were fixed to each bee's thorax to enable the bees to be radar-tracked from the time of their release.

"Initially clock-shifted bees use their sun compass, but realised their mistake and were

able to navigate back to the hive as quickly as the control group bees," says Craig Millar.

Before it had been assumed that the bee brain was too small to have a cognitive map, because it did not have enough neurons to perform computational tasks.

"By giving the bees the equivalent of jet-lag for a couple of hours that tricked them into thinking it was a different time of day, we were able to show that despite making a predictable mistake in direction on leaving the release site, they quickly corrected the angle," says James.

"The bees don't get lost, so they must have a backup system for navigation as well as using landmarks to get back to the hive – they are using a cognitive map to integrate their position. They worked out where they were and within a few hundred metres had corrected their direction and got back to the hive, just as fast as the control group."

Another aspect of the study was to look at how anaesthetic may shift or disrupt the circadian clock and how that may cause post-operative sleep disruption in patients.

James says this study, supported by the Marsden Fund, is part of a broader programme of work "to learn how anaesthetics clock-shift the human biological clock and induce jet-lag like symptoms. Our research also uses mammal models and clinical trials to see to what extent anaesthetics disrupt the circadian clock.

"We are looking at the effect of anesthesia on the circadian clock and how it impacts on navigation by honey bees, and relating that to anesthesia in clinical situations for humans."

The findings have implications for surgery and the impact anesthesia has on causing post-operative sleep problems in people. "If we can stop that happening, we might decrease hospital and recovery time for patients suffering from post-operative fatigue and circadian disruption," he says.

The findings of this study were published in June in the *Proceedings of the National Sciences of America (PNAS)*.



A bee fitted with a transponder.

THE POPPER CHALLENGE

Distinguished Professor Brian Boyd (English, Drama, and Writing Studies) won awards around the world for his biography of Russian-American writer Vladimir Nabokov, which has been called “the greatest literary biography ever written”. He earned a Marsden grant for his 22nd book, a biography of the Austrian-English philosopher Karl Popper, to be published by Harvard University Press. The research has so far taken him to 17 countries.

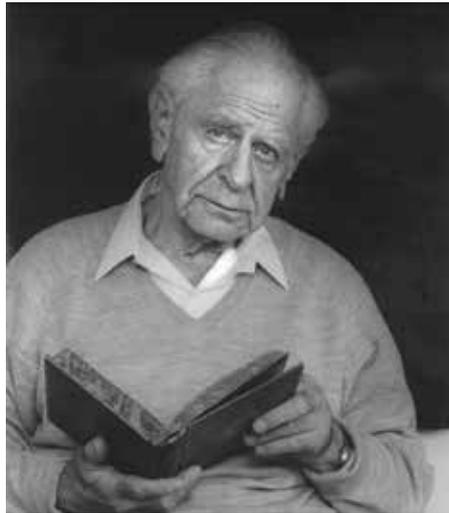
Karl Popper provokes wild disagreements. For many, he was one of the most important philosophers of the twentieth century, or even the most important, “a kind of endlessly spouting fountain of ideas”. He influenced and was paid homage to by Nobel prizewinners of every kind, Physics, Chemistry, Medicine or Physiology, Literature, Peace and Economics. He changed the way science is done. His work helped bring about the fall of the Berlin Wall.

He inspired George Soros both to win billions in financial markets by betting against received wisdom and to give away billions to promote democracy and education in areas of great need, like Eastern Europe after 1989 and Africa. Soros does this through his Open Society Foundation, named after *The Open Society and Its Enemies*, the book Popper wrote in Christchurch as his “war effort”. In samizdat versions *The Open Society* would become, in the words of Eastern European dissidents, “our Bible.” No wonder historian Michael King rated it the most important book to have come out of New Zealand.

Yet in his home discipline, philosophy, and even in his core areas, epistemology (the theory of knowledge) and political philosophy, Popper often meets neglect, indifference, dismissal or hostility. While some think him hopelessly conservative, others find him dangerously radical. Recently a prominent philosopher told me: “I wish the world would forget him.”

Since starting work on this first full biography of Popper, I have seen it as my task to ensure the world does not forget him: I agree with the small minority of philosophers who think his time is still to come. What I have been discovering has been just how live, raw and extreme are the disagreements he provokes, and how deep runs the need to explain them.

Why has his work been rated so highly by so many in so many fields outside philosophy — in physics alone, from Albert Einstein 80 years ago to the present, in David Deutsch, the pioneer of quantum computation — yet so often rated so low by philosophers? Among the reasons is Popper’s readiness to challenge anything. He critiqued



Karl Popper. Photo: Horst Tappe.

what he came to see as the authoritarianism of Western thought, the claims that ideas derive authority through tradition, or the senses, or the mind, or expert consensus. He opposed what he called justificationism, the almost universal assumption that our ideas can be justified, or that knowledge is justified true belief. He argued that we see too little through our little peephole into cosmic space and time to be able to justify our ideas, let alone to attain certainty: instead we should expose our proposals to the most searching criticism we can invent and retain provisionally only what survives the criticisms we can find so far.

Not only Popper’s ideas have provoked divergent reactions: so too has his character. He has been called both charmless, unlovable, a monster, and gentle, kind, sweet, and inspiring. He was undoubtedly a difficult man, and a complex one, and I look forward to showing why, where and when he triggered such intense negative and positive reactions.

Popper proposed — even in the title of one of his books — that *All Life is Problem-Solving*. The most interesting of the innumerable problems his biography poses me is to explain why his ideas, so disconcerting to some, are so exhilarating to others. He proposed that we have no guaranteed answers; but our world is open, as well as challenging, and if we challenge our best solutions so far to the problems facing us, we may feel spurred to come up with better, or might even discover richer problems that might inspire in turn yet richer solutions — even if still tentative, still unguaranteed, still open to fresh criticism, still exposed to new risks.

Highlighting some of the University’s news and commentary that have hit the headlines in the past month.

BRAIN-CHANGING FOOD

That lack of ‘kick’ you feel when drinking diet beverages has a scientific basis: it seems the mouth is able to detect the presence or absence of carbohydrate even in liquids that taste and smell identical. Senior Sports and Exercise Science lecturer Nick Gant’s findings on our fondness for carbs hit the headlines this month with coverage on NewstalkZB and the *New Zealand Herald*. Carbohydrates are extremely powerful oral stimuli that affect the brain profoundly and the mouth is a more capable sensory organ than we currently appreciate, says Nick.

A BUZZ ABOUT BEES

The news of new insights gained by University of Auckland scientists into the way bees navigate was picked up with interest by the media, including the *Economist* in the UK. The study, published by *Proceedings of the National Sciences of America (PNAS)*, proves that bees navigate by building mental maps of unfamiliar territory. See the research story opposite.

IMPORTANCE OF ARTS

Professor Robert Greenberg (Dean of Arts) wrote an opinion piece about the value of a BA degree that appeared in the *New Zealand Herald*. Emphasising the worth of a BA in today’s workforce it was also a response to the Government’s May Budget that saw a \$67 million increase in funding to STEM subjects.

LEGAL ANGLES

The recent conviction of former ACT MP John Banks for filing a false donations declaration caused a flurry of media enquiries from journalists seeking “where to from here” comment from academics at the Faculty of Law. Among those caught up in the melee were Professional Teaching Fellow Dr Bill Hodge, whose comments were reported widely in print, broadcast and television media.

FROM THE COLLECTION

ART COLLECTION



Emigrating from New Zealand at the age of 24 years when the Depression was at its height, Felix Kelly used the graphic design skills he had developed at the Elam School of Fine Arts to win a coveted position as a layout artist at Lintas in London, the advertising wing of Unilever in Britain.

Highly skilled at networking, and with a fondness for sports cars, he soon insinuated himself into the English aristocracy, accepting many commissions to depict country houses. One such edifice appears in the background of this wintry scene, with a glazed conservatory snaking out from its side. Wandering out from this construction are the three ethereal women who are the sisters of the title.

Kelly cut a dashing figure as an airman in the RAF during wartime but suffered a nervous breakdown and was hospitalised twice in 1943, the year after this painting was completed. Despite this, he managed to produce six small paintings which were included in the summer

exhibition at the prestigious St James gallery, Alex. Reid and Lefevre Ltd. in August 1943. Tatler commented on these as “delicious little pictures”, as Felix Kelly was a well-known society figure, but the magazine’s columnist failed to remark on the morbid note struck by this work or to observe that the artist was in Shenley Psychiatric Hospital for the duration of the exhibition.

A production of Anton Chekhov’s *Three Sisters* premiered on Broadway in 1942, making the cover of *Time* magazine, perhaps precipitating this Gothic interpretation of the subject by Felix Kelly. Emily, Charlotte and Anne Bronte are the obvious candidates for the three sisters that inspired Chekhov’s play. Kelly’s three sisters are Bronte lookalikes, clad in dark Victorian clothing with veiled hats and trailing trains behind them, marching singly out towards the viewer through a row of iron hoops, like mourners in a procession. Above, lopsided wintry trees claw the sky, leaning away from the prevailing wind, their branches broken on one side by storms. The effect is

to make the three sisters seem like dreamlike apparitions, or sleepwalkers under a spell. Art historian William Gaunt (1900-1980) pointed out that Kelly’s figures do not inhabit the scenes in which he places them so much as haunt them.

To Felix Kelly’s delight, this painting was purchased by the esteemed art critic Herbert Read (1893-1968) who, like the Brontes, (and William Gaunt) came from Yorkshire. Read commissioned Kelly to illustrate the new edition of his novella *The Green Child* in 1945. He was then persuaded by Kelly the following year to write the introductory essay for the Falcon Press book *Paintings* by Felix Kelly, which reproduced 41 of the artist’s works. Revealingly, Kelly wrote to Read to explain his rather spiritual approach to painting: “Firstly, before commencing a painting I must realise the emotional content of my subject. Secondly, whatever the subject, either imaginative or otherwise, I like to compose it not only of the visible but the invisible people or things once there. Thirdly, I suppose it is obvious that the classical symbols of the eighteenth century have the strongest appeal.” In *Three Sisters*, this recipe is clearly evident: the mood is sombre, the figures ghost-like and the architecture Georgian.

Don Basset of the Art History Department researched the life and work of Felix Kelly for a book and exhibition in 2006, and in recognition of that scholarship *Three Sisters* was recently donated to the University by Herbert Read’s daughter-in-law, Louise Read. It will go on display at the Gus Fisher Gallery in the exhibition *Gifted*, curated by art history student Maria-Constanza Labra-Odde on 5 September 2014.

■ Linda Tyler

ARTWORK: Felix Kelly (1915-1994) *Three Sisters* 1943, oil on paper, 210 x 255mm

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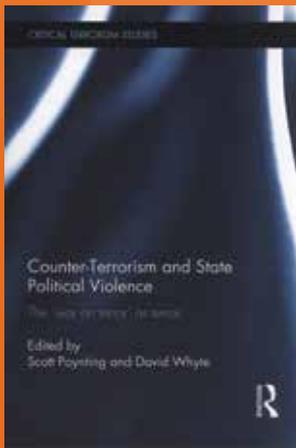
NEED A HOUSE SITTER? Female academic (Associate Professor at Unitec) is looking for house sitting opportunities in Semester 2. I am currently in UK, but am returning to New Zealand to teach and would like to hear of any house sitting opportunities between August and November, for either the whole or part of that period. Please contact Jill Hadfield, email is charjill@extra.co.nz

MISCELLANEOUS

CAFÉ-STYLE PHILOSOPHY COMES TO AUCKLAND. Welcome to lively and informal discussion on topics that matter – at the Leys Institute Library, 20 St Mary’s Bay Road. Fortnightly on Saturdays 2-3.30pm. Facilitated by Wayne Brittenden, presenter of Wayne Brittenden’s Counterpoint on Radio New Zealand. Topics:
Sat 5 July: Is New Zealand anti-intellectual?
Sat 19 July: Is democracy dying?
Sat 2 August: Topic to be decided by the group on the day.
Sat 16 August: Euthanasia.
Free admission – but please bring an open mind.

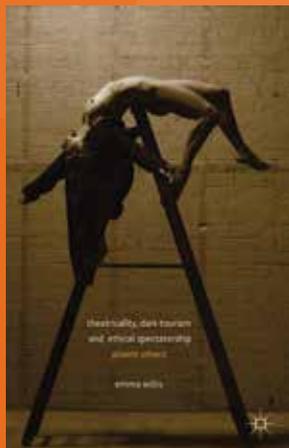
COUNTER-TERRORISM

Counter-Terrorism and State Political Violence, edited by Professor Scott Poynting (Sociology) and David Whyte from the University of Liverpool, aims to deepen understanding of state power through a series of case studies of political violence arising from state “counter-terrorism” strategies. The book examines how these strategies are invariably underpinned by terror in the form of state political violence. It seeks to answer three key questions. To what extent can counter-terror strategies be read as a form of state terror? How fundamental is state terror to the maintenance of a neo-liberal social order? What are the features of counter-terrorism that render it so easily reducible to state terror? Contributing authors draw on case studies from a range of contexts, including the UK and Northern Ireland, the US and Colombia and Sri Lanka and Tamil Eelam. The book also includes chapters by John Pilger and Noam Chomsky, which provide a global and historical context. The book is published by Routledge.



THEATRICALITY

In *Theatricality, Dark Terrorism and Ethical Spectatorship: Absent Others*, Dr Emma Willis (English) builds upon recent literature concerning theatre and ethics and offers a unique interdisciplinary approach. With a focus on spectatorship, the book brings together analysis of dark tourism — travel to sites of death and disaster — and theatrical performances. At dark tourism sites objects and architecture are often personified, imagined to speak on behalf of absent victims. Spectators are drawn into this scenario in that they are asked to “hear” the voices of the dead. This book asks whether playing the part of the listener can be understood in ethical terms. Sites surveyed span broad geographical sites — Germany, Poland, Vietnam., Cambodia, New Zealand and Rwanda — brought into contrast with performances including Jerzy Grotowski’s *Akropolis*, Catherine Filloux’s *Photographs from S21* and Erik Ehn’s *Maria Kizito*. The book is published by Palgrave, Macmillan in hardback. Ebooks are available.



FANTAIL

Shot over 20 nights on location in a working Auckland petrol station, *Fantail* tells the story of Tania, a young woman who believes she is Māori.



Tania is working the night shift at a petrol station to save up to take her younger brother to Surfer’s Paradise to find their father. In a way that is essentially local as well as intensely sad and moving, the film explores issues of identity and belonging. If you are lucky, it will still be showing in Auckland when this issue of *Uninews* is published. Editor Richard Shaw, a graduate from the University of Auckland, says one of the things that made work on the film exciting was that it was the first feature for many of those who worked on it, including director Curtis Vowell and scriptwriter, Sophie Henderson, who also played the leading part.



CINEMA GROUP: This is a group for University staff and students interested in filmgoing to attend European movies on a regular basis at the Lido and Academy Cinemas. Meet for coffee. All welcome. Contact aberens0021@hotmail.co.nz

CITY LEGAL SERVICES. Rainey Collins Wright is a small law firm centrally located at L1 Princes Court, 2 Princes Street. We are near the University, with good parking. We can assist with property transactions, trusts, wills, administration of estates, enduring powers of attorney and relationship property matters. Please phone our senior solicitor Nichola Christie on 379 5828 to discuss your needs, or email nchristie@rainey.co.nz wVisit www.rainey.co.nz

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DRONE DEATHS AND NZ

In April this year, the media reported that a New Zealand citizen had been killed in a United States drone attack in Yemen.

The man, in his twenties, had a wife and children in New Zealand. He was later named as Daryl Jones. He had been killed last November, but it took the five months to identify the remains from his DNA. Five people were killed in this drone strike, including also 27-year-old Australian Christopher Harvard. Intelligence sources were quoted that Jones and Harvard belonged to that curious category of human beings now coyly termed “collateral damage”. Theirs is apparently a lesser humanity, without human rights. Though not the primary target of the assassination by drone, they were knowingly and wilfully killed in its execution.

Prime Minister John Key was not interested in asserting the rights, under international law, of the New Zealand citizen. Far from it, he believed that the strike was “justified”, as a means of “dealing with terrorists”. Had Jones been suspected of committing any crime — and no evidence of such has been presented — he should have been tried in a properly convened court, as stipulated in Article 10 of the Universal Declaration of Human Rights. Instead, he was smeared in the media as a “footsoldier of Al Qaeda”, by anonymous counter-terrorism sources intent on mitigating the “collateral” killing, as a routine part of their psychological operations propaganda. It is not as if the US and New Zealand intelligence services didn’t know where Jones was; Key himself affirmed that he was under their surveillance.

Indeed, investigative journalist Jeremy

Scahill asserts that “New Zealand, through signals intercepts, is directly involved with what is effectively an American assassination programme”. He raises the question of whether “the New Zealand Government, the Australian government ... have provided the Americans with specific intel that could have led to the tracking and killing of their own citizens”. He is not alone in raising this question: Australia’s former conservative coalition Prime Minister, Malcolm Fraser, last month raised the issue of signals intelligence facilities at the US-controlled joint military base at Pine Gap in Australia’s north being used to target drones and thus perpetrate crimes against humanity.

According to the Bureau of Investigative Journalism, over 2002-14 there have been 64 to 76 confirmed US drone strikes in Yemen, killing 334 to 488 people, including 34 to 84 civilians of whom seven or eight were children; with another 93 to 112 possible drone strikes, resulting in a further 315 to 505 deaths, of which 24 to 48 were of civilians including six to nine children. In his report of March this year, UN Human Rights Council Special Rapporteur Ben Emmerson recorded that US drone strikes in Yemen had been significantly increasing, and noted serious doubt about President Obama’s May 2013 claim that drone strikes would not be launched unless there was “near certainty” that no civilians would be killed or injured.

In Pakistan, it is worse: the Bureau of Investigative Journalism reports that in that country there have been 383 CIA drone strikes, 332 of these under Obama’s presidency. These have resulted in almost a thousand civilian

deaths, with some 200 of these being children. Malcolm Fraser’s concerns about crimes against humanity, alongside this horrifying and well documented toll, appear to be well founded.

The 2012 *Living Under Drones* report by researchers from Stanford Law School and New York University School of Law argues, on the base of extensive empirical research, that drone strikes studied in Pakistan contravene International Humanitarian Law and International Human Rights Law by “using lethal force against individuals who are not members of armed groups with whom the US is in an armed conflict, or otherwise against individuals not posing an imminent threat to life”. The drone attacks fail to distinguish combatants from non-combatants, they wreak disproportionate casualties on civilians, they inflict inhumanity on civilian populations, and they exceed military necessity.

Particularly problematic are so-called “signature strikes”, which target victims on the basis of generic characteristics observed from afar or via flawed intelligence, rather than known combat roles. If it transpires that New Zealand, like Australia, plays a part in this targeting, then Mr Key may have to overcome his unconcern.

Scott Poynting is Professor in Criminology in the School of Social Sciences. He is co-editor of Counter-Terrorism and State Political Violence: The War on Terror as Terror (Routledge, 2012) and teaches a graduate course on State Crime.