

**NEXT STOP:
SPACE**

AUT mission control
for private space flight

**CURBING YOUTH
DRINKING**

Do drink prices even
make a difference?

**GASTRONOMY
MAJOR**

Ray McVinnie gets
his knives out

Insight

THE MAGAZINE OF AUT UNIVERSITY

ISSUE ONE 2012



CHANGE AGENT

Andrew Kilding's sports science
could bring home Olympic gold

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the changing world.



Insight

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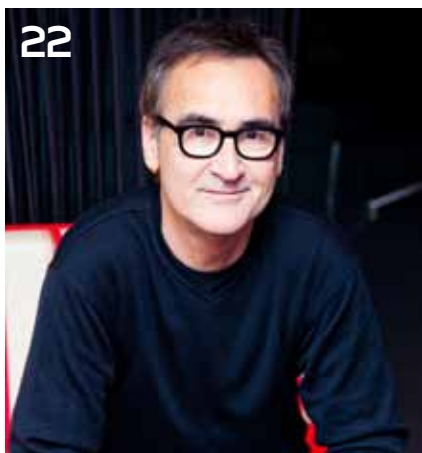
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Welcome



Derek McCormack, Vice-Chancellor AUT University, Universities NZ Chair

In an increasingly globalised market, the successful education providers will be those that best prepare individuals to adapt and move with the changing world. They need to do more than anticipate change, they need to lead it.

As New Zealand's freshest university, AUT is ideally placed to do just that.

AUT takes pride in producing professionals with specific vocational qualifications but it also equips them with a wider skill-set. They leave AUT as creative thinkers, good communicators, effective listeners and most importantly, with the ability to keep learning.

The world will be a very different place in the middle of the century, when the majority of AUT's 2012 graduates approach retirement age

As is the case today, AUT alumni will be working throughout the world in industry, politics, healthcare and the arts. Not only will they have moved and adapted to the changes in society, they will in many cases be responsible for the changes.

As well as preparing students for the future world, AUT's leadership team is also focused on the University's own evolution. In this edition of Insight we look at the

myriad ways in which AUT itself is changing.

AUT's Institute for Radio Astronomy and Space Research (IRASR) played an important role in the recent SpaceX launch. Our Warkworth telescope tracked the spacecraft through its entire mission to the International Space Station. Because of its geographical location, data from Warkworth is critical in checking the status of all systems during re-entry and determining the precise landing location. This will be even more important for future manned SpaceX missions.

The University's Manukau Campus and soon-to-be-completed WG Precinct in the City Campus both reflect the leading thinking in learning and teaching, blended with new technologies, to create vibrant and engaging places of learning.

With the London Olympics just around the corner, New Zealand athletes have been making use of the recently opened SPRINZ sport science laboratory at the AUT Millennium Campus. AUT's SPRINZ sport science laboratory is a key component of the National Training Centre which was opened last October by International Olympic Committee president, Dr Jacques Rogge.

The changing world is an exciting world. AUT is changing with it, and helping to change it, educating people who will help shape the future. ■

NEXT STOP: SPACE

Launching its Falcon 9 rocket and Dragon space capsule on the first private space flight to the International Space Station, a Californian space exploration company took humanity a step closer to space tourism and the possibility of space immigration, with AUT forming an integral part of the mission control crew.

Owned by PayPal founder Elon Musk, SpaceX (Space Exploration Technologies) has contracted AUT's Institute for Radio Astronomy and Space Research (IRASR) to monitor up to 12 space flights a year for 10 years. Initial flights will deliver cargo but SpaceX will later transport ISS crews, eventually expanding its service to private tourists. Musk says ultimately he would like to transport people to Mars and beyond.

AUT's IRASR was approached by SpaceX due to its geographical location and the fact that it has worked extensively with space agencies worldwide including NASA, ESA (European Space Agency), the Russian Space Agency and JAXA (Japanese Space Agency).

AUT's radio astronomy observatory north of Auckland tracks the spacecraft and translates critical operating data between it and its operational headquarters throughout flights. However on re-entry AUT's astronomers take on a critical role, providing SpaceX with the Dragon's landing coordinates.

SpaceX mission operations engineer Steve Mance says, "AUT's station will play an extremely important role in missions and we are incredibly excited to have the IRASR as part of the team". ■



The Falcon 9 launches from Cape Canaveral Air Force Station in Florida.

WORLD INTERNET PROJECT

The third bi-annual World Internet Project New Zealand, conducted by AUT's Institute of Culture, Discourse and Communication has reported that 86 per cent of New Zealanders are now on the internet.

Below are just some of the statistics from the report, completed late last year.

64% of internet users say they belong to a social networking site (SNS)

91% OF INTERNET USERS IN NEW ZEALAND ARE NOW ON BROADBAND

72% of internet users buy things online

58%

of internet users log onto their internet banking accounts at least once a week

58% of New Zealanders feel the internet is important or very important in their everyday lives

Almost half (48%) say they use the internet to sell things

More females

use social networking sites than males

Use of the **internet** in New Zealand has continued to rise, reaching 86% in 2011 up from 76% in 2007 and 83% in 2009

69%

of respondents rated the internet as an important source of information ahead of television, newspapers, radio and other people.

FOR MORE STATISTICS FROM THE REPORT PLEASE VISIT WIPNZ.AUT.AC.NZ

AUT celebrates leadership week

Everyone has a dream; the only difference is that some people turn their dreams into reality.

That's the philosophy of The Sir Peter Blake Trust, organiser of the well-known annual Red Socks Day and the driving force behind Leadership Week (22-29 June).

In full support of the Sir Peter Blake Trust, AUT Business School, including Dean Geoff Perry, are hosting a number of its own events this month to coincide with Leadership Week.

DREAM TEAM

Dean Dr Geoff Perry and Blake leader and director of business relations at AUT Sarah Trotman will speak to schools on 26 June, as part of the Trusts Dream Team initiative. The event encourages inspirational business leaders throughout the country to visit schools and speak about their leadership experiences, inspiring young audiences to set their own visions.

SHADOW A LEADER

Two students from Onehunga High Business

School, two from Takapuna Grammar School and four AUT business students join four of the trust's Blake leaders for the AUT Business School Shadow a Leader Day on 28 June. Each of the students has the opportunity to 'shadow' their leader and experience a day in the leader's own business environment. The leaders and students will also join AUT Business School Dean Dr Geoff Perry and industry partners at a leaders' lunch at the University's Four Seasons restaurant. Blake leader Sam Johnson of the Christchurch Student Volunteer Army will attend to give a speech on his achievements over the past 18 months.

BIG SLEEP OUT

The annual event, this year taking place at AUT on 28 June, is organised to raise funds to support homelessness. Dean of Business School, Geoff Perry will join other leaders in sleeping rough.

RED SOCKS DAY

AUT Business School staff will join thousands

of others around the country in support of great leadership on Friday 27 June in wearing their bright socks for Red Socks Day.

Dr Perry says all these events contribute to the Business School's mission of educating quality future leaders.

"We hope by visiting schools and sharing the experiences of some of New Zealand's top business leaders, we can help inspire students at the very start of their career path, who may be thinking about a career in business. They may have a dream or a vision of what they would love to achieve, and we want to help them turn these dreams in to reality."

For more information on Leadership Week, see www.aut.ac.nz/study-at-aut/study-areas/business or contact Sarah Trotman: 09 921 9999 ext. 5391, sarah.trotman@aut.ac.nz

DOCO HITS HIGH NOTE

A documentary by AUT University television and screen production lecturer Jim Marbrook about survivors of New Zealand's old psychiatric units was shown in cinemas nationwide as part of the World Cinema Showcase.

Mental Notes, a heart-wrenching and, at times, funny portrait of five people dealing with a past that many would find hard to imagine today, was screened in cinemas in Auckland, Wellington, Christchurch and Dunedin.

Despite the grim subject matter with images of ECT trolleys and 'seclusion rooms', Marbrook says he set out to pay tribute to the strength and resilience of the survivors who still managed to positively confront their past.

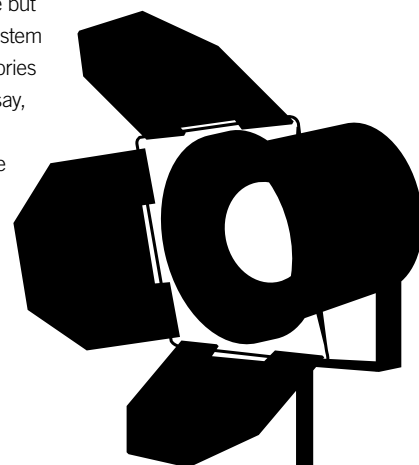
Having co-produced a television piece in 2007 for TVNZ's *Sunday* programme about psychiatric abuse claims,

Marbrook wanted to take a different approach with this film.

"It's not an investigative journalism piece but more a human study of a medical-social system that didn't really work. These are hidden stories that need to come out. I hope people can say, 'Let's not go back there'.

"It's clear that people are better off in the community and this requires continued commitment to support and funding by the government."

Mental Notes is Marbrook's fifth major film and took three years to make. He says the advice and experience of other AUT television staff and technicians was invaluable. ■



Dutch film residency for Ings

AUT Professor Welby Ings is back from an eight-week residency with a prestigious film institute.

Ings, a professor of graphic design, is no stranger to the filmmaking world having made two short films. He is now working on his first feature length film.

The screenplay and director's outline of his 95 minute feature *Punch* so impressed the Maurits Binger Film Institute in the Netherlands, it offered him a special residency.

"They only select a tiny number of films from around the world for this annually and I was really honoured by their recognition. They designed a special edition just for *Punch* because they recognised its distinctive nature and my history of designing, directing and writing highly unusual short narrative films."

During his time at the institute Ings says he was able to refine small details of the work before moving it towards production.

"The time there gave me the chance to work with actors and a range of world class directors and establish a deeper substrate from which to bring the feature into being."

He believes the residency is unique because it allows a writer or director to work from the inside of their film out.

"Instead of the normal practice of critiques being applied to the structure of the script, I got the chance

to make mock-ups of difficult scenes (with actors and editors) and having made these I, along with a selection of world leading directors, sat down and reflected on not only the narrative, but also the visual substance and potentials of the scene."

While in Europe, Ings was also able to see his most recent short film *Munted* show at several European festivals.

Munted was refused selection for the New Zealand Film Festival last year but premiered in Montreal. Following that it won Best Short Film in the Lucerne International Film Festival and was selected for competition in a range of other major festivals including the 29th Brussels International Film Festival, the 53rd Bilbao International Film Festival and the 27th Berlin Interfilm Short Film Festival. It was also a finalist in the 2011 New Zealand Design Awards picking up an award for its innovative approach to visual narrative. ■





NEW STUDY FINDS LINK BETWEEN FENG SHUI AND HOTEL SUCCESS

A first-of-its-kind study by AUT researchers has proved there is a link between the reported success of a hotel and feng shui evaluations.

This exploratory study was completed by Dr Jill Poulston and Rene Bennett from the School of Hospitality and Tourism and looked at the feng shui in accommodation establishments across Auckland.

"In six out of the eight properties studied, a close relationship was found, and the two properties with the poorest feng shui ratings also had the weakest success ratings," says Dr Poulston.

She says although feng shui can be considered a superstitious and unscientific way of trying to determine success, some hospitality businesses follow the principles perhaps to improve ambience, profit, luck or to attract Asian customers.

Although not all feng shui necessarily makes immediate sense, it could be argued that the placement of specific items in a house or office creates psychological effects on an inhabitant's subconscious mind, according to Dr Poulston.

Participants were advised that the study was about hotel design but included questions on feng shui. After interviews, the feng shui of the

foyer and entrance of each hotel were evaluated. Performance indicators favoured by industry such as staff turnover, occupancy and profit were therefore used subjectively.

Properties ranged from a large internationally branded five star hotel to two locally branded backpackers' lodges.

Participants were surprisingly knowledgeable about feng shui but none had implemented feng shui remedies to attract good luck. Results showed strong relationships between feng shui evaluations and managers' descriptions of success.

"It is important to note this relationship, which offers designers and managers guidelines for improving the visual impact and perhaps feelings of success of their properties," says Dr Poulston.

She says there was clear evidence of good feng shui associated with feelings of success too.

"This might indicate that good feng shui promotes positive thinking. It also seems likely that pleasant surroundings may encourage a positive state of mind, resulting in a more positive reflection on progress and achievement."

Poulston says after the success of the study she is already looking at further study with 20 hotels taking part and a 50 point system evaluating feng shui. ■

TEAM SNARES MICROSOFT'S IMAGINE CUP

A UT-led Team Mobile Eye has won the 2012 Microsoft Imagine Cup, impressing the judges with a mobile phone application developed for the blind.

The team, AUT graphic design major Jade Tan, AUT maths and engineering student Aakash Polra and University of Auckland software engineering student In-Hwan Kim, beat 15 other teams to win the opportunity to represent New Zealand at the worldwide Microsoft Imagine Cup finals in Sydney in July.

Sponsored by Microsoft, the Imagine Cup



challenges teams of students around the world to use technology to solve global problems. Mobile Eye's solution lets a blind person take a photo of their surroundings on their mobile phone and receive a crowd-sourced audio description in just a few seconds, using social media.

Microsoft New Zealand developer and platform group director Scott Wylie says Team Mobile Eye stood out with its imagination,

passion, creativity and a well thought-out solution to address the issues faced by people who are blind.

"The team is now aiming for the worldwide finals and we expect the international judges will be very impressed with this New Zealand team's work."

Team leader Aakash Polra says, "We are so excited about winning. It proves our idea is solid and all the hard work we have put in has paid off.

"We wouldn't have been able to do it without the support of our mentors, Microsoft, our family and friends, and others in the industry, so thank you to them. We are thrilled to be going to the worldwide finals to represent New Zealand and hope to bring home the cup for the first time." ■



WORLD'S OLDEST MODEL

A team of AUT public relations and communications postgraduate students have won the hotly contested Paul Dryden Tertiary Award at the 2012 PRINZ (Public Relations Institute of New Zealand) Awards for a campaign called The Oldest Catwalk Models in the World.

Working as AUT's pro-bono agency Outside the Square, the campaign team focused on raising awareness of Auckland senior housing charity Abbeyfield. The key event was a packed fashion show at Lynn Mall, New Lynn featuring elderly residents of Abbeyfield as catwalk models dressed in top New Zealand fashion labels like Zambesi, Pearl, Vanilla Ink and Robyn Mathieson. 3News covered the show which featured models ranging in age from 72 to 93 modelling for a crowd of 450.

The winning team of Jo Greggains, Scott McKee, Randy Manickavasagar, Emma Bryant and Adam Winship also conducted a national survey on age perceptions to coincide with UN International Day of Older Persons. ■



LANGUAGE REVITALISED

A contingent of 20 academics, staff and students from the Te Ara Poutama (Maori Development) faculty attended a two-day symposium in New York titled "Revitalisation in the 21st Century: Going Global, Staying Local". The symposium, held at the end of May, was co-hosted by AUT's International Centre for Language Revitalisation, the Endangered Language Initiative of the Graduate Center of the City University of New York (CUNY), the Endangered Languages Alliance and the Film and Video Centre of the Smithsonian National Museum of the American Indian. The group in the USA also present at the Native American and Indigenous Studies association Conference at the beginning of June. ■



Professor Tania Ka'ai
of Te Ara Poutama
(Maori Development)

WINEMAKERS DINNER SERIES BACK FOR 2012

The AUT Winemakers' Dinner Series run by the School of Hospitality and Tourism is back for 2012. Winemakers from various winemaking regions across New Zealand are showcasing their wine at AUT's Four Seasons restaurant with chefs from AUT matching the wines with a five-course degustation menu. Vineyards showcasing this year are Woollaston Estate, Ti Point, Kumeu River and Pegasus Bay.

Alumni receive a discount, making the dinner just \$85 pp. The general price for guests is \$95 pp. Bookings can be made on (09) 921 9932 or by emailing fourseasons.restaurant@aut.ac.nz. ■

CAPPING OUR FORCES

Health and Environmental Sciences Dean Professor Max Abbott and Private Ryan George.



A medic ready to graduate.

AUT University and the New Zealand Defence Force (NZDF) recently celebrated the first graduation of paramedicine students from the Defence Force Health School in Christchurch.

As the result of a unique partnership between AUT and the NZDF, 50 students from across the three Defence Force services – army, navy and air force – made up the first cohort of students to graduate from the Diploma in Paramedicine Science and Graduate Diploma of Health Science through the Defence Force Health School.

“This partnership is one of a kind internationally. There is a growing importance for academic qualifications to validate the credentials of health professionals across the board. This programme provides NZDF medics with expertise and training which is recognised internationally,” says Dean of AUT University’s Faculty of Health and Environmental Sciences Professor Max Abbott.

The graduation of medics was initially due to take place

at Burnham Military Camp in Christchurch in February 2011. The ceremony was cancelled after the earthquake and NZDF staff and students were called in to support emergency services.

Chief Instructor of the Defence Force Health School Major Brendan Wood says it was a significant moment when the graduation finally took place this year.

“The young men and women proudly walked out in front of friends, family, senior Defence Force officers and veterans of Defence Force health services to celebrate their qualifying as registered medics.”

“The new training programme for our medics came to fruition in 2010 and is now fully integrated into the defence training regime. The training prepares our medics for operations at a world-class level,” he says.

Defence Force medics overseas are usually trained vocationally, says Major Wood.

“The challenge faced by the NZDF includes the likely registration of paramedics and defence medics in the future. This will require a robust qualification and the AUT education package used by the NZDF will enable this.” ■

LAW STUDENT SCORES TOP INTERNSHIP

AUT law student Nina Vanderlaan proved that talent, determination and persistence really do drive success, following her offer of a three-month internship at top law firm Buddle Findlay this summer.

“Every March information about the various internships and what they are looking for is available on each firm’s website, and also via the centralised application forum, cvmail,” says Vanderlaan. “The job application process is quite strenuous, but a good learning experience.”

Following a highly competitive application process, Vanderlaan was accepted on an internship at Buddle Findlay, offering her full time exposure to the industry between December 2011 and February this year.

“My time at Buddle Findlay was fantastic,” says Vanderlaan. “The clerkship comprised two rotations and we were given the opportunity to choose what practice areas we would rotate through. I opted for corporate and litigation, and the variety of work I was given meant I was able

to experience different styles and expectations of work and mentoring.”

Patrina Smith from Buddle Findlay says when selecting a student for the internship programme, the firm not only looks for someone who is academically strong, but also someone who is committed to a career in law, motivated, positive and a team player.

“As our clients are paramount, graduates need to be good communicators, keen to work with and learn about our business and have an interest in a range of activities.

“Not only did Nina fit all of the above criteria, she also has an engaging personality that allows her to interact comfortably across all levels and a positivity and willingness that will stand her in exceptional stead for the future.”

Following her internship, Vanderlaan has since been offered a part-time job at Buddle Findlay, as well as a full-time place on the graduate programme once she completes her studies.

The AUT Law School opened in 2009, with

the first round of law students completing their degree at the end of this year.

For more information, see <http://www.aut.ac.nz/study-at-aut/study-areas/law> ■

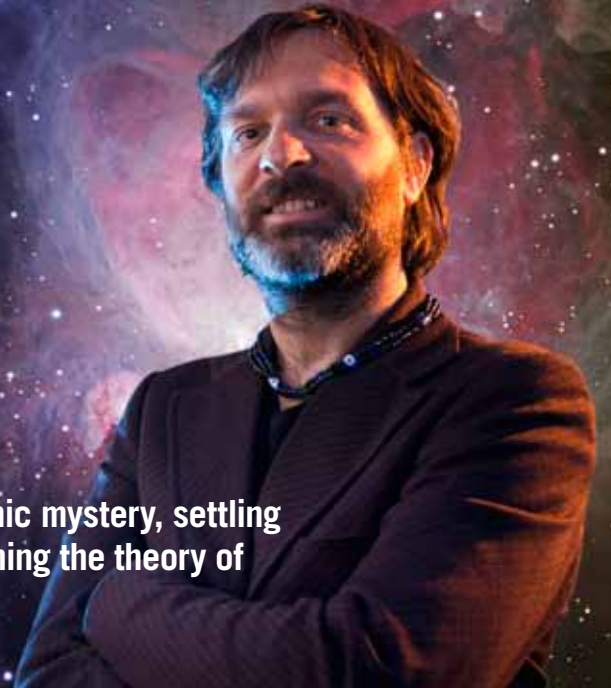


Nina Vanderlaan

SOLVING THE PUZZLE OF GIANT ATOMS

WRITTEN BY **ANDREA MALCOLM**

A PhD astronomy student at AUT has solved an atomic mystery, settling the concerns of astronomers worldwide and reaffirming the theory of quantum physics.



AUT PhD student Jordan Alexander has earned international praise by solving a problem which had thrown the validity of quantum mechanics into question.

Alexander was intrigued to discover that the theory of quantum mechanics, which explains the behaviour of atoms, could be wrong and decided to look deeper into the controversy which centred on the existence of giant atoms.

Atoms consist of a nucleus made up of protons and neutrons, orbited by electrons. On Earth the greatest distance between the nucleus and the outer most electrons is microscopic (a tenth of a billionth of a metre), but in the vacuum of interstellar space the distance between a nucleus and the outermost electrons (the diameter of the atom) can be 10 million times greater – as large as a millimetre, which is truly gigantic for objects of the micro world. This is because the space between stars is devoid of matter and there is little to interfere with atoms becoming so large.

The existence of such atoms had been predicted in the early 20th century by the physicist and ‘father’ of quantum mechanics Niels Bohr, who was a student of New Zealander Ernest Rutherford.

In the 1960s radio astronomers believed they had proved Bohr right. Using radio telescopes they had detected signals from atoms in deep space and then calculated the radio spectrum of these signals using quantum mechanics. The width of the radio spectral lines gave information about the density of the atoms while the frequencies of these lines told about the electron orbits, leading to the conclusion that these were the giants Bohr had foretold.

But all was thrown into confusion in the 1990s when Canadian radio astronomer Morley Bell published a new study saying the widths that had been observed and recorded were too narrow and contradicted quantum theory.

At AUT’s Institute of Radio Astronomy and Space Research, Alexander was fascinated by this problem. He meticulously re-examined the data and conducted observations of interstellar

matter in the Orion Nebula using the Australia Telescope Compact Array (ATCA), a group of telescopes run by the Australia Telescope National Facility.

“We turned every stone over one by one. Every time we looked things became a little clearer,” he says.

Alexander carefully modelled all the conditions of the observations and theoretical investigations found that the spectral lines do not actually narrow – Bell’s technique had caused the lines to appear narrow.

Alexander’s supervisor Professor Sergei Gulyaev says, “I believe we are the first group that has done such a thorough investigation of this paradox”.

“We are the first group that has done such a thorough investigation of this paradox.”

After four years of work Alexander has been able to explain Bell’s apparently paradoxical observations and the theory of quantum mechanics appears to be safely back on its pedestal in the regime of ultra low density matter.

Miller Goss, the Director of the Very Large Array of the National Radio Astronomy Observatory in the United States says the field needed Alexander’s work.

“For those of us who work in the field of hydrogen radio recombination lines, the results of Alexander and Gulyaev are a major source of satisfaction. It was hard for us to believe that the existing theory was not correct. Many follow up observations with radio telescopes are now suggested. I suspect these will be carried out in the near future.” ■

Alexander’s investigations and finding are the topic of his PhD dissertation “Observation and Theory of Highly Excited Radio Recombination Lines”, published in the 2012 *Astrophysical Journal*.



New **space**
design
enriches
learning

Both the *city* and *Manukau* campuses are undertaking large-scale building developments.

WRITTEN BY **EMILY DAVIES** AND
RACHEL REYNOLDS



AUT's newest campus is bringing together world-class university education with the latest approach to tertiary learning spaces.

Set on the former 7.8ha site of Carter Holt Harvey close to the Manukau CBD, the existing office buildings on the site were refurbished for immediate use in 2010 as the Manukau Campus.

"The requirements were to provide flexible learning spaces which would be able to accommodate current and evolving pedagogies, energise and inspire students and ensure the space was able to support different

purposes," says director of asset development Suzanne Webb.

Now entering its third year, the campus offers flexible blended teaching areas, a learning commons and mobile furniture to greater enable student interaction during classes. In the years ahead as the campus grows, it is anticipated that the university will be able to continue to create student-centric teaching and learning spaces according to the latest research in space planning.

"The campus' development was supported by research carried out by the university across Canada and the USA," says Webb. "All the latest



(above) The new WG Precinct will provide more than 1000m² extra covered space.

thinking in this area points towards collaborative learning spaces that are attractive and comfortable places to be. So at Manukau, we have tried to create a learning commons area that encourages social interaction and peer collegiality. Colours and materials are bright and we have modern, funky furniture that is popular with students.”

In the classroom, the traditional model of the lecturer at the front of a large lecture hall is increasingly a thing of the past. Besides presenting information in a traditional sense, lecturers encourage and facilitate discussions between students. The greater use of group work means students are able to express and hear a greater variety of personal and political views from their classmates. The teacher and student boundary is reconfigured as learners become teachers and teachers become learners.

Mobile furniture is an important part of this change. Small classes with tables that can be configured in groups of two or four have replaced the traditional top-down approach of yesterday's vast lecture halls.

With Manukau home to New Zealand's youngest and fastest growing population, expected to grow by around 38 per cent over the next 20 years, AUT is poised to meet the region's demands for university education in a world-class learning environment.

WG PRECINCT, CITY CAMPUS

It's a similar story at AUT's City Campus, with the current construction of a new \$100 million development well underway. Designed to provide the most contemporary and innovative facilities in which our students and staff can learn and teach, our new precinct is set to transform our central location.

The site previously housed two old buildings, providing space for studios and engineering workshops. With both buildings becoming obsolete and having no historic value, it was an ideal site in which to expand, modernise and connect the City Campus.

The new development will enhance and optimise the way students learn today, and provide spaces that encourage exchange, interaction, collaboration and convergence. An on-site cafe, student kitchen facilities and a range of different furniture styles and bookable study areas will provide students with an opportunity to choose exactly the type of environment in which to learn.

In addition to TV, motion capture, green screen, sound and performance studios, the precinct will also include a comprehensive media centre to support the range of communications programmes on offer at AUT.

As well as students and staff, the space will be open to external audiences, with an atrium plaza linking a number of the main university buildings to create an all-season public space. Multiple areas to host internal and external conferences, exhibitions, and special events will be available for hire, ranging in size and style, making the campus more available to a wider Auckland audience.

This 20,000 square metre precinct demonstrates AUT's innovative, creative, technological and contemporary approach to education for the changing the world. ■

Our WG Precinct opens for semester 1, 2013. For more information, see www.aut.ac.nz/futureme



(far left) AUT Manukau Campus

(left) The new WG Precinct from Mayoral Drive



Picking winners

AUT experts dish out the medals ahead of the 2012 Olympics

WRITTEN BY **ANDY KENWORTHY**

The Olympic Games test more than just the athletes. Putting this multi-billion dollar extravaganza together calls for high performance across a broad range of disciplines. *Insight* has put together a panel of AUT experts to judge the way things are shaping up in London.



SPORTS SCIENCE

Sport and science have always been closely linked. But there has been an explosion in monitoring and management technology for athletes in recent decades.

Sports Performance Research Institute New Zealand (SPRINTZ) director Dr Andrew Kilding knows all about how this can yield world-class performance. The Associate Professor's research is all about squeezing an extra one or two percent out of an athlete's performance. "If we work in two or three different areas, maybe we can get an extra half a percent from each," he explains. That two percent could help get a Kiwi on the olympic dias.

"Sport science hasn't just changed the face of the Olympics;

it has transformed the whole way athletes go about preparing for any competition," says Kilding. "At the elite level, sport scientists are now considered integral to the athletes' support team, and depending on the sport and budget, a whole team of sport scientists each with a specific focus will do their bit to help prepare an athlete for major competition. But it can be hard to tell what impact it's actually having, as there are so many factors that determine athletic success on any given day.

"There are many countries that have significant, big-budget sport science support systems to help in achieving their gold medal aspirations, in particular Great Britain, USA, Germany and Australia. The overall high performance support structure in New Zealand is improving, though some individual sports in New Zealand have very good high performance systems in place and use sport science support effectively.

"It's unlikely that New Zealand will ever be able to match the financial power of many other nations, which could put them at a disadvantage in some sports. But we have had several Olympic-bound athletes through the SPRINTZ labs already in 2012 each receiving different types of assessments to help them prepare

THROUGH THE EYES OF THE ATHLETE

AUT law student Shay Neal has spent the last few months juggling his studies with intense hockey training. In July, he'll head to London with the Black Sticks to compete in the 2012 Olympics.

It's an added pressure most students don't have to contend with. Yet for Neal, having the opportunity to be part of such a monumental global event makes it all worthwhile.

"The Olympic squad was named at the end of last year, and to know that I was in contention to be selected for the Olympic Games was an amazing feeling. It has been all up-hill from there, with countless training sessions and games, but hopefully the hard work will pay off.

"Competing at the Olympics is the pinnacle of any athlete's career," he says. "Representing your country at an Olympic Games, Commonwealth Games or World Cup – it doesn't get much better than that."

Neal says the London Olympics looks set to be bigger and better than ever before, with many changes taking place for 2012.

"From an athlete's perspective, the village and competition set up looks amazing, and the distance from accommodation to the sports fields is a lot closer than in previous years, which will also be an added benefit."

So how exactly does an athlete prepare for the Olympics?

"The training is very intense, but that only helps us to get in the best shape possible leading up to the games. We do eight sessions on the turf per week, three strength and conditioning sessions and a couple of games, on top of this we have meetings and recovery sessions. We have to eat good food, otherwise our energy for the sessions and performance will drop come the last sessions in the week."

On dealing with the pressure of global competition, Neal says he doesn't listen to any pressures that may be voiced outside of his team environment.

"We have a goal as a team to medal at the Olympics, so we put pressure on ourselves to work hard to achieve this goal.

"It's not an option to perform badly in this Olympic year. If things aren't going right, we work on correcting these things at trainings or in meetings." ■

AUT wishes Shay Neal and the Black Sticks all the best in London.

Shay Neal playing for the Black Sticks against Korea.



for the games. We will hopefully see our research findings being applied in the preparation of New Zealand athletes, including those who are heading to London, and those developing athletes whose target is the Rio Olympics in 2016, or even the games following in 2020."



MARKETING AND ADVERTISING

When you are spending close to £10 billion (19.3 billion NZD) on a party lasting a couple of weeks, you need to get hold of a lot of corporate cash.

Associate Professor of marketing and advertising Dr Mark Glynn knows a bit about how this is done. "Corporate sponsorship contributes a significant proportion of the revenue from staging the Olympic Games – as much as 40 per cent," he says. "The Olympics represent an opportunity for brands to simultaneously reach a large global media audience, create goodwill for the brand and pursue marketing and advertising activities at a local level."

However, he explains that one of the biggest challenges for sponsors is to make real impact and be heard above the many competing brand voices around the event.

"Event organisers have to attract a number of sponsors in order to stage the event, which can potentially dilute the impact an individual brand has. As a result many consumers are often unaware that a particular firm is actually sponsoring an event. Firms such as Visa, Coca-Cola and McDonalds have been associated with many sports events, including the Olympics, over the years and people are generally aware of the involvement of these brands. However, you may wonder how many customers are actually aware that firms such as P&G or Acer computers are also major sponsors of the games."

"For the firms the end results of sponsoring can be hard to pinpoint amongst their overall marketing activity," he adds. "This means it is important to monitor brand awareness and goodwill towards a brand to see if these have been enhanced, as well as test to see if customers are actually aware of the connection the brand has with the event."



THE OLYMPIC BRAND

The Olympic Brand comes with more than 2,500 years of history and automatic international exposure, but how this potential has changed over the years is not without controversy.

Senior lecturer of marketing and advertising Dave Bibby is among the doubters of the Olympic 2012 visual identity. "The brand personality is quite unique. Sport is entertainment, hence the billions who watch the games on television around the world, and entertainment doesn't get any bigger than this event. In addition, you have the nationalistic fervour that is ignited when 'our' athletes do well. A unique and heady combination of appeals that sponsors can attach themselves to and mine to their own advantage.

"The Olympic brand has adapted extremely well to the new digital era of mass communication. Not just utilising the 'old' media of television, print and radio, but all the new digital media that the Internet has facilitated. This includes social media, viral emails, online blogs and interactive media. In addition, sports sponsorship has grown exponentially on the back of the Olympics, ever since the first privatised Olympic Games in 1984.

"The real danger is 'ambush marketing'. If the legitimate sponsors' rights are not protected there will eventually be no sponsors, and the event will struggle to continue for lack of funding."

TOURISM MANAGEMENT



As Aucklanders know from recent experience, welcoming the world's sports fans to your doorstep is not something to be taken lightly. Director of AUT's New Zealand Tourism Research Institute Simon Milne charts the games' potential, and their potential for pitfalls.

"The economic costs are usually higher than anticipated and are not usually offset by the games. But the broader publicity, legacy of facilities, public goodwill, potential growth in interest in sports and healthy lifestyles are argued to outweigh any monetary shortfall," he says.

"Hopefully, nothing is overlooked given the size and importance of this event. Having just been in London it is clear that urban infrastructure and other things are being developed in an attempt to cope with the influx. One thing that is sometimes overlooked is the impact on residents and the potential inconvenience that some may experience.

"It is also essential that visitors are encouraged to spend time travelling around the country prior to or post the event, but this is not an easy thing to achieve and people do not have limitless time and monetary budgets.

"I don't think the results can be judged until after the event. There has certainly been a focus locally on making the games inclusive for all citizens, which will also be a major factor in overseas marketing campaigns for UK tourism."

SPATIAL DESIGN



Perhaps the most tangible impact of the games and their most lasting legacy is in the building of the sporting venues and supporting infrastructure.

Lecturer in spatial design Carl Douglas says:

"The biggest challenge is to do it in such a way as to keep the city working for its non-Olympic inhabitants during the games, and to ensure that the city, not just corporate sponsors, retains lasting benefit.

"The Legacy Promises and Legacy Action Plan documents seem to indicate that there's a high level of awareness about these issues, and there's definitely a strong will to avoid a city littered with abandoned white elephants. This seems pretty hopeful. There's obviously a massive focus on infrastructure.



The London 2012 Olympics velodrome.

Some of this is great: the new Javelin trains, for example. But there's also a covert infrastructure of security and surveillance that I'm not so sure will end up being a blessing for Londoners in the long-term.

"And there have been some missteps. The ArcelorMittal Orbit tower seems to have originated in a wilful moment on the part of Mayor Boris Johnson, who decided the city needed 'something extra'. In my view it's little more than an ugly and egotistical corporate artwork – Lakshmi Mittal, the UK's richest man, put up most of the money.

"The last figures I saw suggested that the costs of the games had originally been estimated at £2.4bn, and are now heading towards £24bn, counting improvements to public transport. I hope that the intense financial speculation that accompanies the games, which a lot of people make a lot of money out of, doesn't end up shipwrecking good intentions with respect to the city's legacy."

EMPLOYMENT



In these troubling economic times, a lot of people are understandably more concerned about getting a job than how fast Usain Bolt can run.

The Olympic jamboree is estimated to directly employ 100,000 people for varying lengths of time, but the extent to which it will provide a long lasting employment boost is yet to be seen.

Work and employment Professor Erling Rasmussen says events like these are one generally effective way of attracting people – especially talented people – to a city and region, by creating places where people wish to live and work.

"The Olympics is a sporting event like all the others. It works in terms of employment by upgrading buildings and infrastructure, building a city where people want to live, advertising and so on. Will a lot of these jobs be temporary? Yes, there is no doubt about that.

"But the event itself is quite necessary for the process because you get the immediate effects of tourism, hospitality and media exposure. There is also a whole sporting community and industry that gets developed. You could probably invest money in other ways, but the reality is you probably wouldn't without these high profile events.

"The timing is good for the London Olympics because it is in the middle of a downturn and the British economy has had quite a rough ride recently. That's why the Rugby World Cup was important for us, because we were at the bottom end of a recession." ■

New Zealand's home *of* elite sport

AUT's newest campus,
AUT Millennium Campus,
is host to Olympic athletes
and a stunning army of sports
science gear and facilities. We
take a peek.

WRITTEN BY **SCOTT WINTON**



Mike Stanley



MEET MIKE STANLEY – CHANGE AGENT

The former world champion rower and president of the New Zealand Olympic Committee is now the CEO of the AUT Millennium Ownership Trust (AMOT), the body managing AUT's newest campus in Mairangi Bay on Auckland's North Shore.

The new campus is the home of elite sport in New Zealand where Olympic athletes like shot put gold medallist Valerie Adams do their training. The campus houses:

- an aquatic centre
- athletics stadium
- public gym and medical services
- a training and recovery area for elite athletes
- Sports Performance Research Institute New Zealand Laboratory (SPRINZ)

In addition to his leadership roles with the New Zealand Olympic Committee and AMOT, Stanley is on the board of High Performance Sport New Zealand (HPSNZ) – the government-funded body for New Zealand's high performance sport.

Stanley says while the various partners have different functions, they all have the interest of athletes at heart and being located in one facility has many advantages. "Having AUT sport scientists working with National Sporting Organisations [NSOs] domiciled next to the HPSNZ training area breaks down the silo effect," he says.

Stanley believes the benefits go beyond helping elite sportspeople achieve on the world stage.

"For example we have swimming and hockey training here. AUT sport scientists, coaches and medical experts can contribute to their enhanced performance and then disseminate that knowledge into the community.

The objective of the SPRINZ facility is to produce world-class research that benefits not only high performance athletes but also the wider community.

"That is possible in a hothouse environment like we have here but difficult if a programme is spread out among the clubs as they can be possessive of that information," he says.

Those sentiments echo the words of International Olympic Committee president, Dr Jacques Rogge, who visited the SPRINZ laboratory last year. He said having a university embedded in such a facility is unique and he named it one of the top three facilities of its kind in the world.

AUT was an obvious choice when it came to deciding on a sport science provider, says Stanley.

"AUT is a leader in sport science. It has always had a very strong relationship with the New Zealand Academy of Sport North Island and now with HPSNZ."

The campus officially opened in June this year. Stanley says it is a very exciting time but the work is not finished. "We would like to do other expansions like another indoor sports hall to be used by a wide range of sports. AUT has purchased an additional site adjoining the campus, which will future-proof the site.

"I'm so pleased that we have created a culture of integration and excellence. If you don't have that culture then it's just a building. It's people that make these things work." ■

AUT RUNNING CLINIC CONNECTS WITH THE WORLD

AUT's running mechanics clinic at the Sports Performance Research Institute New Zealand (SPRINZ) is now part of the world's largest running biomechanics database.

The clinic has joined the University of Calgary, Oxford University, Ohio State University and the Federal University of Brazil, creating a unique database to improve understanding of how people can run faster and more efficiently, and avoid injury.

The treadmill at the AUT running mechanics

clinic is surrounded by nine high-tech cameras which produces 3D images of the runners. That 3D information is then fed into the worldwide database for further analysis by the researchers.

Research gained from the database will benefit elite athletes as well as recreational runners.

Clinic manager Kelly Sheerin, who spent six months with researchers at the University of Calgary, says it's an exciting project.

"With more than 2000 people now on the database we can start to get a better idea



of what is causing specific injuries. We can also better understand how we can change someone's technique to get the best out of their running," he says.

The collaboration began in September 2007 after Kelly Sheerin, AUT Professor Patria Hume and Dr Reed Ferber from the University of Calgary began research collaboration on running mechanics and injury prevention.

It has now expanded across four continents and includes some of the most advanced biomechanics technology in the world.

CHANGE AGENTS

BIG, FIT AND STRONG

Manchester United players are routinely monitored to gauge their susceptibility to illnesses. Now New Zealand's elite athletes have the same available to them with the opening of the Sports Biochemistry and Immunology Laboratory at AUT Millennium Campus.

The laboratory is a key component of AUT University's Sports Performance Research Institute New Zealand (SPRINZ), investigating the effect sport and exercise has on our immune system.

To perform at the top level, elite sportspeople push their bodies to the limit in training, which is often thought to suppress their immune system, increasing their propensity to illness.

Kiwis training for international competitions can obtain an indication of how their immune system is coping with training and therefore their potential susceptibility to infection. They can then adjust their training accordingly to prevent drops in athletic performance or training lay-offs that may occur as a

result of illness.

Laboratory manager Dr Deborah Fletcher says this type of analysis and research is becoming increasingly important for top sportspeople.

"Due to the large physical, personal and economic investment athletes and coaches put into preparing for competition, a real need exists to identify strategies aimed at minimising an athlete's risk of infection that could otherwise impede athletic performance and see their performance affected by illness," she says.

As well as investigating the effect training may have on an athlete's immune system, Dr Fletcher and her team are also researching what effect various supplements may have on the immune system of athletes in response to exercise.

One of the first substances being tested at the lab is caffeine, which is no longer on the World Anti-Doping Agency's list of banned substances.

It is generally accepted that caffeine improves performance but Dr Fletcher and Masters student Chloe Gibson have studied top Auckland runners to understand what effect various doses of caffeine may have on immune systems after strenuous running. ■



Top triathletes like Debbie Tanner will benefit from AUT University's sports laboratory joining the world's largest running biomechanics database.

NASA-DESIGNED TREADMILL BOOSTS AUT SPORTS RESEARCH

Pursuing his dream of working with Olympic-class athletes has led US student Kyle Barnes to New Zealand and AUT.

The PhD candidate is now working with the NASA-designed AlterG treadmill coaching one of New Zealand's top athletes, Commonwealth Games double silver medallist, middle distance runner Nikki Hamblin.

Barnes's research is an example of how AUT's Sports Performance Research Institute New Zealand (SPRINZ) successfully collaborates with High Performance Sport New Zealand (HPSNZ) now that they are both based at the AUT Millennium Campus.

"To be able to work with Olympic calibre athletes in the world-class facilities at SPRINZ is a dream come true. The opportunities AUT and SPRINZ have provided me with has made the move to New Zealand the best decision I've ever made," he says.

Barnes spends most of his days in the SPRINZ offices overlooking the athletics track at AUT Millennium Campus while working on his thesis, which examines ways to improve efficiency in endurance athletes.

Originally designed to help rehabilitate astronauts after returning to Earth with reduced bone density and muscle atrophy, the AlterG is now being used to help athletes all over the world prevent and recover from injuries.

The athlete runs inside a waist-high chamber which encases the treadmill. The pressure inside the chamber is then increased to create a lifting force on the body which decreases the weight of the athlete.

That weight can be decreased to as low as 20% and up to as much as 95% of the athlete's actual body weight which allows them to train with the desired impact force on their body.

"When you decrease the body weight, you can run faster for the same effort. Therefore to achieve the same heart rate, you need to run faster which means the body needs to significantly increase the frequency of muscle contractions. I want to find out what that increase in muscle contraction frequency is having on the musculo-skeletal system and heart." ■





FIRST, DO NO HARM

WRITTEN BY **ANTHEA MCLEARY**

Ketamine is commonly known for its use as an animal tranquiliser and recreational drug, so it may come as a surprise that it is used clinically as a method of sedating children.

Lack of knowledge about the long term effects of this practice on developing brains, has prompted AUT clinical educator and registered nurse Michael Neufeld to investigate the ethical implications and risks associated with Ketamine use in paediatrics as part of his Master of Health Science.

Ketamine has been used as a dissociative sedative since the 1970s when it was first developed to replace the anaesthetic drug phencyclidine (PCP), which had devastating neurotoxic effects.

The drug was adopted into paediatric practice in New Zealand in 2003 and since then it has proven a popular method of sedation in emergency medicine, enabling invasive medical procedures without the need for general anaesthetic.

“From a clinical perspective, Ketamine provides an efficient and economical way to perform painful procedures in paediatric practice without the use of general anaesthesia, however its long-term effects upon children are not understood.”

Neufeld says while there has been a general reduction of Ketamine use in adult populations across the United Kingdom, United States and Canada, the use in children is increasing.

“Ketamine separates mind from body and can result in what is known as emergence phenomena, causing hallucinations, vivid nightmares, disorientation and behavioural changes. Looking beyond immediate emergence phenomena, few studies have attempted to ascertain the potential for long-term, negative, non-physiological side effects.”

Early research has found that in young adults, the odds of

the patient experiencing unpleasant dreams in the three days following the procedure was three times more likely following Ketamine sedation.

Other findings indicated that children under three years of age who underwent sedation were twice as likely to develop future learning difficulties.

“Some children have reportedly awoken from Ketamine sedation seeing aliens or asking if they were dead.”

Neufeld was motivated to further his research when he received a Health Research Council summer studentship in 2011. Working with Dr Tineke Water and Dr Rosemary Godbold as part of his Master’s thesis, he hopes to complete the research by mid 2013.

In his current role, Neufeld works with undergraduate students as a clinical educator. Previously he worked in paediatric homecare and emergency, where Ketamine sedation is frequently administered.

Neufeld is particularly interested in how healthcare professionals determine risk and harm in paediatric practice. He says further understanding and research into children’s experiences of Ketamine sedation is required to ensure the best possible health outcomes for children and their families.

“If the overriding rule is to do no harm in health care, then harm must be eliminated for the act to be morally and ethically acceptable,” he says.

“One could argue that medical science is attempting to do just that when seeking to understand the physiological risks faced by patients undergoing Ketamine sedation. However, an awakening to other potential non-physiological risks could bring rise to better health outcomes for children.” ■

GUESS WHO'S COMING TO DINNER?

International guests from across the globe visit AUT in 2012



SWEDEN, FINLAND, CANADA, CHINA, SINGAPORE, UNITED KINGDOM, UNITED STATES AND AUSTRALIA

A number of leading international problem gambling experts, including researchers and policy makers from Sweden, Finland, Canada, China, Singapore, United Kingdom, United States and Australia visited AUT in February to attend the 8th International Think Tank on Gambling Research, Policy and Practice. The focus of the think tank was to advance understanding of gambling in the context of public health, social and economic development and to ultimately effect international change. It was followed by the conference *Shaping the Future of Gambling – Positive Change through Policy, Practice and Research*, which was attended by over 230 delegates from more than 14 countries around the world.

EXPERTS INCLUDED:

DR SALLY GAINSBURY
CLINICAL PSYCHOLOGIST AND POST DOCTORAL RESEARCH FELLOW AT THE CENTRE FOR GAMBLING EDUCATION & RESEARCH, SOUTHERN CROSS UNIVERSITY, AUSTRALIA

PROFESSOR DAVID HODGINS
FROM THE UNIVERSITY OF CALGARY'S FACULTY OF MEDICINE AND DEPARTMENT OF CLINICAL PSYCHOLOGY

DR RACHEL VOLBERG
PRESIDENT OF THE AMERICAN-BASED GEMINI RESEARCH – A LEADING INTERNATIONAL ORGANISATION WHICH SPECIALISES IN PROBLEM GAMBLING RESEARCH. DR VOLBERG IS WIDELY REGARDED AS ONE OF THE MOST EXPERIENCED PROBLEM GAMBLING EPIDEMIOLOGISTS IN THE WORLD AND HAS WORKED EXTENSIVELY WITH AUT PROFESSOR MAX ABBOTT ON PROBLEM GAMBLING IN NEW ZEALAND

CALIFORNIA, USA

If your business is stuck, Californian-born **KEITH YAMASHITA** will unstick it with his theories around design thinking and its role within leadership, branding and culture. Considered one of the leaders in design thinking, Yamashita was in New Zealand in March to talk to 300 of New Zealand's top CEOs at the Better by Design Summit. Before he flew back home he dropped in to AUT to give a two-hour guest lecture on the subject. University foreign policy expert Michael Mandelbaum.

MARYLAND, USA

A three-time Pulitzer Prize winner for journalism, **THOMAS FRIEDMAN** has had numerous roles at the New York Times including Beirut and Jerusalem bureau chief, chief White House correspondent and foreign affairs columnist. He is the author of six best-selling books and has written extensively on foreign affairs, global trade, the Middle East and environmental issues. He has been awarded an honorary Order of the British Empire. Friedman visited AUT earlier this year as a John F. Kennedy Memorial Fellow (awarded by Fulbright New Zealand) to give a lecture based on his latest best-selling book *That Used to be Us: How America Fell Behind in the World It Invented and How We Can Come Back*, co-authored with John Hopkins

OXFORD, UK

University of Oxford Vinerian Professor of English Law **ANDREW ASHWORTH** is also a Fellow of All Souls College, Oxford and a member of the Centre of Criminology. He has also been a Fellow of the British Academy since 1993, was appointed honorary QC in 1997 and was awarded a CBE in the Queen's Birthday Honours in 2009. Professor Ashworth visited AUT in March to give a public lecture *Guilty of doing nothing? Omissions, duties and crimes*, questioning whether there are situations when citizens could have a duty to intervene, reinforced by criminal sanction.

SYDNEY, AUSTRALIA

The inventor of wi-fi **DR JOHN O'SULLIVAN** visited AUT University in February to talk to an international gathering of scientists who converged in Auckland to attend the SKANZ2012 conference hosted by AUT. The Australian, who began his career as an electrical engineer, joined a lineup of speakers who offered pathways to the next level of challenges in receiver technology, fibre networks, signal processing, software and computer power generated by the Square Kilometre Array (SKA) – a giant radio telescope run by 67 organisations in 20 countries, to be hosted by either Australia or South Africa.

MASSACHUSETTS, USA

Harvard Business School Professor **GEOFFREY JONES** gave a public lecture at the AUT Business School in February on the evolution of the natural food and beauty industries. Geoffrey Jones is an Isidor Straus Professor of History at Harvard.

CONCEPCIÓN, CHILE

Associate Professor **GEORGINA MURRAY** and Professor **DAVID PEETZ**, both from Griffith University, and **FELIPE MEYER COHEN** from the University of Concepcion in Chile visited AUT in April as guest speakers at a public symposium on Health and Safety Issues in Mining, an Australian and New Zealand perspective, at the AUT Business School.

SYDNEY, AUSTRALIA

DR RON EKERS is best known as the man who was instrumental in the downgrading of Pluto as a planet in 2006 in an historical International Astronomical Union general assembly in Prague. He visited AUT University in February in his role as a part of the Australasian Square Kilometre Array (SKA) bid. The internationally funded project will cost \$3 to 4 billion and create hundreds of jobs and research opportunities in astronomy, mathematics, engineering, climate science, and other areas.

“We’ve got Knives”

What many people don’t know about the somewhat elusive *Ray McVinnie* is that he has a huge involvement with AUT, one which is about to get even bigger.

WRITTEN BY **CAITLIN MADDEN**

Ray McVinnie is a well-known character in New Zealand. He’s the glasses-wearing, sharp-witted man-in-the-know on New Zealand’s version of *Masterchef*, a food editor at *Cuisine* magazine and the same for the *Sunday Star Times’* Sunday magazine.

But what many people don’t know about the somewhat elusive McVinnie is that he has a huge involvement with AUT, one which is about to get even bigger.

McVinnie is a lecturer on the Department of Culinary Arts gastronomy paper, but he is also working with staff at AUT on producing a Bachelor of Arts gastronomy major.

For many, gastronomy is an unknown area, but McVinnie can easily tell you exactly what it is, and why is it so important.

“[It is] history, sociology and anthropology of food. It’s everything that humans do with food and it’s a lot more than people think. Because food is not just about eating. It’s a universal language that everybody understands. It’s so deeply ingrained in all society, a lot of people can’t see it anymore. It’s really interesting, it’s about how we use food for all sorts of things.”

And now, more than ever, is the right time to be introducing this major, according to McVinnie. Along with other staff members in the department, he is working on papers they

will teach on the course and McVinnie is writing a paper aptly named *Food and the Media* – an area he won’t have too much trouble sourcing material for.

“This paper will be food and art, food and film, food and newspapers and magazines, just all kinds of media. So we’ll look at food styling, food photography, all of that.”

McVinnie says completing a major like this will not be a dissimilar experience to completing a liberal arts degree. He believes students that complete these kinds of courses are brilliant and highly sought after.

“They know how to organise information. They can just about turn their hand to anything. That’s the whole point. This major will be perfect for a variety of students, especially those considering a career in hospitality.

“To be really blunt and very cynical if you want to make a whole lot of money out of hospitality you need to be as sophisticated as your most sophisticated customer because the more you can talk to them the more you can sell them ... you’ll be working for an economic entity and economic entities want to make profit.”

McVinnie’s knowledge in gastronomy is not the only thing he offers AUT, however. In fact, he started his time here in production, teaching students how to be chefs in restaurants. And he loved it so much that for the first semester of this year he has been back in the kitchen.

...as they said in *Lock Stock and Two Smoking Barrels*, ‘guns for show and knives for a pro’.



CHANGEMAKER

Ray McVinnie believes cooking has the power to “cure all the ills of society”, but only if people regain ownership of their culture’s food and place more importance on traditional food institutions like the shared table.

like. And you’ve got a whole lot of restaurant chefs who don’t own the food they cook,” he says.

“The only time they ever have any experience with that sort of food is when they are at work. They don’t eat it, they weren’t brought up with it and it’s bizarre.”

This is unlike old cultures, says McVinnie. Old cultures take the food that they grew up with to the restaurant, tidy it up and make it into erudite food. But they always own it, he says.

Industrialisation of the food supply completely skews people’s attitudes to food.

“It does away with things like the shared table because you don’t need to sit together and eat. It’s an incredibly important mechanism because that’s where you learn everything – at the table. That’s where you learn your manners. It’s where you learn to make eye contact with people. You take that social mechanism out of a culture and what are you going to replace it with? You’ve got to replace it with something and boy I hope it’s not TV.”

McVinnie says he believes cooking has the power to “cure all the ills of society”.

“If only people would wake up.”

It’s not just cooking that he holds in high regard, but also the unparalleled profession of being a chef.

“We call everyone else civilians,” he jokes. “And as they said in [the film] *Lock Stock and Two Smoking Barrels*, ‘guns for show and knives for a pro’. We’ve got knives.”

But McVinnie hasn’t always held a knife, nor did he know that was what he would be doing with his life. In fact, he completed a postgraduate degree in history, completing a dissertation while working in kitchens. After finishing his dissertation, with a year-long extension and with 25 minutes to spare, he realised cooking was what he really wanted to do.

“I was actually in a management consultant’s office one day filling out forms and I thought, ‘no’. I just put it down and said ‘Nah, I’ll take my chances,’ and I went off and got a job as a chef.”

He now holds a Diploma in Culinary Arts from AUT, but says at the beginning of his career he learnt his skills in the kitchen.

“I was really lucky; in those days I could get good jobs in restaurants where there were great chefs. I started off basically working my way up and I got trained by them. In effect I suppose I did an apprenticeship without the theory. But I provided my own theory because I read books all the time.”

When it comes down to it, McVinnie has a passion for food; a statement he wouldn’t deny.

“I just don’t like bad cooking, there’s no reason for it. All food is good as long as it’s cooked well. And I’m not talking, fancy, exotic, expensive. I’m talking simple food, cooked beautifully.” ■

“This is a training restaurant, Four Seasons, so I’m in there with a class of students that are learning what it’s like to be in a real kitchen. They do everything ... I make the bread. Which is great, I’m getting really good at it too.”

It was giving back and passing on knowledge that led McVinnie down the path of teaching, and being able to match that with his passion for food and 30 years worth of experience gives him a well-rounded view of cuisine, from teaching production to delving deeper into theory or the importance of food in society.

Anglo-Saxons have a very strange thing happening with food at the moment, according to McVinnie.

“They’ve rejected their traditional cuisine, for a start. They want to be incredibly eclectic and eat food from all sorts of different places but no one knows what it is supposed to taste



GENERATION EXCESS

PREPARED TO PAY THE PRICE

Excessive alcohol consumption is a primary public health challenge of the 21st century, and this is reflected on New Zealand shores. A recent AUT retail study has shown increased liquor prices do not deter youth alcohol consumption, a move the Government had considered. So where to from here? AUT academics add to the case for shifting social norms in order to curb consumption.

WRITTEN BY **EMILY DAVIES AND ANTHEA MCLEARY**

A considerable amount of research has suggested the excessive consumption of alcohol is an accepted social norm in New Zealand and Australia, and that young people deliberately drink to reach a level of intoxication.

“Alcohol is Janus-faced,” says Director of AUT’s Gambling and Addictions Research Centre, Professor Max Abbott. “With one hand it deals enjoyment, relaxation, celebration and entertainment, and with the other it deals impaired judgment, high risk behaviour, damaged relationships, ill-health, injury and premature death.”

“Many of these outcomes are largely a consequence of the way in which alcohol alters brain function. It’s been quipped that ‘conscience is that part of the brain which is soluble in alcohol.’ Alcohol has an affinity for the frontal lobes. These brain structures enable humans to anticipate future consequences of our actions, reflect on past experience, be self-critical and regulate current behaviour.”

Short-term, alcohol can reduce anxiety and inhibition, partly by impairing the functioning of this part of the brain. And this is largely its attraction, with these effects passing as alcohol is

metabolised. However, many people who drink heavily over a number of years, with those who frequently binge drink prone to developing chronic brain and psychological impairments that persist even if they stop drinking.

With the fiscal cost of excessive alcohol consumption estimated to cost the New Zealand economy between \$1.4 and \$4 billion every year, it's a significant problem that is impacting us all, not only the heavy consumers. Adding the social costs on top, this expense could even be as high as \$16 billion a year.

WHAT'S THE STORY?

Through her extensive research into the impacts of drugs and alcohol, AUT addictions counselor and researcher Dr Helen Warren says she believes consumption of alcohol is influenced by a number of factors.

"The role of the liquor industry, a genetic vulnerability towards problematic drinking in a section of our community and the greater social context all play their part in the excessive consumption of alcohol that has become the concern of parents, teachers, law and policy makers and treatment centres."

CHANGING OUR DRINKING BEHAVIOUR

Policies considered by the government to reduce consumption include a zero tolerance policy for drink driving offenses, increasing minimum legal ages, restricted sales policies and limits to advertising. Raising the tax on alcohol to raise the price and movements to limit the allowable alcohol content in some drinks that are popular with many young drinkers, such as ready-to-drink beverages (RTDs), have often been the core of government policies.

A recent experiment by AUT researchers was carried out to find out if, in fact, these proposed government changes will have any impact. Conducted in both Australia and New Zealand, the experiment, led by Associate Professor of retailing Andrew Parsons of AUT Business School, examined the effects of price changes and alcohol content changes on behavioural intention.

The results were analysed as part of the thesis of AUT business masters student Nicola Stephenson. They revealed that social norms are stronger than price effects in both countries – even when the price was increased by as much as 25 per cent, the students sampled in both countries would still not change their buying behaviour. The researchers also found that the alcohol content of beverages has a significant pull on their popularity in New Zealand. These findings therefore contradict government emphasis on fiscal and regulatory approaches to modifying purchasing choices.

It's been quipped that 'conscience is that part of the brain which is soluble in alcohol'.

Parsons suggests the government cannot simply rely on fiscally manipulated prices or product restrictions.

"Instead, more programmatic approaches like those used in anti-smoking have been shown to be more effective social interventions," he says.

"The influence of perceived social norms on consumer behaviour around drinking far outweighs the influence of price and alcohol content variations."

Professor Abbott also believes that changing social attitudes would have a bigger impact on reducing alcohol-related problems in New Zealand.

"Measures such as media and education campaigns, age restrictions, enforcement of current laws and regulations, further restraints on alcohol marketing and advertising, mobilising communities to design and implement programmes to reduce underage drinking, expanding effective treatment services and evaluating the effectiveness of interventions are all important.

"But changes in social attitudes and norms are known to have a significant impact. Countries that have chosen to run a combination of campaigns to change attitudes with legal and other measures have been most effective."

For Dr Warren, a combined intervention or strategy is likely to make the most significant impact on the drinking culture of New Zealanders.

"Price control and alcohol content are just part of the solution. Part of the programmatic approach Dr Parsons' research addresses needs to de-normalise alcohol consumption as an integral element of the fabric of our society and social interaction.

"As a society we apply a double standard to alcohol consumption: on the one hand we are quick to individualise problem drinking in the young and on the other we accept little or no collective responsibility for the general environment in which this pattern of alcohol consumption develops (including a high level of tolerance for drunkenness).

"Only by having a mix of regulatory measures and social norms working together will we push behaviour in the desired direction of change." ■

OUR BUSINESS

MEET BUSINESS'S BIGGEST FAN

Earlier this year, the AUT University Business School acquired the Excellence in Business Support Awards, brainchild of business support specialist and AUT's Director of Business Sarah Trotman. We ask what motivates her.



WHY DID YOU START THE EXCELLENCE IN BUSINESS SUPPORT AWARDS?

I wanted a mechanism that provided a rigorous and objective evaluation and acknowledged the very best business support on offer to New Zealand's businesses. Success of our business organisations is often dependant on the quality of business support services available.

WHY DO BUSINESSES ENTER?

All entrants report great value in the process of preparing their entry because it forces them to take a good look at their entire business model. At the end of the evaluation process we can provide a full report on the strengths and opportunities for improvement in the business across a wide range of business areas.

WHAT ARE THE BENEFITS OF ENTERING?

Being a finalist or a winner is a wonderful way for an organisation to set themselves apart from their competition. Most importantly though, we want to highlight the organisations that should be sought out by businesses for the valuable contribution they can make to a business's growth.

The AUT Excellence in Business Support Awards evaluation process is aligned to the Baldrige international quality standard of business excellence.

WHO ENTERS AND WHO SELECTS THE FINAL WINNERS?

There are twelve award categories including <\$5m turnover, large business, not for profit, government and individual. Previous Supreme Award winners include The National Bank, Sir Stephen Tindall's KEA (Kiwi Expats Abroad), Ministry of Economic Development and Designworks. The 100-120 entries that we attract come from right across the country.

WHAT ARE THE JUDGES LOOKING FOR?

Evaluators both consider the value and performance of the business support being offered. They are looking for clarity in the processes that achieve those results and specific details or data about the outcome of the process.

For me, a winner needs to be an organisation that is well led, meeting all stakeholders needs, with excellent sustainable results and underlying those results will be robust processes aligned to best practice.

WHY ARE THE AWARDS A GOOD FIT WITH THE AUT BUSINESS SCHOOL?

AUT's Business School understands both business education and business practice. The Business School has a strong reputation for its engagement with business, and is in fact a past winner of the Excellence in Business Support Awards. During their evaluation process I was impressed with their clarity of vision, commitment to quality business education, their connectedness to industry and that they did research that actually matters to business. ■

Sarah Trotman has previously been the CEO of Business Mentors New Zealand which provided mentorship to 5000 businesses each year. In 2005 she started Bizzzone.

www.aut.ac.nz/business/ebsa



Katerina Beattie took her Masters degree in Construction Management down to Christchurch where she knew she could put her studies to use.

CHANGEMAKER

REBUILDING A CITY AND ITS DREAMS

WRITTEN BY **GEORGINA HAMMOND**

Construction management graduate Katerina Beattie is helping to rebuild a city, and in doing so making a profound contribution to the rebuild of peoples' lives.

As an assistant project manager with MWH Mainzeal in Christchurch, she works with a group of engineers, designers and construction managers whose job is to rebuild Canterbury from the ground up. Beattie says her colleagues are from all over the world and the office is a buzz of different accents.

"Working in such a unique environment where everyone is learning on-the-fly is really inspiring. The combination of different nationalities and the experiences they bring creates a great learning environment."

Beattie is not from Christchurch; she applied for a job there after completing her Masters in Construction Management at AUT. Keen to put her newly gained design and construction skills to good use, she was acutely aware of the importance of being a "part of something so globally unique".

The region's reoccurring shocks and liquefaction means new work is constantly on the horizon. On any given day Beattie could be handling site verification to determine the extent of the damage, engaging contractors to scope and price each rebuild, coordinating architectural and engineering services to deliver design, reports, drawings and specifications, or driving construction on a rebuild.

Beattie is one of three female project managers, from a total of 40 who work out of the Christchurch office.

"The number of women working in the construction industry in New Zealand is still low, but it is becoming more common to see women in higher-level roles than it was 10 years ago.

"I wouldn't say we are behind the times when it comes to comparing us with the industry overseas. Even so, it's still a bit of a novelty and it is definitely a lot harder to earn respect being both young and a woman," she says.

"Being young, I can offer expertise in all forms of new technologies and being a woman can also have a positive impact

when working with clients as – I think – we can connect on a more emotional level than some of the men can."

The rebuilding of Christchurch is painfully slow. A substantial amount of the city hasn't begun due to the continuing aftershocks. Experts predict that it will be 15-20 years before the city is up and running again.

"There is a big problem – every time there is a large aftershock that causes significant damage a building owner may submit a new insurance claim for that damage, and this ultimately affects the cost of the rebuild and plays a key role in the lack of progress."

Changes to construction codes, now that Christchurch is regarded as earthquake prone, have been similar to other earthquake areas such as Wellington and Napier, although liquefaction has added complexity.

"Liquefaction has caused a unique problem for Christchurch. We must ensure that the land is sturdy before rebuilding, and significant piles must be made to ensure stability of the building."

It's been more than a year since Christchurch residents felt the effect of what has been dubbed 'the big one', and although much of the central business district still remains closed, many businesses have moved out into the suburbs to survive.

"Each project we work on presents a mixture of feelings. It is hard to leave work at work. So much happens each day and it is often emotionally charged as you are dealing with peoples' businesses and livelihoods."

Katerina's recipe for survival is all about shifting her focus. "I love that everything I do each day is contributing to the rebuild of a city; helping so many people gain a little normality and a sense of community back into their lives. Being part of a team that is rebuilding a city is a feeling that not many people will ever be able to experience and it's a really exciting one." ■

UGLY DUCKLINGS

Not much is known about the geoduck in New Zealand yet – that’s where AUT’s pioneering aquaculture researchers are leading the way. With a goal of \$1 billion worth of sales per annum by 2025, New Zealand’s aquaculture sector is of increasing economic importance.

WRITTEN BY **ANTHEA MCLEARY**

When you’re a geoduck (pronounced “*goeey duck*”, scientific name *panopea zelandica*), appearances can be deceiving in more ways than one. Found in New Zealand waters, it is the largest burrowing saltwater clam in the world. With an average weight of approximately one kilogram and an average shell size of 20 cm, the geoduck has, understandably, earned the name of ‘king clam’. Based on its phallic appearance, the name of ‘elephant-trunk clam’ is another obvious name.

“Geoducks are an established delicacy overseas,” says Associate Professor Andrea Alfaro, who heads AUT’s Aquaculture Biotechnology Group.

“Due to a robust demand from Asia and North America for geoduck, the capture fishery cannot satisfy the demand in an ecologically sustainable fashion. On a return-per-acre basis geoducks are the western region’s most valuable cultured shellfish species. Hence the intense interest in geoduck aquaculture and the predictions for continued rapid growth.”

In partnership with the Cawthron Institute, new research at AUT is now underway investigating the aquaculture market potential for geoducks in New Zealand and overseas.

The institute is known for its leading research and development of New Zealand’s seafood industry and sustainable management of the coastal and freshwater environment.

Mostly found off the Pacific coast of the United States and Canada, geoduck aquaculture does not exist in New Zealand as yet, says Alfaro, although they are harvested by scuba divers in the South Island’s Golden Bay at depths of about 18 metres.

“Recent trials at Cawthron Institute in Nelson have resulted in successful production of *panopea zelandica* seed (juveniles), which will soon be transplanted to wild growing areas,” says Alfaro.

“If New Zealand geoduck can be successfully cultivated to market size, this species will bring an added value to the growing aquaculture industry in this country.”

Doctoral student Le Viet Dung, who previously investigated the cultivation of a smaller geoduck species in Vietnam, is working alongside Alfaro conducting this research.

“Le’s previous knowledge will make a vital contribution to the cultivation of our New Zealand species. It is envisioned that

this government-funded research will generate the biological knowledge to successfully cultivate *panopea zelandica* to market size,” says Alfaro.

“Since there is a high demand for geoduck worldwide and only a few countries have a geoduck aquaculture industry, it is anticipated that New Zealand can easily break into this international market.”

In 2005 about 47.5 per cent of the geoduck market (*panopea generosa* market) came from British Columbia in Canada, another 47.5 per cent came from Washington, USA and five per cent from Alaska. The geoduck production in British Columbia alone was around 2 million tonnes a year during 2006-2008 and the price was also steady at US\$20/kg, yielding US\$40 million per year.

“The large meaty geoduck siphon is prized for its savoury flavour and crunchy texture. In Asia especially it’s a real delicacy, each costing up to \$300, so you can see the potential market value,” says Alfaro.

Purportedly an aphrodisiac, the texture of the geoduck is likened to a combination of clam and chicken, with the meat tasting like a sweeter version of crab. Traditionally, the neck is cut or ground and used in chowders or sautéed. Sushi fans may also have tasted the delicacy in their sashimi without knowing it – geoducks are known as mirugai in Japanese. ■

Geoducks – our next big export?





CONVERSATIONS AROUND CONSERVATION

WRITTEN BY **ANTHEA MCLEARY**

A gannet at the Muriwai colony - about 1,200 pairs of gannets nest here from August to March each year.

Following AUT signing a memorandum of understanding with the Department of Conservation to enrich conservation research, Dr Dave Towns has been appointed as Adjunct Professor of Conservation Biology at AUT.

Towns has worked with DOC since 1987, playing a pivotal role in the restoration and preservation of flora and fauna unique to New Zealand. Drawing on his 25 years experience he will boost terrestrial conservation research at AUT, which already has an established reputation for marine conservation.

Towns currently has three postgraduate students under his tutelage, although that number will grow based on the plans of evolutionary scientist Dr Len Gillman, head of AUT's School of Applied Sciences.

"DOC's conservation work has a very high profile both in New Zealand and within the international markets. Joint research projects that make use of both our expertise and that of DOC scientists will enhance the research capacity of both organisations," says Gillman.

"AUT are already involved in conservation science research involving marine mammals, benthic surveys and water quality surveys but our partnership with DOC will add a terrestrial component to that research and, more importantly, it will include the social aspect of conservation implementation which is critical to the success of all conservation initiatives."

One of the areas both parties are keen to develop is monitoring and surveying through geographic mapping techniques.

AUT recently purchased an unmanned aerial vehicle (UAV) from Skycam UAV. Commonly known as a drone, UAVs are better known for reconnaissance use in military operations. Their flight is usually controlled by remote control of a navigator, or pilot, though the AUT system also has a sophisticated on-board

autopilot. Through the remote sensing techniques of the UAV, it will provide AUT and DOC greater capacity for habitat mapping and marine and terrestrial surveillance.

Towns says that, overall, New Zealand is around 10-20 years ahead of the rest of the world with our unique conservation approach.

"We can now provide people with untouched worlds to see which, up until 20 years ago, were very much touched."

According to Dr Towns, throughout our country's young history, we have compromised our unique natural habitat, which is at the heart of our nation's identity.

"From a biological perspective we're weird, for instance we have a huge fauna of sea birds in New Zealand. It's not recognised so much in New Zealand, but it certainly is internationally. This is one of our biological selling points.

"But we've managed to screw up a good proportion of what we have in a spectacular fashion. About 40% of our native bird fauna is now gone - that's the terrestrial bird fauna, marine ones have survived quite well. We're not the worst island archipelago for that, but we're one of the best documented ones."

But what has set New Zealand apart from the rest of the world, he says, is having a conservation strategy centred on restoration and species preservation.

"The focus of attention has been on threatened species, but most of the success has been with threatened species on islands. Just by careful programme management and design, we're now regarded as by far the most effective people globally at removing pests from islands and developing restoration.

"New Zealand is internationally regarded in scientific and conservation circles for our conservation efforts on islands. We are the global gold standard." ■

IN THE BEST OF HEALTH

Driving the changing face of health care delivery

WRITTEN BY **ANTHEA MCLEARY**

Combined with a global shortage of health workers, New Zealand's health system faces a significant challenge meeting the needs of an ageing, ethnically diverse population. AUT is responding to this challenge by developing an interprofessional health workforce which collaborates across multifaceted disciplines and sectors – a model of health care which the World Health Organisation is driving internationally.

At the recently expanded Akoranga Integrated Health (AIH) clinic on AUT's North Shore campus, New Zealand's future health professionals are already studying and working together consultatively across different disciplines.

The AIH clinic is one of a kind internationally. It is both a core community health service and a training centre dedicated to educating a range of undergraduate and postgraduate health professionals. According to Associate Professor Duncan Reid, Associate Dean of Health, it embodies the changing face of health care delivery.

"At AIH we are leading interprofessional health care. This innovative model will help create a workforce that provides 'person and community centred care', instead of traditional treatment where an individual sees only one health professional."

The Osteoarthritis project is an example where a variety of health disciplines come together, including physiotherapy, nursing, podiatry, oral health, counselling psychology and occupational therapy, says Dr Reid.

"An estimated 16.2% of New Zealand's population live with some form of arthritis, so the goal is to develop students who have the complex skills needed to work in an interprofessional team to help provide a more comprehensive service for people living with osteoarthritis."

Aside from educating our future health professionals, the clinic also provides a range of cost effective health services for the community including physiotherapy, podiatry, oral hygiene, nurse led assessments, occupational therapy, counselling psychology, and speech language therapy for acquired dysfunction, says Clinic Manager Naomi Heap.

Recent developments at the clinic include improved facilities in the podiatry and oral health clinics - which now includes digital x-ray and 15 dental units. Another new feature at the clinic is a specialised motion analysis room, created to provide a space that facilitates opportunities for students from different

disciplines to work with patients using equipment including an advanced medical treadmill, gait analysis recording equipment and software, and a diagnostic pressure plate.

The interprofessional model of the clinic is simply reflective of a wider, holistic approach to health care, says Mrs Heap.

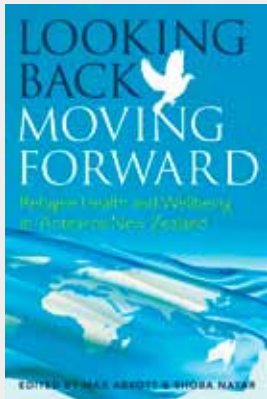
"With interprofessional health care delivery, treatment goals are shared, they don't happen in isolation. A patient's health goals can be achieved more readily when the disciplines are working together, when they are listening to the patient together and in doing so are aligning their recommendations for the patient's care, rehabilitation and management with each other." ■

Appointments can be made at AUT's Akoranga Integrated Health Clinic by calling 09 921 9155.

At AIH clinic clients are assessed by a team of health professionals.



READING LIST



LOOKING BACK MOVING FORWARD: REFUGEE HEALTH AND WELLBEING IN AOTEAROA NEW ZEALAND

by Professor Max Abbott and Dr Shoba Nayar

Looking Back Moving Forward is a collection of stories from a national refugee conference held in 2009 which examined refugee resettlement, health and wellbeing.

The book reflects on developments leading up to and following the first national conference on refugee resettlement and wellbeing in 1988. It considers both the achievements and gaps in policy and practice identified by the 2009 national conference. It also looks at the role of research in resettlement and the relevance of conference themes – learning, collaboration and connections – to advancing the wellbeing of refugees.

Looking Back Moving Forward was launched earlier this year by United Nations High Commissioner for Refugees and former Portuguese Prime Minister Antonio Guterres.

As High Commissioner, Guterres heads one of the world's foremost humanitarian organisations which provides protection

and assistance to millions of refugees, returnees, internally displaced people and stateless persons.

AUT's Centre for Migrant and Refugee Research is headed by the authors, Professor of Psychology and Public Health and Dean of AUT's Faculty of Health and Environmental Sciences Max Abbott and Dr Shoba Nayar from the department of Occupational Science and Therapy.

Abbott has played a significant role in placing refugee mental health on public policy agendas in New Zealand and internationally.

Dr Nayar's research focus is on developing understanding of Asian mental health, particularly the relationship between occupation and wellbeing for immigrants and refugees living in New Zealand.

Copies of the book are \$40 each and are available from Sheree Green-Molloy. Email: sheree.green-molloy@aut.ac.nz ■



SHOOT THE MESSENGER

by Dr Teena Brown Pulu

A controversial book about a report into the reconstruction of a CBD in Tonga has been released by an AUT academic.

The book's author, Dr Teena Brown Pulu, launched the book *Shoot the Messenger* earlier this year about the Nuku'alofa Central Business District. The Tongan Prime Minister authorised Dr Brown Pulu to write a report on the reconstruction project in April 2011 but its release was later blocked with the report considered, "inadequate and

unreliable".

However Dr Brown Pulu says her book sets the research in the political context of Tonga's democratic reform and analyses why the Prime Minister's office felt it should be hidden from the public.

This is Dr Brown Pulu's first book and it is on sale for \$30 at Te Ara Poutama, Faculty of Maori Development, AUT City Campus, Level 3 Reception, WB Building, Wellesley Street, Auckland. ■

MOVERS & SHAKERS

AUT ADVERTISING CREATIVITY WINNERS

AUT advertising creative graduates picked up 13 gold awards, five silvers and six bronzes at the annual CAANZ (Communication Agencies Association NZ) AXIS awards. Their winning work featured in digital/interactive, print, direct response, billboard, integrated campaigns and PR/existential categories.

Meanwhile DDB Auckland was named Advertising Agency of the Year in the January/February issue

of the Australasian ad industry magazine Campaign Brief and won the 2012 Fairfax AdMedia Supreme Agency of the Year for the second year in a row. DDB's current creative department is largely staffed by AUT advertising creativity graduates ranging from 2011 back to 2003. Their creative department was described as, "the best in the country, if not the region". ■

CELEBRATED YOUNG BUSINESSWOMAN STEPHANIE FAHEY

Stephanie Fahey (nee Yost) graduated from AUT Business School with a Bachelor of Business, Marketing and Management (First Class Honours Marketing) in 2010.

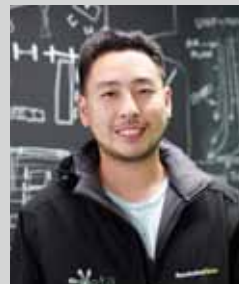
In 2011, she was awarded the Westpac Young Business Person of the Year Award in recognition of the successful marketing

and rebranding projects she implemented for the VisionWest Community Trust.

Stephanie is now a marketing communications associate at the Bank of New Zealand, assisting with national campaigns and local branch marketing initiatives. ■



SAM LIN TAKING NANOFIBRES TO MARKET



Product design graduate Sam Lin is already inventing, less than a year into his new job.

Revolution Fibres is the first company in New Zealand to develop and commercialise nanofibre products. The global nanofibre market is expected to increase to \$517 million by 2015.

Six months into his working life, Lin has worked on a diverse range of projects in the cosmetics, health and electronics markets.

He saw a gap in the market

between disposable face masks and the heavier rubber masks used when dealing with chemicals and dangerous gases. Using Revolution Fibres nanofibre technology he designed the Nanox respiratory mask which, unlike other facemasks on the market, is lightweight and comfortable on the face, allowing air to flow in and out of the mask, and it's reusable. ■



Gijs Ijma doing research on lung muscle

FINDING A DRUG-FREE APPROACH TO ASTHMA TREATMENT

With a PhD in mechanical engineering from AUT, Dr Gijs Ijma is continuing to study the mechanics of the lungs as a post doctoral researcher at the Meakins-Christie Laboratories, McGill University in Montreal, Canada – one of only two places in the world where this kind of research is performed on live human lungs.

Ijma first became interested in the workings of the lung's airway smooth muscles at AUT's Institute of Biomedical Technologies (IBTec).

As an intern from the University of Twente in the Netherlands he designed, manufactured and tested a breathing simulator for IBTec under the supervision of Professor Ahmed Al-Jumaily.

After completing his Masters in Mechanical Engineering in the Netherlands he returned to AUT to do a PhD under Professor Al-Jumaily where he focussed on how the smooth airway muscles in the lungs shorten during asthma attacks, resulting in breathing difficulties. ■

NUMBER CRUNCHING

> approx. **40%** of our native bird fauna has been lost – AUT’s new partnership with DOC will enhance research in this area, with a military drone already purchased for mapping and surveillance. See page 14 for more.

> **one fifth** of total body weight is what an athlete’s weight can be reduced to while running inside the pressurised **NASA-designed AlterG treadmill**, situated at AUT’s SPRINZ. See page 11.

> **NZ\$50 million** the annual market worth of the **geoduck** – a burrowing saltwater clam and global delicacy that could be NZ’s next big export. See page 29.

> **16.2%** of Kiwis live with **arthritis**, a condition targeted by Akoranga Integrated Health Clinic’s holistic healthcare approach. See page 20.

> A **25%** hike in alcohol prices did not reduce student alcohol consumption in AUT retail study. See page 21 for more.

> **38%** Manukau’s expected population growth over the next 20 years. AUT is at the ready with a **world-class learning environment** waiting on their doorstep. See page 31 for more.

HE SAID, SHE SAID

“That is possible in a hothouse environment like we have here but difficult if a programme is spread out among the clubs.”

AUT Millennium Ownership Trust CEO Mike Stanley on AUT’s SPRINZ facilities which produce world-class sports performance research, serving both high performance athletes and the wider community.

“From a clinical perspective, Ketamine provides an efficient and economical way to perform painful procedures in paediatric practice without the use of general anaesthesia, however its long-term effects upon children are not understood.”

AUT clinical educator Michael Neufeld on research into the use of Ketamine in paediatrics.

“We turned every stone over one by one. Every time we looked things became a little clearer.”

AUT PhD student Jordan Alexander earned international praise by solving a quantum mechanics mystery.

“We will hopefully see our research findings being applied in the preparation of New Zealand athletes, including those who are heading to London, and those developing athletes whose target is the Rio Olympics in 2016, or even the games following in 2020.”

SPRINZ director Dr Andrew Kilding.

“I love that everything I do each day is contributing to the rebuild of a city; helping so many people gain a little normality and a sense of community back into their lives.”

Construction management graduate Katerina Beattie.

“This food and the media paper [which is being designed as part of a new gastronomy major] will be food and art, food and film, food and newspapers and magazines, just all kinds of media. So we’ll look at food styling, food photography, all of that.”

Ray McVinnie, food editor, Masterchef maestro and AUT culinary arts lecturer.

INTRODUCING THE AUT ALUMNI NETWORK

From groundbreaking research to international guest speakers and a host of key local events, we're constantly evolving and we want you to continue being part of our journey.

We also want to help you stay in touch or reconnect with the academics and students who helped shape your time at AUT. After all, you're curious to know what others are up to now, right?

WHAT DO I GET AS AN AUT ALUMNI?

You become part of the AUT Alumni Network, which gives you access to:

This alumni magazine, Insight, mailed direct to you twice each year

- AUT AlumNet – an online information tool for alumni
- AUT Alumni social media connections – LinkedIn, Facebook
- Invitations to key events related to your area of interest
- Emails with news and events targeted to your area of interest (coming soon)
- Access to university Career Services
- Discounted library fees at AUT Library
- Use of the AuSM Ski Lodge at National Park
- Discounted Breakfast Club membership – hear from successful business leaders and high profile personalities, over a delicious sit-down breakfast including Starbucks coffee

KEEP IN TOUCH

All students are automatically enrolled in the AUT Alumni Network once they finish their studies.

You can, of course, choose to opt out of being contacted if you wish.

We know that as time passes you're likely to move around. We are eager to stay connected to our alumni, but we can only really do it with your help, so please keep us in the loop and update us with your latest contact details.

✉ alumni@aut.ac.nz

🌐 Search for 'AUT Alumni' on LinkedIn

📘 Search for 'AUT Alumni' on Facebook

www.alumnet.aut.ac.nz/update

