

JUNE 2011

# INSIDE | AUT

NEWS FROM AUT UNIVERSITY | TE WĀNANGA ARONUI O TĀMAKI MAKAU RAU

## AUT to be smoke-free from next year

**AUT UNIVERSITY** has announced that its three teaching campuses in Auckland will become smoke-free from 2012.

The announcement, which coincided with last month's world smoke-free day, extends the current standard non-smoking restrictions to all buildings and open spaces within the City, North Shore and Manukau campuses.

AUT Vice-Chancellor Derek McCormack says the decision will help provide a healthier environment for students, staff and visitors, and is consistent with AUT's position as a leading university in health science education and research.

"The decision to be smoke-free is very much in keeping with our strong focus on research and teaching in health and sports science disciplines," says McCormack.

AUT already provides a range of support services to staff and students to help them quit smoking. The university will spend the rest of this year working closely with staff and students to implement the plan from 1 February 2012. "We have a large cohort of staff and students who will welcome this decision. Many staff and students have advocated for smoke-free spaces in forums and student publications."

McCormack said the decision is aligned with the University of Auckland's smoke-free status, along with Auckland Council's plans to make parks across the region smoke-free.

"Our neighbour, the University of Auckland, has successfully implemented a smoke-free policy, so in joining forces we collectively provide a smoke-free Learning Quarter in the city."

Ben Youdan from anti-smoking lobby group ASH says the decision is a great move as it will help young people to live a smoke-free life.

"Not only is this good for staff and students at AUT but it will also have positive health implications for the wider community. We're delighted," says Youdan.

The Ministry of Health recognises smoking as the leading cause of preventable illness and death in New Zealand.



## New meets old as construction continues

**WORK CONTINUES** on the brand-new WG precinct development at AUT's City campus, but the discovery of a second brick well dating back to the 19th century adds historical interest to the project.

The learning precinct construction between Governor Fitzroy Place and Wakefield Street is set to transform the face of the university by 2013. Opening up the City campus to the public and the Auckland CBD, the development will enhance the city landscape and complete AUT's Mayoral Drive frontage.

But the recent discovery of a brick well and household artifacts dating back to the 19th century raises the question: exactly how has this city landscape changed over the past 100 years,

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## LETTER FROM THE VC



**STUDENT EXAMS** are drawing to a close, with the busy work of marking picking up pace. The first semester has been another successful period for AUT as is evident from the stories featured in this issue of *Inside AUT*.

During the first semester, hundreds of staff members participated in forums, focus groups and discussions about the AUT strategic plan 2012 – 2016. These occasions have been extremely valuable in identifying the visions and values we share for our future work and development together as a vibrant, capable and transforming university. I thank all those who have participated in the strategic plan development so far

for their contributions to this important expression of AUT. The plan is now in the drafting stage, using the extensive input that has been gathered. The first completed draft will be available for staff comment at the end of July.

The University has just undergone the last phase of its current academic audit. This has involved an intensive and comprehensive review of the work we do and the standards we apply as a university.

Each of New Zealand's universities has been audited every five years by the NZ Universities Academic Audit Unit since the scheme was introduced, and this was AUT's third academic audit. I am pleased to report that the visit of the academic audit panel last week was a very positive one. The panel, chaired by Professor Sylvia Rumball of Massey University and including professors from Otago, Victoria and the University of Technology Sydney, with a further member from industry, brought a depth and breadth of academic and audit experience to the table.

One hundred and thirty AUT people from Council members to students, managers to academics, and external stakeholders and employers of AUT graduates, met with the panel, which also surveyed a quantity of written material. In its concluding remarks to me and the executive team the panel was most complimentary about the progress, commitment, quality and spirit of the University as evidenced in its documentation, but most strikingly by the staff members and stakeholders of the university with whom they met.

I thank all of those who participated in the audit and especially the AUT audit team who did such a splendid job of preparation, organisation, and assisting the visiting panel members. The detailed audit report is due to be published in September.

AUT has officially announced that the teaching campuses will become entirely smoke-free from 1 February 2012. The aim is to provide a healthier environment for students, staff and visitors and to take a lead consistent with AUT's position as a major university in health education and research. The announcement has received wide support, and implementation is to be overseen by a university-wide steering committee chaired by Dr Andrea Vujnovich. The committee will keep you updated on implementation matters. Of particular interest to current smokers will be the support the University is offering to any who wish to join a sponsored 'Quit' programme.

Next month I will be spending the night of 7 July sleeping rough in the AUT Hikuwai Plaza. I am participating in the Lifewise Big Sleepout campaign along with other business and community leaders. The sleep out is being hosted by AUT and aims to bring attention to and raise money for the issues of homelessness in Auckland. I will be joined by AUT colleagues, Nigel Murphy, Director of Corporate Relations, and Ian Robertshaw, Director of Facilities Management. You can sponsor our efforts and find out more by visiting <http://bigsleepout.org.nz>.

*Derek McCormack*

## New meets old as construction continues

*From page 1*

and what does the future look like for AUT University's City campus? Records from the New Zealand Archaeological Association show that use of the land encompassing Governor Fitzroy Place dates back to the 1850s, when it was part of the Auckland barracks military grounds. By the mid-1870s, the streets surrounding AUT were undergoing development, and the land formerly occupied by the military barracks had been subdivided into a number of separate allotments and sold at a public auction.

The land occupied today by the university was designated for the Auckland Education Board and the Salvation Army. The historic well, discovered by Fletcher Construction workers in April 2011, is located immediately behind where the Salvation Army home once stood.

The recovery of eight ceramic vessels and four glass items nestled amongst tonnes of organic soil in the well provide clues about when it was operational. All are commonly found 19th-century household items, most likely purchased between 1860 and 1870. The well appears to pre-date their manufacture and may have been built in the mid-1800s as part of the initial subdivision of allotments.

Fast forward 160 years and the appearance and use of this site have transformed beyond recognition.

Since construction work began late last year, excavation of the foundations and retaining walls has commenced, piling is complete, wall reinforcing and the installation of sanitary services have started, and civil drainage is well under way.

When it opens in 2013, the new complex will be a major gateway to AUT, providing 20,000 square metres of undercover space, including a 12-floor tower, a new media centre, a five-storey glass-roofed atrium, lecture theatres, a café and plazas.

Vice-Chancellor Derek McCormack says the new learning precinct is one of the priority capital projects for 2011 and 2012.

"The visionary design for this \$97 million building reflects the latest thinking in learning and teaching, with facilities for media and communication studies, and exceptional new public spaces and student commons," says McCormack. "The contemporary spaces it provides will enhance and optimise the way people learn. When it's completed, it will transform the City campus, linking it even more strongly to the CBD."

## AUT cleans up at media awards

**AUT GRADUATES** have been scooping awards left, right and centre in the media industry this month.

Past graduates of the School of Communication Studies swept the board at the recent Public Relations Institute of New Zealand (PRINZ) awards in Rotorua and at the Canon Media Awards in Auckland.

Public relations graduate Melanie Palmer was the winner of the coveted supreme award at the PRINZ 2011 national awards. She was singled out for this honour for her management of Zespri's communication response to the kiwifruit PSA disease. Palmer graduated in 2007 with a Graduate Diploma in Communication and Public Relations.

As well as winning the top prize, AUT public relations alumni were in winning teams for six out of eleven major awards.

The other outstanding win was by public

relations graduate Mary-Louise Dare of Professional Public Relations NZ, who was awarded the Sally Logan-Milne young practitioner of the year. She is the eighth AUT graduate in nine years to win this award.

AUT students won all of the prizes in the tertiary student project category. Winners were postgraduate diploma students Isaac Banks, James Roberts, Angela Campbell, Safia van der Zwan and Victoria Ellis, with the Rugby Foundation's "No 8: That's How We Roll" campaign.

Banks, from the winning tertiary award team, says they were very excited by the win and also to be in the company of so many other graduates of AUT.

"AUT was well represented at the awards. It's inspiring to see how well other AUT graduates have done, and we'll certainly be looking to emulate them in the future."

At the Canon Media Awards, alumna Donna Chisholm won four awards: the magazine feature writer of the year, feature writer crime/justice, feature writer general and feature writer human relations.

Sarah Murray, a graduate of the Graduate Diploma in Journalism in 2009, won the junior newspaper feature writer of the year award for her work at the *Sunday Star Times* and in *Sunday* magazine.

Murray says the win was a shock but that it was lovely to be recognised.

"I think AUT has such a good alum of journalists and it is great to have been in their company. AUT gives you the skills to get the jobs and these jobs are the platforms that win these kinds of awards."

The student journalist of the year award was won by 2010 graduate Amelia Wade.

Other AUT graduates were nominated and highly commended in categories at both awards ceremonies.

## Gambling research recognised

**PROFESSOR** Max Abbott has been honoured for his services to gambling research.

At the Problem Gambling Forum last month, Professor Abbott (right), Dean of the Faculty of Health and Environmental Sciences, was awarded the outstanding service to gambling research award.

The award recognises his 20 years of service and research dedicated to gambling and addictions.

Professor Abbott, who heads AUT's Gambling and Addictions Research Centre, conducted early research on assessing alcohol-related cognitive impairment and its impact on treatment participation and outcome. In 1991 he completed the first national pathological gambling prevalence survey with Dr Rachel Volberg. Since then he has retained an involvement in problem gambling research, alongside research on migrant adaptation and health and other areas within public health and mental health.

According to Professor Abbott, about two-thirds of New Zealand adults gamble. Most do so in moderation, but a significant

minority experiences problems resulting in harm to themselves, others close to them and wider society. A 2010 New Zealand health survey found over 50,000 adults had gambling-related problems, with Māori and Pacific Islanders over-represented.

"New technologies, including the expansion of internet gambling, have potential to cause enormous personal and social damage. However they are Janus-faced, also offering new ways to prevent problems from arising, detecting problem gamblers early on and assisting with their recovery."

Major projects currently underway by the research centre include a clinical trial of brief psychological interventions for problem gambling and a national gambling and incidence study. Professor Abbott is also involved in large-scale research programmes in Sweden and Australia. With the recent establishment of undergraduate and postgraduate addictions programmes and new staff appointments, future plans include broadening the research centre's focus to include substance use and misuse



and other addictions.

Professor Abbott was also a founding trustee and chair of the Compulsive Gambling Society, and foundation member of the Health Promotion Forum, Gambling Addiction Services Council and national committee on problem gambling management.

## Recognition for AUT buildings

**AUT UNIVERSITY** buildings have been awarded accolades at the Property Council awards this month.

Three AUT buildings were nominated in two different categories.

In the Coffey education and arts award, the AUT AJ School of Education building (Jasmax Ltd), the AUT AF lecture theatres and conference centre, and the AUT MC building Manukau (Jasmax Ltd) received merit awards.

The Manukau MC building also received a merit award in the Hawkins Construction, heritage and adaptive reuses award.

The event was attended by Vice-Chancellor Derek McCormack, general manager of finance and estates Judith McKay, director asset development Suzanne Webb and group director of estates Tony Lanigan.

The awards are an annual celebration of excellence in property development and recognise the efficient use of capital, maximum investor return and the greatest community benefit for public buildings.



## Signing for Christchurch

**IRONICALLY** it was the media who first resisted the idea of interpreters working after the Christchurch earthquake. They thought they'd get in the way of cameras. But in the end it was the media who took to one particular interpreter and created huge hype around him.

AUT graduate Jeremy Borland (above), 'the sign language guy', was propelled to celebrity status during the earthquake when he worked as one of two main interpreters for council and civil defence briefings.

This unexpected publicity for Borland was a little unnerving at first, until he realised he could use his status to help boost the

profile and importance of sign language interpreters. He recently visited Auckland to open the New Zealand Society of Translators and Interpreters conference hosted by AUT.

"Initially we had to lobby a bit at the level of the Prime Minister's office, but two days after the earthquake we were on.

"The first ever media briefing I did was probably the most stressful interpreting job I've done and it took every ounce of concentration I had," says Borland.

"Some of the challenges included deciding on a sign for port-a-loo and we had to be really sensitive around signing things like human remains."

## Professor awarded with honorary degree

**AUT UNIVERSITY'S** Professor Marilyn Waring has been awarded the honorary degree of Doctor of Letters from an international university. Professor Waring (right), from AUT's Institute of Public Policy, was awarded the honorary degree from Glasgow Caledonian University for her "outstanding international contribution towards the understanding of feminism and female human rights".

This was an important aspect of the award for Professor Waring.

"I am very honoured and especially pleased that the award is for research in feminism and female human rights and not hidden behind a generic political economy or political science discipline

title," says Professor Waring.

Professor Waring will officially be awarded the honorary degree at a ceremony at the Glasgow Royal Concert Hall in November in front of an estimated crowd of 2,000 people. While there, she will also be a guest of the university at a conference on women in the Scottish economy. The event will be filmed as a documentary for Scottish national television and will involve Professor Waring meeting members of the new Scottish parliament.

Professor Waring believes her invitation to the conference and a book that is currently being written about her led to receiving the honorary degree.



## AUT Māori doctoral graduates celebrated

**A RECENT** awards ceremony celebrated the contributions of Māori doctoral graduates across Aotearoa, with AUT graduates well represented.

Now in its ninth year, the Te Amorangi awards were held at Turangawaewae marae, the home of the Māori King movement (Te Kingitanga) in Ngaruawahia. Over 300 Māori PhD graduates have been recognised from across multiple disciplines. This year saw the highest number of Māori doctoral graduates across New Zealand, and the highest number from AUT University.

The concept of the awards, 'Te Amorangi', comes from an ancient Māori whakatauki, 'Ko te Amorangi ki mua, ko te Hāpai ō ki muri'. The name embodies the responsibilities that each recipient must embrace as an academic leader in our ever-changing world.

Seven AUT doctoral graduates were recognised for their academic achievement this year. They include Dr Rachael Ka'ai-Mahuta and Dr Dean Mahuta (Te Ara Poutama), Dr Doug King, Dr Geoff Kira, Dr Grant Mawston (Health and Environmental Sciences), Dr Lynette Reid, and Dr Adam



Taylor (Faculty of Business and Law).

Among those awarded were Dr Rachael Ka'ai-Mahuta and her husband Dr Dean Mahuta, whose presentation and defence of his thesis in te Reo marked a significant milestone in the history of AUT. Dr Pare Keiha, Pro Vice Chancellor learning and teaching, says the graduation of all seven postgraduates is a significant achievement for the students and their supervisors.

"It's also an important step towards the strategic recruitment of staff who are better able to serve the needs of Māori students and their communities."

Professor Tania Ka'ai, Director of Te

Ipukarea, The National Māori Language Institute, says this is just the beginning. "We have established targets between 2010–2020 for masters and PhDs written in te reo Māori. We aim to have 100 masters and 20 PhD theses written in te Reo Māori in this timeframe."

Dean of Business Dr Geoff Perry described the immense pride in attending the awards. "Growing Māori academics is a key focus for the faculty. With a concerted effort in mentoring and Māori scholarships at all levels we hope to see more Māori progress to PhD level." For more information visit [www.aut.ac.nz/news](http://www.aut.ac.nz/news)

## Visual arts student wins James Wallace award

**AUT UNIVERSITY** student Anthony Cribb was presented the James Wallace award last month for outstanding achievement at postgraduate level in visual arts.

Cribb, who completed his masters in art and design (visual arts) last year, and is now doing his PhD, received the annual award from the patron himself at the visual art awards at the St Paul St galleries in May. With eight students graduating from the masters programme last year, it was Cribb's 'challenging' style that made him stand out to the judges. After being selected as a finalist by the faculty, it was then James Wallace who selected the eventual winner.

"He has a challenging and successful way of expressing himself in diverse three dimensions," says Wallace.

Along with the winning title, Cribb also

received a prize of \$2,000, donated by Wallace himself – an increase of \$1,500 from previous years.

"I felt that this year, the award has been elevated to something more than it has been in the past," says Wallace.

The patron has installed hundreds of works of art from the James Wallace Arts Trust collection throughout AUT University over the past ten years, resulting in him being named an AUT 'decade partner' last year. The collection is displayed on walls throughout the three university campuses – making AUT the largest host of works from the trust.

Twenty years ago, Wallace established the annual Wallace Art Awards. They are now the longest surviving and largest annual art awards of their kind in New Zealand, with a value amounting to



**Anthony Cribb (left) is presented with his award by arts patron James Wallace.**

over \$160,000. Each year, four winners are awarded valuable residencies at prestigious institutions overseas.

"I would be keen for the finalists to enter the annual Wallace Art Awards this year, and see if they can win one of the residencies," says Wallace.

## New programme enhances educational journey

**BEING THE** first counselling psychologist trained in New Zealand is “a bit scary” says recent AUT graduate Penny Chai. “It was a bit overwhelming... I feel like I have to be a role model.”

But Chai, the first counselling psychologist ever to be registered with the New Zealand Psychologists Board, says the programme was an enlightening experience.

Eight AUT students enrolled in the new counselling psychology programme last year. Counselling psychologists differ from clinical psychologists in that they consider the wider social, cultural and historical context of the client before diagnosis and treatment. They also tend to treat clients with less severe mental health issues. Rather than relying strictly on medication, a holistic view is taken when the options for treatment are considered. That entails seeing what changes can be made to diet, exercise and the reduction of stress.

Head of psychology at AUT Dr Mark

Thorpe says he is extremely proud of the students who have completed the programme.

“It’s exciting that this cohort is now going out into the community and making headway in the New Zealand mental health care arena.”

For Chai, it has been an interesting educational journey. After completing a psychology degree, she completed a one-year honours degree followed by a masters degree. Last year she completed an internship as part of her postgraduate diploma at Community Alcohol and Drug Services in Kingsland.

It was an experience that she enjoyed very much. “I learned so much from dealing with the experienced and knowledgeable staff. I also got to apply a lot of theory into practice.”

Working in an environment where she could see first-hand how addiction can affect people’s lives afforded Chai an opportunity to learn more than just



theory. “The long-term effects of addiction are horrible. I had to know what to do if someone is crying in front of you. That’s not in a textbook.”

Chai likes the fact that counselling psychology is based on research and science. “There is also an emphasis on the importance of the therapeutic relationship taking a non-judgmental approach.”

## New roosting place for interactive digital art

**A NEW PARTNERSHIP** sees AUT’s creative technologies centre CoLab collaborating with Auckland’s entertainment and performing arts venue THE EDGE to showcase Digital Art Live.

A 4x3-metre flat screen has been erected within the Aotea Centre to exhibit the work of local and international digital and interactive artists, with AUT creative technologies lecturer Kim Newall presenting his work *Roosting*.

CoLab director Frances Joseph says the collaboration is in line with CoLab’s philosophy, which aims to provide opportunities for artists to create works using new technologies and to establish links between artists and industry.

“There are very few places for interactive digital artists to develop and show their work,” says Joseph.

“This collaboration offers artists access

to a state-of-the-art interactive suite to design, build and test their work, and space to exhibit.”

THE EDGE programme co-ordinator Nolwenn Hugain-Lacire says it’s a new and exciting direction for THE EDGE.

“We’re opening up other possibilities for interaction within the performing arts space. By offering digital artists a unique place



**A Kim Newall bird from his exhibition, *Roosting*, currently on show at THE EDGE.**

to exhibit, we are also presenting EDGE audiences with new interactive experiences.”

Aware that the inclusion of digital art within a traditional performing arts venue is a significant step, the Digital Art Live committee has selected artists whose work encourages interaction from its audience.

“To get a good feeling from art, and to learn to appreciate it, it is often easier to interact with it,” says Hugain-Lacire. “The beauty of this type of digital art is its ability to encourage that interaction between artwork, physical space and audience.”

Still in its infancy, both parties have big plans for the project.

Joseph sees possibilities for research. “This cross-media space is sure to provide some significant research opportunities for CoLab.”

Hugain-Lacire talks of further collaborations with local art galleries and events within Auckland, such as the international film festival and the Rugby World Cup, as well as the presentation of international artists’ work and the sharing of New Zealand work globally.

## Biological invisible ink used for blood tests

**NEW TECHNOLOGY** being developed at AUT University will provide a simplified method for blood testing.

Called biosurfacing technology, the new development uses a standard desktop inkjet printer to print diagnostic markers (invisible ink) as words onto paper. If the result is positive, the assay returns the result as words – a kind of invisible biological ink.

The new technology would be a significant change from the status quo, which requires sophisticated equipment and experienced operators.

Working on the technology is AUT biotechnology PhD student Katie Barr (right), who won the student scientific poster competition at the NZBio conference in Auckland earlier this year for her poster promoting biosurfacing technology – ‘a novel solution for diagnostic printing’. Barr, originally from England, says it was awesome to be recognised. “It’s great to know that people in the industry find it interesting.”

The technology uses inkjet printers to print specialised molecules called FSLs (function-spacer-lipids) on paper. FSLs are molecules made of three components – a functional part, spacer and lipid. This special construct is the core of the new technology as it can be constructed with a variety of different diagnostic functional heads, is compatible with printer technology, and remains attached to surfaces including paper.

In the assay, a blood sample is dropped onto paper and if there is an antibody in the blood, directed against the functional part of the printed FSL, it attaches to the printed FSLs. Following development, words will appear and the operator simply reads the result by eye. The whole procedure can be done without any machines and at room temperature, making it ideal for diagnostics in the field and especially in developing regions.

Initially the technology is being developed to determine blood type, but



ultimately the objective is to use it for a wide range of diagnostic testing. That includes tests for a range of infectious diseases like HIV, syphilis and hepatitis.

“Currently most assay testing requires expensive equipment, but this assay can be done with equipment as simple as a drinking cup and an eye dropper. Like a pregnancy test, the answer is given back as a visual result, in this case, words.”

## Communications going global for AUT students

**A GLOBAL** communications project has nine AUT students doing just that – going global. The public relations students from the School of Communication Studies leave for Barcelona, Spain, on June 25 as part of the Global Communications Project (GlobCom), an international competition and symposium.

The competition pitches global virtual teams from 11 universities around the world against each other in an academic challenge to develop an international PR campaign for a ‘real world’ client, optics company Carl Zeiss. The winning team will be announced at the international PR symposium after the teams have met face-to-face and pitched their proposals in person to Carl Zeiss managers.

GlobCom was brought to New Zealand and pioneered by AUT University courtesy of senior lecturer Averill Gordon. Gordon

had previously been part of the project while at the University of Gloucestershire in Cheltenham, where she set up a public relations degree. She is also the global team mentor for GlobCom, which has seen her help students from all around the world with the challenge.

Gordon says the opportunity offers Kiwis the chance to be at the forefront of current international business.

“It’s a unique concept that pits global virtual PR teams together in a competitive academic environment, so these students are really pioneers in this type of study.”

Gordon, who is also researching global virtual teams for her PhD, says GlobCom presents real challenges in working with different cultures, languages and time zones using a variety of technologies.

Scott McKee, one of the students leaving for Spain, says participating in GlobCom is



**Public relations students will leave for Barcelona, Spain, on June 25 to participate in GlobCom.**

fantastic for not only the students but AUT as well.

“By participating in GlobCom we are ‘internationalising’ the AUT curriculum, which is very new, exciting and opens up a whole lot of future opportunities.”

McKee says the students have been fundraising since April to try and get as many of the class of 24 to Barcelona as possible.



## Aroha for Christchurch

**POSTCARDS** designed by AUT spatial design students to express support for Christchurch are now on show at one of the city's public libraries.

Early this year, students at the School of Art and Design were asked to use their studio design work to create postcards that could be sent to Christchurch to express their sympathy and solidarity for the city in the wake of the earthquakes.

By coincidence, studio design projects for the semester had been organised around the themes of "retrofit" or "renovation" and it seemed that Christchurch faced similar issues on an enormous scale, says spatial design lecturer Andrew Douglas.

"Given the sense of shock felt by many of us, it seemed that a gesture was necessary to acknowledge the magnitude of the events there and the difficulties Cantabrians faced. The project was conceived as a way for students to focus their creativity to this end, and through the small, individual act of forming a postcard and writing a message, to collectively voice our support."

Restricted to a postcard-sized image, students interpreted the assignment in a number of ways, some utilising drawings and photographs from their different design projects, and others choosing to formulate images specifically with Christchurch in mind.

Approximately 200 cards were produced and were exhibited briefly at the School of Art and Design, with a selection then being flown down and installed at the South Christchurch library.

## Trip of a lifetime for AUT marine scientist

**FOR THE MAJORITY** of Rod Lockie's master of science degree, the Three Kings Islands were little more than an image on a computer screen. That all changed a few weeks ago when he was selected to go on an expedition to the remote cluster of islands, 55km northwest of Cape Reinga.

The voyage on board the RV Tangaroa was led by the National Institute of Water and Atmospheric Research (NIWA) with the objective to map the seafloor surrounding the islands.

Multi-beam echo sounders were used to do most of the deep-water mapping, but Lockie's work using satellite imagery was preferred when it came to the mapping of the seafloor between the shoreline and 30 metres out to sea.

For Lockie (right), it was a fantastic opportunity to see the island in person.

"It was pretty cool. They'll be doing more mapping and I'd really like to go again."

Three Kings Islands are one of 14 marine biogeography regions which are to be mapped in New Zealand's vast economic exclusion zone. Ultimately the objective is to gain information that can be used to determine the location for potential future marine reserves.

Lockie uses imagery collected from a satellite called World View 2, owned by United States firm Digital Global.

The satellite has sensors that capture various bands of light frequencies, from visible to near-infra red. The various frequencies reflect differently, depending on what surface they are projected onto.

That allows Lockie, with the assistance of specialist software called ENVI, to determine whether the seafloor or coastal



fringe is sandy, rocky or covered in vegetation.

With a scientific team of nine and a crew of 15, there were a range of jobs to be done, which is why Lockie quite literally took an 'all hands on deck' approach.

It was an attitude that endeared him to the other crew members, says supervisor and AUT senior lecturer in applied sciences Dr Barbara Bollard Breen.